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# Interactional Processes in Heterosexual Dyads Based on Gender and Defense Style

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# INTERACTIONAL PROCESSES IN HETEROSEXUAL DYADS BASED ON GENDER AND DEFENSE STYLE

by

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VITA

The author, Rachelle Joan Zalman, is the daughter of Harriet and the late Louis Zalman. She was born on September 25, 1951 in Chicago, Illinois.

She attended grammar school at Solomon School and high school at Von Steuben High School, both in Chicago.

Her college education was obtained at the University of Michigan in Ann Arbor from 1969 - 1973. She majored in Psychology in the Honors Program and received a Bachelor of Arts degree with Honors, High Distinction in May, 1973.

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# DEDICATION

To my family.

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# CHAPTER I

## INTRODUCTION

Gregory Bateson and his daughter complete their "talk":

> Daughter: What did you mean by a conversation having an outline? Has this conversation had an outline?
>
> Father: Oh, surely, yes. But we cannot see it yet because the conversation isn't finished. You cannot see it yet because the conversation isn't finished. You cannot ever see it while you're in the middle of it. Because if you could see it, you would be predictable -- like a machine. And I would be predictable -- and the two of us together would be predictable.
>
> Daughter: But I don't understand. You say it is important to be clear about things... And yet we think it's better to be unpredictable and not be like a machine. And you say that we cannot see the outlines of our conversations until it's over. Because we cannot do anything about it then.
>
> Father: Yes, I know -- and I don't understand it myself... But anyway, who wants to do anything about it?

from "Metalogue: Why Do Things Have Outlines?" in Steps to an Ecology of Mind by Gregory Bateson (p. 32).

The dissertation presented here is about outlines in conversations and the people who make them. It will attempt through research to better understand such conversations (as opposed to doing anything about them, which is more in the realm of activity of therapists and other changers of pat-

tern). Specifically, the following dissertation will attempt to assess some predictable personality variables of individuals as they are expressed in interpersonal interaction or communication, but it will also assume that the outline of conversation created in interpersonal communication also creates the personalities of the interactors to themselves and each other as they speak. This is to say that as people "make" communication with each other, their communication to an extent also "makes" their personalities. It is hoped that in the present dissertation, these processes can be theoretically and empirically examined.

According to Bateson:

> In describing individual human beings, both the scientist and the layman commonly resort to adjectives descriptive of 'character.' It is said that Mr. Jones is independent, hostile, fey, finicky, anxious, exhibitionistic, narcissistic, passive, competitive, energetic, bold, cowardly, fatalistic, humorous, playful, canny, optimistic, affectionate, careless, careful, etc. (1972, p. 395)

But Bateson reminds us that such adjectives are chimeras if they are meant to describe the individual since they describe instead transactions between the individual and his environment. Thus, no person is "dependent" or "narcissistic" in a vacuum. "His characteristic, whatever it be, is not his, but is rather a characteristic of what goes on between him and something or somebody else." (p. 395)

For psychologists, this transactional or interactional

focus on "the between" is relatively new. Most of modern psychological theory and practice, from pre-Freud through the history of the psychoanalytic movement and medical model approach, looked at the individual organism as an entity unto itself with self-enclosed structural characteristics. Trait and psychodynamic paradigms thus looked at the individual as a thing unto itself. A violent challenge to this point of view occurred with development of behaviorism, which made the contingencies of the environment all powerful in the understanding of individual behavior and reduced interest in the individual to the unknowable (and therefore, unworthy of researching) "black box." The primacy of the environmental or situationalist point of view occurred in the late 1960's and early 1970's, and many voices cited evidence that situational environment was of greater predictive value than personality traits (Bandura & Walter, 1963; Farber, 1964; Mischel, 1968, 1969, 1971, 1973; Vernon, 1974).

Fortunately, an integration of the individual and situationalist positions evolved rapidly. The interactional point of view was proposed (Argyle & Little, 1972; Black, 1968; Bowers, 1973; Endler, 1975) so that currently psychologists can ask not only how much variance is due to situations and how much to persons, but also "How do individual differences and situations interact in evoking be-

havior?" Investigation of this question has been greatly enriched by recent revolutions in other areas of scientific theory and research, specifically, information theory, cybernetics, and general systems theory. The how of interaction is being studied with increasing sophistication.

The present dissertation may be viewed as an addition to the growing inquiry into this how of interaction. It seeks to integrate a pillar concept of individual psychology, the psychoanalytically-based notion of intrapsychic defense, with an analysis of interpersonal situations. The present study will attempt to relate individual styles of defense to patterns of interpersonal behavior, and try to suggest a process that integrates the individual and the interpersonal environment in terms of their mutual feedback. Moreover, it will ask not only how the individual defense styles and related characteristics of interactors of both sexes affect their interpersonal situation, but also how the interaction situation itself in turn affects the defense and sex-type-related characteristics of its participants. This dissertation will attempt to discover processes and patterns, and as such, will thus explore a small aspect of that which Gregory Bateson has called the "pattern which connects."

Because of the complex multidimensionality of interactional research, it is not possible to present a specific

description of a problem to be studied before the interacting components of this problem are separately (if somewhat artificially) discussed. Therefore, it would appear necessary to present reviews of the literature from several areas contributing to the present study before proposing its interactional problems and hypotheses. The following review will set forth three components of the problem to be investigated. First, a description of the individual personality variables in question will be detailed. Second, interpersonal outcome research on interpersonal perception involving these individual variables will be surveyed. Finally, theory, research, and methodology exploring interpersonal phenomena in terms of interactional process will be discussed. Subsequent to this review, the specifically interactional statement of the problem and hypotheses for this dissertation will be formulated.

# CHAPTER II

# REVIEW OF THE RELATED LITERATURE

## The Individual and Personality

### The Theory of Defense and Defense Style

The concept of psychological defense reached a high level of importance and elaboration long before the development of the interactionalist perspective. Anna Freud (1936) spoke specifically of intrapsychic defense in terms of the individual entity: "One and the same ego can have at its disposal only a limited number of possible means of defense. At particular periods of life and according to its own specific structure, the ego selects now one defense, now another."(p. 46) Here, no mention of the situation surrounding the utilization of a defense mechanism is made. In a sense, the methods of defense are the hallmarks of the individual personality in psychoanalytic theory. Freud himself stated (1925): "The theory of (defensive) repression is the cornerstone on which the whole structure of psychoanalysis rests."(p. 16) He had earlier stated (1915):

> The essense of repression lies simply in turning something away and keeping it at a distance from the conscious. We must now obtain some insight into the mechanisms of the process of repression. In particular, we want to know if there is a single mechanism only, or more than one, and whether each of the psychoneuroses is distinguished by a mechanism of repression peculiar to it.(p. 153-154)

In his case histories, Freud detailed and explained defense mechanisms proposed to be characteristic of various mental disorders and personality structures. He noted the defensive constellation of repression and denial in the hysteric, projection in the paranoid, and isolation, intellectualization and undoing in the obsessive compulsive. In The Ego and the Mechanisms of Defense (1936), Anna Freud counted nine mechanisms of defense that had been outlined by her father: regression, repression, reaction formation, isolation, undoing, projection, introjection, turning against the self, reversal, and she added sublimation. Introductory psychology textbooks list anywhere from six to 30 separate defense mechanisms. But systematic efforts to explain or predict the patterning or use of particular defenses by individual personalities are relatively rare and idiosyncratic to each particular author or theorist. The classification attempts of Bibring (1961), Holland (1973) and Suppes and Warren (1973) were exceptional. These authors attempted to classify the long list of defense mechanisms according to logical or syntactical methods, (hardly an interactional approach, however, it will be noted.) Holland's (1973) approach, for example, generated all the other defense mechanisms as algebraic alterations of the concept of displacement, i.e., displacement of direction, displacement in number, and displacement based

on similarity. Suppes and Warren (1973) suggested generation of all defenses based on systematic syntactical transformations of propositions of the form actor-action-object that were supposed to be contained in the unconscious thought; i.e. I hate Daddy can become Daddy hates me, I love Daddy, they hate Daddy, etc.

A basic definition of defense mechanisms as an intrapsychic event must be understood before its varied characteristics within personalities can be conceptualized. Generally, defenses are conceived of as specific unconscious mechanisms which enable the individual to cope with or minimize anxiety. As such, they are held to be processes of the ego which mediate the individual's unconscious drives and the outside environment. According to Mahl (1971), defenses may interfere with the anxiety provoking wish, drive or impulse, and/or the unpleasant emotions related to the impulse. Thus, defenses are defined as intraindividual, intrapsychic mechanisms that may alter perceptions, behavior, and/or subjective emotional experience.

In the adult, according to standard theory, defenses occur only when the primal or childhood conflicts are aroused. Thus, only anxiety that is symbolically related to childhood memories or anticipations of loss of nurturance, loss of self-control, loss of self-esteem, loss of a loved one or loss of sexual organs (castration anxiety) is con-

sidered likely to engender the operation of unconscious defense mechanisms. Otherwise, according to standard theory, threat and the person's response to it are under rational and conscious control, so that he may be expected to respond primarily to the realistic demands afforded by the environment. Early psychoanalytic theory clearly regarded defense mechanisms as separate and distinct from realistic coping. It viewed coping behavior as more realistic and adaptive than defensive behavior, and suggested that increased reliance on unconscious defenses was evidence of individual pathology, while individual mental health would be characterized by minimal reliance on these unconscious defense mechanisms.

But this classic position has evolved, and emphasis in the literature has developed on the common coexistence of defense and coping mechanisms in every individual as related means to successful adaptation. In environments where an overwhelming danger beyond the individual's control really does exist, for example, the unconscious mechanisms of denial and repression might allow a person to function, perhaps in life-preserving ways, until the threat is passed (Mahl, 1971). Hartmann (1939, 1950, 1952, and 1955) added important theoretical refinements that suggested that defenses could become autonomous from the childhood experiences that triggered them and lead to a characteristic

stable and adaptive style of coping for the individual that remains long after the original conflict has been resolved. Lazarus (1966) states that people tend first to try an active coping strategy and only after this fails do they utilize cognitively distorting unconscious defense mechanisms, often in characteristic pattern. Thus, it would seem that everyday experience may be expected to involve defensive coping not at all unrelated to classic defense mechanisms, although not as drastic in their cognitive distortion.

In addition to case studies, which have noted patterns of defense in pathological personality structures, empirical research studies have begun to classify coping and defensive patterning in non-clinic subjects as well as among clinical populations. For example, Carney (1978) utilized the personality classification system of Millon and the Defense Mechanism Inventory of Ihilevich and Gleser (1973) to find that specific patterning of defenses was associated with individual personality type in a normal student population. Social histrionic individuals were found to use Turning Against the Other and Projection while avoiding the defense of Principalization (intellectualization), while obsessives were found high on Principalization and Reversal. Minsky (1978) classified defenses according to an active/passive dichotomy, and found that defenses held to reflect

passive coping, such as denial and repression, were more prevalent among otherwise normal hypertensive men than more active coping defenses such as projection and displacement.

## Repression-Sensitization as an Individual Trait

More than a decade prior to Minsky, Byrne (1964) had already classified two distinct personality styles based on whether an individual's coping and defense pattern was active or passive. He called the active style of coping of persons who approach and focus on conflicts and threats in their environment "sensitization" and termed the passive coping style of persons who avoid and ignore danger and conflict "repression." Byrne presumed intellectualization and isolation to be examples of the former style and repression and denial to be instances of the latter.

The repression-sensitization concept grew out of the study of individual differences, in particular, individual differences in perception. The heuristic "New Look" studies on perception at the Harvard Laboratory of Social Relations (Bruner & Postman, 1947; McGinnies, 1949) led to a generation of literature that attempted to classify individuals according to their characteristic styles of perceiving threatening stimuli in the environment. Countless studies found supportive evidence for the existence of two styles

of perceptual defense and individual differences in use of these styles (Carpenter at al., 1956; Chodorkoff, 1954; Eriksen, 1951, 1952; Hutt & Anderson, 1967; Kagan, 1956; Kissen et al., 1957; Kurland, 1954; Lazarus & Longo, 1953; Mathews & Wertheimer, 1958; Moody, 1952; Nelson, 1955; Perlce, 1960; Shannon, 1962; Singer, 1956; Spence, 1957; Stern, 1953; and others). Byrne carefully studied this literature, noting the consistency of findings despite diverse populations, dependent measures of perception, methods of increasing perceptual difficulty and ease, etc. He also took special interest in the numerous studies which used various measures of personal coping or intrapsychic defense style, i.e., presence of overt conflict in Sentence Completions or TAT stories, ability to recall failure-associated material, scores on the Defensive Preference Inquiry for Blacky Pictures, Rorschach scores, case history codings and interview ratings, etc., in an effort to correlate overall defensive qualities with perceptual style. Based on his review, Byrne (1964) concluded:

> Individuals who have difficulty in perceiving threatening material accurately also give evidence of blocking, repression and avoiding when responding to conflictual stimuli in other contexts. Conversely, those who perceive threatening stimuli as accurately or more accurately than neutral stimuli respond in other situations with intellectualization, sensitization and general approach behavior.(p. 172)

It was upon this conclusion that Byrne coined the terms repression and sensitization mentioned above; the former to

describe the coping and defense style that avoids threat, and sensitization to indicate the style that approaches threat. Furthermore, Byrne assumed that using the regression-sensitization continuum, it might be possible to show that extreme reliance on either style had implications for pathology in the personality. He speculated that regressors' breakdowns would be characterized by hysterical conversions, manic fantasies and denial of reality, while sensitizers' pathology would be manifest in obsessions, hypersensitivity to loss and threat, and paranoid ideas.

Researchers next began work on instruments to specifically measure this approach or avoidance dimension of coping. Several were devised (Altrocchi, Parson & Dickoff, 1960; Carlson, 1954; Ericsen & Davids, 1955; Page & Markowitz, 1955; Tort, 1962; Truax, 1957; Ullman, 1962, 1968), frequently using MMPI scales to reflect repression and sensitization, i.e. K, L. Fminus K, Hy, Hy denial, Hy admission, Hy minus Pt, MAS, Welsch A and Welsch P. Byrne incorporated and improved upon these efforts to produce the Repression-Sensitization (R-S) Scale.

Byrne's scale consists of 127 items from the MMPI. Seventy percent of them were found in Altrocchi's scale, and correlations with Ullman's scale were found of .77 to .94. Byrne tested his instrument and recorded a split-half reliability of .94 and a test-retest reliability of .82

after three months. Although some doubt has been case on the equatability of the two administrations, Byrne stated the scale could be administered within the usual MMPI format or as the "Health and Opinion Survey", which consists of the 127 R-S items and 55 buffer items (Fischer, 1969; Simmons, 1966).

Hearkening back to the New Look tradition, numerous studies have found the R-S Scale a valid predictor of perceptual defense and associational recall (Bootzin & Stephens, 1967; Dublin, 1968; Gossett, 1964; Markovitz, 1968; Nelven, 1967; Porzemsky, 1969; Tempone, 1962). Contradictory evidence is relatively rare (Lapidus, 1969; Lichenstein, 1969; Millimet, 1969; Tillich, 1968).

Since both repression and sensitization describe defensive coping, both might be expected to decrease anxiety on physiological indices when employed. Scarpetti (1973) confirmed this expectation. When sensitizers approached or sensitized to a threat stimulus (shock delivered by a confederate) by responding with return shock, their electrodermal and plethysmographic monitors indicated caharsis; for repressors, catharsis was indicated when these subjects reacted to the shock stimulus with avoidant and rewarding responses toward the confederate.

It might also be wondered if the threat-approaching

sensitizers are generally more anxious than the threat-avoiding repressors, however. This hypothesis has also gained support (Byrne & Sheffield, 1965; Paris & Goodstein, 1966; Pomeranz, 1963). Critics have charged that the R-S Scale is no more than a simple measure of anxiety (Opton & Lazarus, 1968). Joy (1963), for example, found a .91 correlation of the R-S Scale with the Taylor Manifest Anxiety Scale, and Byrne (1964) conceded that the TMAS and the Welsh Anxiety Scale are built from MMPI items in the same manner as the R-S Scale.

Nevertheless, subsequent research indicates complex relationships among R-S, perceptual and recall defense, self-report of anxiety and physical manifestations of anxiety. Lomont (1964) found that inpatient repressors manifested more signs of disturbance (hesitation, blocking and reproduction failure) on a word association task than sensitizers, but sensitizers rated themselves as more nervous than repressors. Among subjects anticipating shock, repressors showed higher GSR skin conductance than sensitizers, (Hare,1966). A similar pattern emerged in a series of related studies that showed a film of ritual subincision of a boy's penis and recorded physiological and self-report measures of male viewers' anxiety (Davidson, 1963; Lazarus & Alfert, 1964; Lazarus, Speisman, Mordkoff & David; 1964). Lazarus and Alfert summarized, "High deniers (repressors)

refuse to admit disturbance verbally but reveal it autonomically, while low deniers (sensitizers) are apt to say they are more disturbed while showing less autonomic activity."

Still, Tucker (1970) reemphasized the anxiety-reducing features of both defensive styles, noting that in the Lazarus et al. variation (1964), a commentary designed to promote intellectualization was most effective in reducing the skin conductance of a student group high in intellectualization, while a commentary promoting denial was most effective at reducing GSR among repressing business executives. Interestingly, related research suggest that the most efficient people at problem-solving under stress are those who show the greatest autonomic reactivity (Blatt, 1961; Kagan & Moss, 1962), thus, perhaps, repressors.

Such efficiency might be expected to be a factor in adjustment. Indeed, despite Byrne's original hypothesis that the R-S score would show a curvilinear relationship to indices of adjustment with extreme scores least adjusted, much literature exists to indicate that repressors are better adjusted than sensitizers. This difference has been noted on adjective checklists (Byren, Golightly & Sheffield, 1964; Lucky & Grigg, 1960), the MMPI (Joy & Endler, 1963) and in psychiatric versus control populations (Feder, 1967; Tempone & Lamb, 1967). Sensitizers see their lives as more controlled by forces outside themselves than repressors

Altrocchi, Palmer, Hellman & Davis, 1968; Tolor & Reznikoff, 1967). Repressors have also been shown to surpass sensitizers on verbal ability, social intelligence, sex knowledge and scholastic grades (Clark, 1969).

Perhaps related to poor adjustment, sensitizers report lower self-esteem than repressors and greater self compared to ideal person discrepancies due to less positive self-descriptions than repressors (Altrocchi, et al., 1960, Byrne, 1961, 1963; Gordon, 1959; Lomont, 1965). Rios-Garcia and Cook (1975) found sensitization correlated with self-derogation and anxiety, and Baldwin and Cabiance (1972) and Shavit and Shouval (1977) have shown sensitizers more willing to agree with negative evaluations of themselves than repressors.

Despite these consistent differences, the meaning of the above results has been disputed. Are repressors really better adjusted and more self-confident than sensitizers, or do they just say so? Alternately stated, are repressors more concerned about the impressions they leave on others than sensitizers, and more likely to engage in social desirability responding? Evidence from several quarters suggests the answer is yes.

In the first place, some studies in which indices of adjustment did not require conventional socially desirable

responses suggested that sensitizers may be capable of fuller development than repressors. Fretta (1974) found sensitizers more flexible and repressors more rigid on tasks requiring integration of cognition and affect. Gayton and Bernstein (1969) and Baker and King (1970) found sensitizers and neutrals higher in self-awareness of conflict than the more inhibited repressors. Weissman and Ritter (1970) stated that sensitizers, while "critical, impatient, action-oriented and personally more troubled" had greater capacity for "personal integration and creativity." Amont psychiatric inpatients, repressors were rated more extremely disturbed than sensitizers despite their unwillingness to acknowledge their disturbance directly (Lomont, 1965). It would seem important to ascertain whether hospitalized psychiatric patients were self-referred, referred by others, or committed, since sensitizers might be more likely to self-refer than repressors. Studies that find sensitizers more prevalent in outpatient clinical samples (Feder, 1967; Tempone, 1967; Thelen, 1969) likewise fail to rule out self-selection as opposed to differential adjustment as the important difference. Byrne, Steinberg and Schwarz (1968) found that among extreme scorers on the scale, sensitizers made significantly more visits to the student health service than repressors.

The relevance of social desirability for repressors

as opposed to sensitizers has been demonstrated. The expected differences have emerged when investigators' instructions intensified social desirability considerations regarding TAT responding (Gordon & Glass, 1970; Lefcourt, 1966), recall of violent news content (House, 1972), willingness to endure shock (Chabot, 1970; Merbaum & Badia, 1967) and estimation of shock intensity (Barton & Buckhout, 1969). Not surprisingly, when Lefcourt (1966) asked his subjects to assess the meaning of the R-S Scale, repressors were found to interpret the scale as an indicator of mental illness while sensitizers construed the scale as a measure of honesty with oneself.

Joy (1963) found a correlation of -.91 between the R-S Scale and the Edwards Social Desirability Scale. Crowne and Marlowe (1964) developed their social desirability scale in a manner uncontaminated by accurate self-report of health adjustment. It correlates at .35 with the Edwards scale and -.37 with the R-S Scale. Ramaniah (1977) found that the denial items of the Marlowe Crowne scale, which reject socially undesirable characteristics, correlate more highly with the R-S Scale (.58) than the items that embrace socially desired characteristics or the MC scale as a whole. It would seem, therefore, that R-S measures social defensiveness rather than social desirability per se (Fischer, 1969; Schill, Althoff & Black, 1969; Schill, Emanuel, Peterson

& Wachowiak, 1970; Silver & Grebstein, 1964).

Studies of perceptual defense have found differences between repressors and sensitizers even when the salience of social defensiveness was reduced by the experimental design (Bootzin & Natsoulas, 1965; Bootzin & Stephens, 1967). One study, for example, required subjects to respond with a taboo word to indicate perception of a neutral word and to respond with a neutral word to indicate perception of a taboo word (Zigler & Yospe, 1960). With reference to such studies, Erdelyi (1972) defended the New Look findings of perceptual style differences as more than just a response set. It seems likely that the R-S dimension, while encompassing a social defensiveness set tendency, also reflects a more general difference reflecting approaching or avoiding defense and coping style.

Returning to the psychoanalytic foundations of the defense style concept, some efforts have specifically addressed the issue of defining repression and sensitization in terms of their patterning of specific intrapsychic defense mechanisms. Tucker (1970) extrapolated from the research literature and intuitively categorized psychoanalytic defenses according to the R-S dichotomy. For defenses characteristically used by repressors, Tucker included repression, denial, reaction formation, and sweet-lemon rationalization. For defenses characteristic of the

sensitizer Tucker listed isolation, intellectualization, projection, compulsivity and sour-grapes rationalization. Tucker emphasized that his classification was tentative and needed to be researched empirically.

Some research has turned up negative results. The R-S Scale did fail to correlate with Rorschach indices of repression (Cooper, 1969; Lewinsohn et al., 1970; Tillich, 1968;), defense ratings of Sentence Completion tests (Crowley & Nalven, 1969) and a recent defense measure of untested validity, the Problem Situation Test, 1978). But the positive findings encountered in Byrne's original comprehensive review suggests that these negative findings may be exceptions to the rule. In fact, a recent study by the present author (Zalman, 1981) suggests that repressors and sensitizers are indeed significantly different in their utilization of specific intrapsychic defenses. Sensitizers were found to more actively approach conflicts as reflected in their greater utilization of Turning Against the Self and Turning Against the Other, while repressors appeared more likely to avoid or neutralize perceived conflict, as reflected in their greater use of the sweet-lemon rationalization found to characterize Principalization, in Zalman's study. Furthermore, combinations of approaching and avoiding defenses showed even greater correlation with sensitization and repression in Zalman's research. Thus, there

appears to be sufficient indication that the R-S Scale does have merit as a test of the individual, psychoanalytically-oriented defense style concept. The R-S Scale will be utilized as a measure of individual differences between subjects in the present study.

## Sex-Related Traits of Individuals

Certainly, there are other individual differences in addition to the R-S dimension that may be assumed to have major consequences for the expression of personality and important implications in interpersonal interactions. One primary candidate it would appear important to consider is sex or gender of the individual.

Normative differences exist between men and women. Nonetheless, the sexes share many similarities, and there are many men and women who are exceptions to the normative differences. According to Thorndike (1911), "...the average man differs from the average woman far less than many men differ from one another."(p. 21) Ambert (1976) agreed, "...the sexes are more alike than dissimilar."(p. 10) Still, it has been a matter of vigorous research to determine and explain the differences that exist between men and women (Hall, 1934; Maccoby & Jacklin, 1974; Mead, 1935; Parsons, 1955; Terman & Miles, 1936). It would be beyond the scope of this review to address the complex issues of the biology, sociology, and even psychology of sex differ-

ences, and the balance of similarities and differences between the sexes. Still, normative sex differences might be expected to interact with and mediate individuals' defensive preferences in a heterosexual interaction. Certain traits commonly considered peculiar to either sex seem likely candidates as factors related to defense and coping.

From Freud on, the psychoanalytic tradition has assumed biological, instinctual and psychological differences between men and women (i.e., Deutsch, 1932; Horney, 1926). Eriksen (1964) concluded that the genital anatomical differences between the sexes require males to be concerned with "outer" space, expressed as exploring, conquering, achieving and discovering, and females to lean toward "inner" sapce in terms of caring, nurturing and creating a stable environment. He was careful to note that each sex is capable of acquiring the other sexual style and that the proposed orientations are not rigid restrictions as much as predispositions. Jung also expected every individual to containt an androgynous balance of female anima or Eros, the ability to make connections, and masculine animus or Logos, the tendency toward abstract analysis, but he believed the sexes differed in that, "In men, Eros...is usually less well developed than Logos while in women... Eros is an expression of their true nature." More recent theorists have given other names to these same

dichotomies in men and women, referring to agency in males and communion in females (Bakan, 1966) or noting that females emphasize "process" as their criterion of achievement while men consider "impact" or the result the sine qua non of identity and success (Veroff, 1973).

Research has converged showing these polarities are neither universal or invariant. Mead's (1935) Arapesh, Mundugumur and Tschambuli, as well as the variety of marital patterns exhibited in Western Culure prove that men and women exhibit "masculine" and "feminine" characteristics in multitudinous diversity. Terman and Miles (1936) notwithstanding, many researchers have shown that the presence of one sex-typed polarity does not automatically preclude the presence or development of the other (Bem, 1975; Constantinople, 1973; Merrill, 1978). Nevertheless, common sex differences that may be related to coping style have been documented in the areas of field dependence, aggression, anxiety and self-disclosure of anxiety or weakness.

Witkin's (1959) proposals about field dependence and coping style have often been described. Field independence is associated with unemotional, independent problem-solving, while field dependence is related to passive, suggestible, conforming problem solving. Beginning in adolescence, men are more field independent than women (Bierei et al., 1958; Green, 1955; Witkin, et al., 1967). Thus, as psychoanalytic

tradition asserts, it would seem that men are more active or analytic copers, while women are more passive and global.

But the meaning of the sex difference in field task performance is no longer clear. Sherman (1967) attributed the results to male superiority in visual-spatial tasks as opposed to difference in analytic coping. On analytic tasks eliminating the spatial element, women often perform as well or better than men (Feathr, 1968; Witkin, Birnbaum, Lomonaco, Lehr & Herman, 1968; and others reviewed in Maccoby & Jacklin, 1974). Even when spatial ability is involved, women's analytic ability has improved when performance is described in terms made more acceptable to the female role, i.e. labelling a test a fashion design task (Milton, 1957; 1959; Naditch, 1976). Freedom to break stereotypical sex-type barriers appears important to expression of analytic ability among females. It has been shown that for women, field independence is associated with moderate cross-sex typing (Behrens, 1973; Greenwald, 1968; Kidd & Revoire, 1964; McCaulay, 1964).

It is debatable whether the same holds for men. McKinnon (1962) proposed that rigid sex-typing involves repression of cross-sex tendencies, and such repression entails loss of fluency in scanning thoughts and original or creative analytic ability. Hence, less sex-typed persons would be likely to be more fluid, field independent

thinkers according to MacKinnon's logic. As mentioned, such a result has been found among women. Bieri (1960) also found field independent men more female identified than field dependent men. But Vaught (1965) showed femininity inversely related to field independence among both sexes, and this factor was more significant than biological sex per se. While cross-typing among women may de-repress active analytic tendencies, cross-typing among men may also involve de-repression of passive-dependent "feminine" coping approaches which impede active, analytic coping.

Cross cultural evidence sheds further light on these issues. In the Temne culture of Sierra Leone, child rearing practices emphasize authority, strict discipline, conformity and group reliance. Temne males are found to be more field dependent than males raised in the more permissive, initiative- tolerating Mende tribe. Still, even stricter control is emphasized on Temne females, so that males of this culture remain more field independent than their female counterparts (Dawson, 1967). Among Eskimos, where girls are allowed considerable independence, there is no difference between the sexes on field independence. In Western culture, Bieri (1960) found field-independence high when acceptance of authority was low and identification with mother was high for males; for field

independent females, acceptance of authority was also low but identification was high with fathers.

In conclusion, active analytic coping as measured by field independence appears to be a complex issue involving not only sex differences, but cultural (which may be viewed as the macro-interpersonal) context. In general, while lack of repression and flexibility of cross-sex identification appear to aid active analysis in both sexes, de-repression may be of greater aid to field uninfluenced performance among females, while socially desirable sex-role sanctions may typically favor uninfluenced, field independence in men (Kagan & Kogan, 1970).

Another area of sex-typed behavior is aggression. According to Lee (1976), the most consistent finding on sex differences in American society and cross-culturally is that males are more aggressive than females. Although aggressive behavior is also learned, the sex difference in aggression appears to have a biological, hormonal foundation (Maccoby & Jacklin, 1974). Paulino (1968) found the expected sex differences in aggression in such social-sanction free behavior as dream content. Still, it may be true that because aggression is so obviously a male activity, females also learn to perceive aggression as reprehensible in themselves, and repress it below their initially lower level. Rothaus and Worchel (1964) found evidence of greater aggres-

sion anxiety in women's TAT responses. Kagan and Moss (1962) found that girls required longer tachistoscopic exposures than boys to recognize aggressive scenes. Thus, among females, differences in aggression may be evidence of greater or lesser repressive tendencies that accompany social propriety considerations, while among men, differences in aggression may reflect adherence or defiance with regard to the male role.

Fear and anxiety are also aspects of coping associated with sex differences. Women have been presumed to be more fearful or anxious than men. Physiological measures of anxiety do not appear to correlate highly with each other or with self-reports of anxiety (Lacey, 1967; Ross, 1959). Duffy (1962) did find sex differences in a review of arousal indicators and Liberson (1973) found that men responded to electric shock stress with circulatory changes while women responded with respiratory changes. Maccoby and Jacklin (1974) reported that observational studies do not show clear sex differences in anxiety or timidity among males and females, and concluded, "We would not be surprised if the answer turns out to depend on the stimulus situation. That is, the two sexes may turn out to be afraid of different things, on the average."(p. 412)

One clear difference that does emerge, however, is the greater willingness of women to claim anxiousness com-

pared to men. Sarason et al. (1960) suggested this explanation for girls' higher scores on self-report anxiety scales. Boys are more defensive on such scales, earning higher scores on lie scales by answering no to such items as, "When one of your friends won't play with you, do you feel badly?" Maccoby and Jacklin also offer this explanation for the fact that among 23 studies reviewed, males' anxiety scores never outstripped females.

Philips and Segal (1970) and Merrill (1978) found women endorsed more items on the Langner scale than men. Although once considered a screening device for mental illness, the Langner is now seen as a self-report for "psychological stress and physiological malaise." While it is not clear that women experience more symptoms than men, it is clear that they are more likely to admit them if they do experience them.

Cozby (1973) reviewed research on self-disclosure and concluded that women are more likely to disclose themselves generally than men. Merrill (1978) found women both more likely to admit stress symptoms on the Langner scale, and to disclose more varied aspects of themselves such as attitudes, tastes, work, money and bodily information as measured by the Jourard scale, than men. Interestingly, Merrill discovered that while femininity in either six correlates with increased symptom and general self-disclosure,

masculinity in either sex correlates with general self-disclosure but selects against symptom disclosure. It is possible that general self-disclosure among males includes a tendency to put only one's best foot forward by disclosing non-negative aspects of the self.

Given these important findings related to gender, the question arises whether defensive style also is affected by or expressed differently depending on the sex of the individual. In his early work with the R-S dimension, Byrne reported no significant sex differences between men and women in their R-S scores (1961, 1964). This result was also obtained in a recent study by the current author (Zalman, 1981). Yet, Chabot (1972) reviewed the R-S literature at the time of his article and found that only half of all R-S studies had included subjects of both sexes, and of the less than one third of those that analyzed sex differences, a plurality found them.

In addition, the possible interaction effects of R-S and sex in relation to a variety of behavior should not be ignored. Becker (1967) found relationships of sex, R-S and Guilford Introversion-Extroversion. Repression correlated with social extroversion in both sexes, but females tended to be more repressed than males, significantly so as extroversion increased. Becker also found both men and women introverts to be sensitizers. Merrill (1978)

found a high correlation between repression and stereotypical masculinity as measured by the Bem scale. She found that repressor, high masculine men were low disclosers of weakness. This finding contrasted with results for women, who disclosed weakness in relationship to their sensitization regardless of their masculinity scores. Self-disclosures not specific to admission of anxiety and weakness is also highest among sensitizing women, while male sensitizers are lowest in general self-disclosure (Chelune, 1975). Thus, differential sensitivity to admission of weakness is opposed to general self-disclosure appears to be more characteristic of repressor men and women, who thus, appear more concerned with meeting sex-stereotypes.

Zalman (1981) failed to find interaction effects of R-S and sex in predicting specific defense utilization as measured by the Defense Mechanism Inventory. Yet, it remains to be seen in the current study whether R-S and sex do interact to produce perceptual and behavioral differences in interaction and communication. The manner in which this question will be studied in the present dissertation will be addressed in a subsequent chapter. Before, this, however, it is necessary to survey the interpersonal research that does exist concerning R-S and sex.

Interpersonal Research Concerning R-S

The interpersonal behavior of repressors and sensitizers has received considerable attention. Differences in their interpersonal perception with regard to situational factors, accuracy and favorability have been studied. Several researchers have found that repressors attribute less hostility to themselves and more to those with whom they interact, especially under stress or ego threat conditions, than sensitizers (Altrocchi, et al., 1968; Baldwin & Cabianca, 1972; McDonald, 1965; Shavit and Shouval, 1977; Webber, 1968). A lone discrepant result occurred in Davis' (1976) all female sample.

Some studies have investigated repressor-sensitizer differences in how they evaluate or are evaluated by others with whom they related. Gordon (1959) found that contrary to repressors, sensitizers perceived less similarities between themselves and someone with whom they interacted after the interaction than prior to it. This difference characterized the sensitizers whether their partners had been repressors, sensitizers or neutrals. Sensitizers are also less favorably perceived than repressors, regardless of the perceiver's R-S score (Joy, 1963; Kornfeld, 1977).

Sensitizers appear to show greater verbal activity and interpersonal aggressiveness than repressors (Carroll,

1972). After asking his subjects to interview R-S neutrals, Kaplan (1967) found that when the interviewer was a sensitizer, the interviewer took a more active role and the interviewee a less active role than in interviews where neutrals or repressors did the interviewing. Furthermore, while interview content did not differ, sensitizers were found more critical of the interviewees than repressors post-interview. Scarpetti (1973) found sensitizers inclined to react to punishment with retaliation toward the punishing confederate while repressors tended to reward or mollify the agent of the punishment. Berquist and Crandall (1972) found sensitizers to perceive themselves as more aggressive in a group situation. In contrast, repressors rated their own group behavior as more aggressive in a study by Parsons et al (1967). Since Parson's groups were task-oriented perhaps a distinction can be made between aggressive behavior toward a task and aggressive behavior toward persons. Cohen and Forest (1968) compared five man homogenous groups of repressors and sensitizers. Repressor groups were found to settle more quickly on efficient, stable ways of approaching the tasks and produced more stable leaders than the sensitizer groups.

Sensitizers focus their interactions onto threat and anxiety more readily than repressors. Gleason (1969) discovered repressors under threat of shock became less anxious

when talking with someone who avoided the topic of the shock, while sensitizers became less anxious when the could talk with someone who would talk about the shock. McCashin's (1970) analog to therapy showed that sensitizers responded favorably to verbal reinforcement or interpretations to their references to a problem, while repressors failed to respond to verbal reinforcement and negatively conditioned to interpretations.

## Interpersonal Research Concerning Men and Women

The primary hallmark of men and women together is that men tend to dominate these interactions, while women engage in non-dominating behavior. Women conform more to pressure in mixed-sex groups than in groups of women only (Beitan & Shaw, 1964; Tuddenham, MacBride & Zahn, 1958). Lockheed and Hall (1976) reviewed research on mixed-sex groups and found these consistencies: 1) on the average, men initiate more verbal acts than women, 2) a woman is more likely to yield to a man's opinion than a man to a woman's and 3) men spend a larger percentage of their time giving suggestions, orientations and opinions to the group, while women spend more time agreeing with or praising others. Males have been shown to make 98-100% of the interruptions or talk-overs in same and mixed-sex dyads in natural settings (Zimmerman & West, 1975). In same and mixed-sex groups and pairs, men simply talked more than women (Hilgard, Kramer &

Clark, 1975; Strodtbeck & Mann, 1956;) while women smile more in virtually every social context (Weitz, 1976).

Aries (1977) reported a careful study of differences among small all male, all female and mixed-sex groups. In the mixed-sex groups, both men and women used more emphatic and exaggerated words, doubtful uncertain words and qualifications than they used in their same sex groups, perhaps indicating defensive coping. Male group conversations were characterized by story-telling, jumping from one anecdote to another and emphasized themes of superiority, aggression action and objective reports, while all female conversations reflected sticking to one topic, exploring feelings and self-revelation. In mixed sex groups, men made more frequent references to their feelings than was usual for them, but the usual differences in amount and dominance of speech were retained.

Aries' study implies situational flexibility in the interactional behavior of men and women. Maccoby and Jacklin's (1974) review of Prisoner's Dilemma Game research suggests that on a neutral experimental task, so-called pervasive sex differences in cooperation and competition did not come into play. Yet, Megargee (1969) found that high dominance women will assume dominance over low dominance women but not over low dominance men, indicating that individual traits of one member of a dyad will lead to

differential reactions based on both the sex and the traits of the other member. Pleck (1976) demonstrated that men high in "male threat from female competence" (MTFC) showed an elevation in performance and greater desire to avoid future task interaction with their dates after competing with them on a task than did other men. Lips and Colwill (1978) speculated that the female partners of high MTFC men may be high in fear of success and suggested the need to investigate ways in which "personality dispositions of a man-woman pair may interact to influence the behavior of each." (p.211) Peplau (1973), in fact, discovered that women high in fear of success did considerably less well on an anagram task when competing against their boyfriends than when joining them to compete against others. Among men and women low in fear of success, relationship to the competitor had no bearing on performance.

Several researchers have explored the patterns of self-disclosure of men and women sensitizers or repressors interacting with others. Studying men only, Baldwin (1974) found that on a paper and pencil test given during the first four hours of experimentally offered therapy, repressors indicated greater willingness to self-disclose than sensitizers. But detailed inquiry qualified this finding, since these male repressors also expected more planned rather than spontaneous activity by the therapist,

felt therapist personality less important in facilitating change and estimated less likelihood of entering therapy in the future than sensitizers. It is not surprising then, that Thelen (1969) found that males who tend to terminate actual therapy are repressors, while no difference in stage of termination was found between female repressors and sensitizers. While Chelune (1977) failed to find sex-differences among subjects paired with same-sex interviewers, he found that male repressors made proportionally fewer negative self-references than male sensitizers and female repressors made proportionately more negative self-references than female sensitizers when paired with opposite sex interviewers. Lupei (1974) discovered inter-actional processes of self-disclosure for men and women. His method involved a study of process of interaction that will be described in a subsequent section.

Some researchers have focused on the self and other perceptions of male and female repressors and sensitizers. Lomont (1965) studied the self-perceptions of fraternity brothers and sorority sisters who knew and interacted with them. For males, repression correlated with both self and peer estimates of dominance, which essentially agreed with each other. But among females, R-S score correlated with both peer and self estimates for repressors only. Sensiti-zation was correlated with a woman's underestimate of her

own dominance compared to her sorority sisters' ratings.

A few studies have looked at male and female repressors and sensitizers in mixed sex-dyads. Turk (1963) found that repression in the coping style of female nurses in pairs with male student doctors was correlated with their greater assumption of similarity of perception of their relationship than actually existed between nurse and doctor. Wolfe, Young and Bryant (1977) found that female perceivers' accuracy in evaluating the defense style of male targets depended on their R-S similarity with the target. Repressors perceived repressors more accurately, aided by social desirability presumptions, while sensitizers perceived sensitizers more accurately.

Some studies of marital dyads also shed some light on interaction between repressors and sensitizers of the opposite sex. Sorenson (1974) compared Q-sort data of 10 clinic couples with low marital adjustment and 10 non-clinic couples with high measured marital adjustment. The R-S scores of both husbands and wives in the clinic couples were significantly higher, discrepancies between husbands' and wives' scores were greater in the clinic group and the non-clinic couples showed more agreement in their perceptions of their marital behavior. However, a random pairing of husbands and wives selected from the non-clinic group showed similar levels of agreement, suggesting social

desirability responding may be a factor in the similarity of the non-clinic spouses' endorsements, as would be expected for repressors.

Day (1972) compared 60 randomly chosen married college couples representing all paired combination of repressors, sensitizers and neutrals. He found that repressors reported significantly better marital adjustment than sensitizers and neutrals; that for all subjects including sensitizers, marital adjustment report was higher and life-stress estimate was lower if the spouse of the respondant was a repressor; that sensitizers perceived themselves to be more aggressive than their mates perceived them to be while their was no such discrepancy for repressors or neutrals; that sensitizers rated themselves significantly more aggressive than repressors rated themselves; that sensitizers prevailed in having their judgements endorsed by repressor mates when confronted with ambiguous choice situations, and that repressors' feelings about their life situations were more accurately perceived by their mates than sensitizers' feelings.

Research on general marital interaction indicates substantial variation in dominance pattern (Kenkel, 1963; Strodtbeck, 1951). Leik (1963) and Burke (1972) failed to confirm Parsons and Bales' model of instrumentally dominant husbands and expressively dominant wives. While noting that

wives tend to increase in dominance relative to the length of their marriages, Collins and Raven (1968) commented, "In the analysis of husband-wife interaction, the power structure shows even greater variability and multidimensionality than with other groups."

## Interactional Process and Personality

### Theoretical Background

Thus far, the review of the literature has suggested that individual variables, even those as central to personality as defense style and sex, may be studied in an interactional framework. Some interpersonal studies including these variables have been reviewed. Most of them have identified various outcomes of the interactions studied. However, the study of the actual process of interaction requires additional background. The theoretical underpinnings of process analysis and its contribution to the understanding of persons and their interpersonal behavior will now be explored.

The modern study of interpersonal interaction and relationship is rooted to a substantial degree in the work of Henry Stack Sullivan. Sullivan (1964) diverged from the emphasis of traditional psychiatry on individual pathology during his work with schizophrenics. He began to see all mental pathology and indeed all personality as a

product of interpersonal relationships. He felt the notion of an individual apart from interpersonal relationships to be a misleading cultural myth and stated, "Personality is manifest...in interpersonal situations, only."(p.53) He developed a complex theory of personality development through interpersonal experience and traced the idea that any interaction between two people is a function of their past experiences in interpersonal situations and their past experiences with each other interacting. Sullivan was well aware of the complexities of interpersonal communication, both verbal and non-verbal. He emphasized the importance of communication through language and gesture in the formation of personality.

Another psychiatrist, Jurgen Ruesch, also gave maximal emphasis to the communication between people in understanding pathology and personality, as is evident in the titles of his books, Disturbed Communication, (1957), Therapeutic Communication, (1961), and Communication: The Social Matrix of Psychiatry, (1951), co-authored with Gregory Bateson. Ruesch wrote (1951):

> Under the term "ego psychology" much valuable information has been collected about the ways patients communicate and on the impact they have on others, although the findings are still formulated in terms of mechanisms of defense, transference, and counter-transference. Since the ego mediates whatever happens outside the organism, the scientific observer and the therapist can only perceive whatever has been expressed. At this point, the views of psychoanalysis coincide with those of communication theory. One might even go so far as to

> say that the psychiatrist who is interested in communication takes up where the psychoanalyst begins to leave off.(p. 117)

Reusch particularly clarified his ideas with respect to the concept of psychological defense:

> The tendency to dissect the functioning of individuals into mechanisms is a greater weakness of theoretical psychiatry. When the psychiatrist refers to identification, projection, sublimation, reaction formation and so on, he is making statements about his own focus of attention rather than explaining what goes on in another individual. These mechanisms do not constitute separable units of behavior which could be legitimately used as explanations of what is happening; rather the reference to one of these mechanisms is an explanation indicating some features of the momentary focus of the psychiatrists' perceptions. If the reader will take the trouble to think through what is meant by one of these "mechanisms," he will soon discover that in order to understand and explain any one of them, all the other mechanisms are needed. The word "mechanism" is in fact, a misnomer. "Projection," "identification" and so on, are elements in the functioning of a total individual as perceived and dissected by another individual (the scientist). If these elements were represented in a diagram, the diagram would not be comparable to a block design of existing parts within the single individual. Rather, it would be a flow chart in which the units represent functions or processes. Furthermore, this flow chart would represent not one individual but two persons in interaction.(p. 117)

Thus, Ruesch was able to conceptualize specific defense mechanisms in terms of interpersonal interaction, rather than the intrapsychic mechanisms proposed by psychoanalytic theory:

> Freud postulated that repression is the principal mechanism in the production of neurotic symptoms while the upsurge of unconscious forces occurs primarily in psychotic conditions. Today, we can add that inadequate interpersonal feedback characterizes both insufficient and excessive repression.(p. 119)

Isolation, for example, is conceived by Ruesch as a mechanism occuring only when their is a particular failure of interpersonal communication that happens when a person is not allowed or encouraged to communicate both the details of an experience and its emotional impact to a listener. Ruesch describes the appropriate therapeutic response to this mechanism in terms of a communicative process:

> Apparently when a person cannot repeat an experience in action and when the affective component of the experience is discordant with its intellectual counterpart, he needs elaboration of such an experience in an interpersonal context. Through this process, the individual acquires the ability to relegate irrelevant material to the background, and the other person helps in connecting emotional concomitants with intellectual content.(1957, p. 73)

A similar emphasis on the importance of understanding personality in an interpersonal framework is represented by another well known and contemporary psychiatrist, Robert Langs. In The Bipersonal Field, (1973) he states:

> In the past, we would be attempting to understand the intrapsychic anxieties and conflicts within the patient that prompted defenses and resistance, and it would be more than likely that we would not consider the interactional aspect at all. Now you can be sure that if a patient was intellectualizing and using isolating defenses, this is part of her own intrapsychic needs and conflicts. But I would submit to you that you cannot really understand this resistance without the bipersonal field concept and an understanding of the interaction that occurs within it. In fact, if you interpreted a patient's defense based entirely on the patient's intrapsychic conflicts, it is my belief that you would be inappropriately placing the entire responsibility on the patient at a point when you yourself had contributed to her defense in important ways.(p. 236)

It is quite clear that Sullivan, Ruesch and Langs all conceive of the psychiatric session as an interpersonal interaction first and foremost, and one in which therapeutic patterns of communication are the overall focus of emphasis in affecting and developing characteristics of personality.

Dance (1976) suggested three functions of spoken communication between people that may make it the most relevant process for the development and maintenance of personality organization: 1) the integration of the individual with his milieu, 2) the development of mental process, and 3) the regulation of behavior. In Dance's words, "The presence in a human being of speech communication naturally and inevitably -- regardless of the will or intent of the individual himself -- results in the above three functions." (p. 301) Luria (1963) has studied the development of speech and communication behavior in the child. In essence, Luria suggests a child's internal thinking, its processing of all complex stimuli in the environment, both social and non-social, must be internalized through the words he learns in process with other verbal, communicating human beings. Hence, the importance of the spoken interaction for the child's internal development of a sense of self in relation to his world becomes clear.

A growing body of research, both empirical and experimental, is beginning to shed light on the relationship

between personality and interpersonal interaction. For example, Carson (1969) has combined the theories of Sullivan with concepts derived from social exchange theory (Thibaut & Kelly, 1959) and learning theory (Golddiamond & Dymond, 1968; Kramer, 1962) to construct a personality theory where communication contingencies are taken into account. Research has pointed out that in the formative stages of interpersonal relationships, the interactors tend to be highly selective in the behavior they display (Jourard & Laskow, 1958). If they anticipate future interactions, the respective partners are more apt than they otherwise would be to screen aspects of self from presentation (Gergen & Wishnow, 1965). Evidence has been found for reciprocal aspects between communication and self regard. Indeed, it has been shown that a person who holds a negative view of himself will tend to actively construe the behavior of others toward him in a negative way (Diggory, 1966; Phillips, 1951). Good feelings toward the self are also actively played out in interpersonal situations, thereby evoking more positive behavior from others, confirming the individual's high regard. Experiments by Haan and Maehr (1965) indicated that people are usually quite sensitive to the degree of approval or disapproval they receive, and induced changes in the self-rating after receiving approval or disapproval may last for several weeks. Videbeck (1960) has shown that the extent to which communication leads to

reciprocal changes in person perception and overt behavior corresponds to the number of interactions, the significance or regard each person has for the other, the intensity of their interpersonal environment and the involvement of each person in it.

Interactions are chosen by individuals because they fit with their present personality, that is, they conform to comfortable or familiar expectations regarding interpersonal situations. According to Precker (1953), "We tend to maintain our cognitive structures in relatively stable form and select and interact with those who do not attack these structures."(p.97)Situations which do attack these structures are found to arouse defensiveness or rejection of the "attacking other." Certainly, resistance in therapy and premature terminations can be conceived in these terms; perhaps so may divorces. Triandis (1969) found that pairs of subjects who categorized objects similarly communicated more effectively than those who categorized them differently. The interplay of cognition, communication, self-image and personality is clearly suggested by this diverse research.

Some research on a variety of particular personality variables as they are expressed in interaction has been done. For example, verbal and non-verbal communicative differences between introverts and extroverts have been noted.

Mobbs (1967) found that extroverts engage in slightly more eye contact than introverts, with longer glances. Exline (1963) found that subjects, especially females, who were highly motivated for affiliation, gazed more in cooperative and less in competitive situations. Miles (1965) found that extroverts spoke more and sooner than introverts. Similarly, dominant individuals were found to succeed more in interrupting and holding the floor.

Communicative and speech characteristics typical of mental disorders have been explored. Argyle and Kendon (1967) found that chronic schizophrenics engaged in very little eye contact, tended to gaze at a 90 degree angle to the line of eye contact, and used very short glances. Schizophrenic speech has been shown to be unsynchronized with that of another speaker, so that there are frequent interruptions and long silences (Chapple & Lindemann, 1942; Matarazzo & Saslow, 1961). Depressives have been found to speak little, sustain long silences and especially inititate few speech events (Chapple & Lindemann, 1942). Manics have been found to speak more rapidly than normals, to change topics frequently, and to use more verbs and fewer adjectives (Lorenz & Cobb, 1952). Anxiety neurotics have been shown to perform fast and irregular speaking patterns, with frequent speech interruptions and errors. They respond rapidly and often inititate interaction

(Chapple & Lindemann, 1942; Matarazzo, 1958). Riemer (1958) reported higher rates of blinking among hysterics. It is interesting to view these behaviors from a communication or interactional perspective. Certainly such behaviors evoke responses in listeners that may be seen to have an impact on these very speech communications and the communicators themselves. Such idiosyncratic disorders in speech and a listener's response to them define aspects of relationship and self-concept that may either be maintained or altered.

Thus, while many of the above studies support the notion of individual consistencies in communication behavior regardless of who the listener may be, it is also clearly true that communication interacts with personal consistencies and situational factors, making each conversation a unique event of self-presentation and person perception for its participants. Mortensen (1972) put it succinctly:

> Through the gamut of human dealing -- verbal wranglings, idle banter, heated confrontation, intimate disclosure, subterfuge and innuendo -- the self adds to our storehouse of self-defining information. Hence, the individual sense of self is constantly taking on new shape. It is neither fixed nor capricious, yet in some elastic and dynamic way it permeates all facets of the unfolding moment and brings a wondrous sense of immediacy to human experience.(p. 267)

## Major Theoretical Advances Regarding Interaction Process

Theoretical developments in a variety of areas, some well outside the field of psychology per se, helped prepare the theory and methodology with which to understand the process by which human personality and interpersonal communications both maintain and affect each other. Specifically, the contributions of information theory, cybernetic theory and general systems theory have defined communication with its own vocabulary and procedure of study.

Claude Shannon wrote The Mathematical Theory of Communication in 1949 to outline and explain the principles of information theory. Not limiting his discussion to human interaction, Shannon described the parts of any communication system as including a source, a transmitter, a message, a channel, a receiver and a destination. The source sends messages through the channel to the destination aided by a transmitter which changes the message into a signal compatible with the channel and by the receiver, which changes the signal back into a form usable by the destination. Shannon assumed that a source makes choices and the destination reconstructs these choices from the signal that was transmitted/received. In a perfect system, Shannon pointed out, the source and the destination operate under the same restraints, that is, the destination "knows"

exactly what the sender knows, except for the particular choices that source will make. Based on these assumptions, Shannon used mathematical proofs to show that the source's freedom of choice is exactly equal to the information transmitted through the channel in a perfect, noiseless system. He then showed mathematical functions by which all these concepts could be manipulated in terms of the number of things that could occur and their probabilities of occurrence.

Thus, the concept of information as used by information theory does not connote its usual meaning. Rather, it is more clearly related to "surprise value." A signal that is perfectly "redundant" or predictable would carry little or no information between source and destination. On the other hand, a signal or stimulus that is totally unpredictable and thus loaded with surprise value or information may in human terms also be somewhat unintelligible. It is relative redundancy in information or interpretable deviations that are most important for communicating human beings.

The complexity of human communication may be thus understood via a structured approach through the application of information or communication theory. The main "channel" is the verbal stream back and forth between the speakers, allowing the mutual transfer of information. According

to Allen and Guy (1974):

> The great communicative power of this verbal stream lies in its incredible flexibility. Indeed, there is a wide variety of alternatives for ordering words in communicative statements. Furthermore, each participant has tremendous freedom in redefining, repeating, modifying and referencing his own and his partner's preceding statements. This process establishes new chains of association for each participant. The process of verbal exchange is a creative flux in which the two partners can generate and adjust their verbal interchange up to the point where some level of understanding has been reached. Understanding...does not mean agreement but rather a modified orientation toward the communicative content.(p. 28)

In addition to the verbal stream, of course, a second channel which can reinforce or modify the verbal channel consists of non-verbal somatic and gesture behavior.

Additional efforts in the field of mathematics again contributed concepts to a model of communication. Norbert Wiener was a contemporary of Shannon, and also was interested in communication of information. In 1948, he wrote Cybernetics: Control and Communication in the Animal and the Machine, which concerns information theory, prediction of signals in the presence of noise, feedback and servomechanism theory as it applies to machines, computers and "any phenomena of life which resembles anything in this list of which embodies similar processes." The essence of Wiener's work lies in his analysis of the extensive parallels between the operation of animal nervous systems and the feedback control systems of machines. The main idea of

cybernetics lies in its conception of feedback mechanisms which inform, guide, regulate and predict performance. Wiener (1948) defined feedback as follows:

> When we desire a motion to follow a given pattern, the difference between this pattern and the pattern actually performed is used as a new input to cause the part regulated to move in such a way as to bring the motion closer than that given by the desired pattern...feedback tends to oppose what the system is already doing and is thus negative.(p. 97)

An oft-cited example of a mechanical feedback system is the governor of a steam engine. Weights are attached to a spinning "output" shaft of the engine and to the intake valve of the engine. As the shaft increases its speedk, the weight is thrown outward by centrifugal force and that movement shuts the intake valve, slowing the engine down. Through this feedback servomechanism, a steam engine is able to maintain a constant speed under various load conditions. Other examples often used to illustrate the concept are the thermostat for a furnace, or radar giving feedback to the signal-generating missile. According to Wiener, "Negative feedback is an essential function in any adaptive teleological (goal-seeking) system, for without information about the errors that it makes, the system cannot correct them.(p. 108) Applying this concept to the interpersonal context that is the focus of this dissertation, it can be stated that each person's response serves as feedback to be interpreted by the other in a continuous pattern.

This enables the maintenance and achievement of conversational goals of each interactor and the mutual conversational parameters of both.

A third theoretical force was emerging around the same time Shannon and Wiener were making their contributions. This was General Systems Theory, proposed by Ludwig van Bertalanffy (1950), who viewed his proposals as the outgrowth of convergent thinking from a variety of fields. Bertalanffy noted similarities in the assumptions of mathematicians, biologists, physicists, psychologists, sociologists, anthropologists and so on. He stated, "There exists models, principles and laws that apply to generalized systems or their subclasses, irregardless of their particular kind, the nature of their component elements and the relation of forces between them."(p. 32) He proposed General Systems Theory to take as its subject matter "the formulation and derivation of those principles which are valid for systems in general." (p. 32)

The essential assumption of General Systems Theory is that every part of a system is so related to every other part that any change in one aspect results in dynamic changes in all other parts of the total system (Hall & Fagan, 1958). Van Bertalanffy took pains to describe human personal and social systems as open as opposed to closed systems. A system is considered open if some ex-

change of matter, energy or information takes place between it and the environment. The important fact is that this exchange or flow of process occurs without disrupting what the organism experiences as coherence. In other words, the organism interacts with and is influenced by the environment but not in ways which destroy self-identity, or for example, psychological stability. A closed system, in contrast, is self-contained and uninfluenced by the environment; no energy or information penetrates from the outside. Essentially, the idea of communication as an open system denies the possibility that man can act in an automatic and self-contained manner, cut off from the constraints of his interpersonal surroundings. The implications of this outlook for the intrapsychic or individual emphases of the medical and even psychoanalytic models are noteworthy.

The application of systems theory to personality and human interaction was developed extensively by Watzlawick (1967) among others. Watzlawick was interested in the process by which the relationship between interactors is defined and maintained in their interaction as an open system. He outlined a number of important propositions: An interacting system is more than the sum of its parts (nonsummativity) but behaves according to its wholeness, complexity, Gestalt or pattern. In interpersonal interac-

tion, all behavior is communicative and one cannot not communicate. Communicative sequences cannot be separated into parts and summed. There is no unilateral relation between elements; to say A's behavior cause B would be to ignore the effect of B's subsequent or anticipated reactions on A, or in essence, to ignore the reality of feedback. Also, in a self-modifying open system that seeks to maintain its coherence, results are not determined so much by the initial conditions as by the nature of the process, or the system parameters (equifinality). The system does define its own limitation so that in a communicational sequence, every exchange of messages narrows down the number of possible moves. It is the sequence of moves preceeding through time that defines a relationship and the roles or personalities of the interactors in it. There is a universal tendency to organize and attach meaning to this interaction as it unfolds. In Watzwalick's view:

> To an outside observer, a given sequence of statements seems to unfold in an uninterrupted ebb and flow... However, the principals punctuate differently from each other and from an outside observer. Each sees the interchanges from a particular beginning point, one that defines all that follows." (1967, p. 93)

Bateson and Jackson (1964) pointed out that it is each individual interactor's or observer's punctuation that makes it appear variously that one or the other interactor has

has initiative, dominance, or the like. Thus, the interactors will "set up between them patterns of interchange (about which they may or may not be in agreement) and these patterns will in fact be rules of contingency regarding the exchange of reinforcement." (Bateson & Jackson, 1964).(p.273) Watzlawick paid great attention to the actions of the interactors as they are punctuated by them to define the relationship. He describes two patterns of interaction: In symmetrical interactions, the parties tend to mirror the relationship-defining acts of each other's behavior, whether they be defined as goodness, badness, assertiveness, helplessness etc. In complementary interactions, a behavior of one partner accepts or completes the Gestalt offered by the other, for example, aggression is followed by submission and vice versa. Symmetrical interactions are characterized by equality and minimization of different behavior, while complementary interactions emphasize maximization of opposites and difference. The potential "run-away" reactions, that is, escalating competition in symmetrical interactions and rigidity of role in complementary interactions would seem likely to develop manifestations of "individual" pathology in one or more of the interactors, such that maintenance of the open system is threatened. Another example of interactional pathology is the double bind, in which symmetry and complementarity are communicated simultaneously on different channels, i.e. words suggest complementarity

but vocal tone metacommunicates symmetry and vice versa.

These theoretical developments have clearly given rise to a new focus on interactional process, that is, the moment to moment flow of interactional events. Argyle (1969) noted that one way of conceiving interaction was as a chain of responses, with each interactor reacting to the other's most recent social act. This model leads to research in which the sequences of acts are studied, and has, in fact, been shown to lend considerable degree of fit with what actually happens in that quite a high degree of prediction can be obtained if just the immediately preceeding act is know.

Despite this apparentlysimple predictability obtained regarding the next act if the current act is known, the underlying process remains multidimensional. Scheidel (1971) described a process model of communication as having three features: 1) ongoingness; a sequential, changing, developing activity, 2) complexity; a multi-variable, multi-faceted activity, and 3) interrelatedness; a coherence and interaction among the many dynamic variables in the activity. Arundale (1973) felt that the concept of process involved all of the following: change over time, irreversability, continuity, interrelatedness, relativity, equifinality, interaction, emergence and complexity. Wilmot and Wenburg (1973) offered the following itemization of what is involved

in communication as process: 1) Communication is a complex, dynamic process, 2) all communication transactions are contextual and therefore, are unique, irreversible and unrepeatable, 3) since communication is an uninterrupted sequence, it has no beginning or end, to designate some participants as "senders" and others as "receivers" is therefore, an arbitrary decision and should be recognized as such, 4) each participant in a transaction affects and is affected by the other participant -- none will ever be the same again, and 5) each participant in a transaction is simultaneously encoding and decoding.

Process research utilizing many of the theoretical ideas outline in the above section has been forthcoming in recent years. This research will be reviewed in a coming section. However, before describing process research and its methodology, it would seem beneficial to integrate and elaborate the notion of interactional behavioral process with that of interpersonal perception. Complex perceptual reactions occur during interactions. What can be said of the perceptual aspects accompanying interpersonal interaction?

Kendon (1967) studied patterns of perceptual focus during conversations. He noted that first a speaker often looks away when he starts to speak, probably to avoid distracting input when formulating the utterance. He looks

at the other person during grammatical breaks, probably to check if she is listening and following and whether that person is willing to let the first person continue talking or not. Just before ending an utterance, he looks up again to see how the person is reacting; he looks for agreement, enjoyment, patience, etc. By such intermittent scanning, interactors are able to resolve the conflict described by Jones and Thibaut (1958) between interpreting the reaction of the other and planning the next response.

The first few minutes of an interaction may often be quite decisive in setting the tone and pattern for a relationship. According to Berger (1974):

> We believe the first few minutes of verbal and non-verbal communication between strangers may determine, at least under some conditions, whether persons will be attracted to each other, and by implication, whether the persons involved in the interaction will attempt to communicate at a future time.(p. 204)

Zunin and Zunin (1973) entitled their book, "The First Four Minutes." for this reason.

According to Tagiur and Petrullo (1958), in mutual dyadic interactions, the need for information from one person to the other is immediate and it must be quickly processed since neither interactor has that much time to think about the preceding act before having to communicate herself. As a consequence of this immediacy, these authors suggested, much of the perceiver's attentive focus will be

directed to her own future output and not to the input of the other. Thus, there may be a greater focus on "What am I going to do next?" as opposed to "What is this other person like?". However, each interactor may also be seen as a partial cause of the other's behavior. If we assume that both speakers perceive each other to be receptively influenceable from moment to moment, than cues of acceptance and social reinforcement will be perceived and have impact. In line with this, as a conversation proceeds and after it is over, inferences about the other's intentions, motives, and personality will be coming into play, and become increasingly important in future interactional behavior.

According to Leary, (1957), "What a person does in any social situation is a function of at least two factors: 1) his multi-level personality structure, and 2) the activities and effects of the other one."(p. 83) Perception of self and other become important in this process in a complex manner. The perceptual "stimuli", that is, the presentation of persons in interaction, is itself multi-level, including simple physical variables as well as complex configurations. The interactors use a shorthand for constructing meaning from all these components, and it is extremely difficult if not impossible for either to be concscious of his perceptual processes. Involved in

these processes are the situation of the interaction, the person perceived, and the perceiver, who is selectively attuned to certain events in preference to others.

William Schutz (1958) outlined personality variables considered important in what people look for and communicate to each other in their interactions. Schutz proposed three fundamental dimensions of personality to be perceived and enacted -- inclusion, control and affection. Inclusion concerns the entrance or acceptance into association with others. Control concerns the need to respect relationship defining competence in the other and to be respected by him. Affection concerns the need to be liked and loved. Schutz felt each dimension should be divided into two aspects: 1) the behavioral characteristics each expresses in the relationship, and 2) the extent to which each individual wishes to see this expressed toward him. Leary (1957) and others had reduced it to two dimensions of importance, since inclusion is often assumed as a given. Thus, Leary and his associates identified dominance/submission (similar to Schutz's control) and love/hate (similar to Schutz's affection) as the important aspects of action and perception. Leary's paradigm conceived of the two dimensions as intersecting as an axis on which any relationship could be graphed.

How do these dimensions reflect themselves in an in-

teraction? Giffin and Patton (1976) note that affectionate behavior tends to evoke affectionate behavior if it is perceived. Similarly, hostile behavior perceived as such also tends to induce hostile responses. On the other hand, these authors suggest that dominant and submissive behavior, perceived as such, tend to evoke their reciprocals. In light of these contingencies, which are identical to the symmetry and complementarity discussed earlier, people tend to work out a shared definition of their relationship.

But perhaps the most interesting analysis of the relationship of interpersonal perception to the definition of a relationship in action was offered in the work of R.D. Laing, particularly in his book Interpersonal Perception (1967). Laing spoke about each interactor's perception of the relationship:

> My field of experience...is filled not only by my direct view of myself and of the other, but of what we shall call metaperspectives -- my view of the other's view of me. I may not be able to see myself as others see me, but I am constantly supposing them to be seeing me in particular ways, and I am constantly acting in light of the actual or supposed attitudes, opinions, needs and so on the other has in respect of me. (p. 4)

Laing proposed a feedback model of the interpersonal process. According to this model, each person in a dyad can attempt to act upon three areas related to the other through communication: 1) on his experience of me, 2) on his experience of himself, and 3) upon his behavior.

Clearly, the perceiver also can act on his own experience of the other:

> What I think you think of me reverberates back to what I think of myself and what I think of myself in turn affects the way I act toward you. This in turn influences how you feel about yourself and the way you act towards me and so on.(p. 9)

Laing termed each person's view of himself the "direct perspective," he called each person's view of the other the "metaperspective" and he called each person's view of the other person's view of him or her the "metametaperspective." Furthermore, he suggested an analysis of particular aspects of the interaction according to the following: Comparison of one person's view with the other's on some issue tells whether or not they are in agreement or disagreement. If a person is aware of the other's point of view, we say he understands that person. If he fails to recognize the other's point of view, we say he misunderstands. With agreement or disagreement, people's direct perspectives are compared, with understanding or misunderstanding, one person's metaperspective is compared with the other person's direct perspective. In addition, comparison between one person's meta-metaperspective and his own perspective is that upon which is based his feeling of being understood or misunderstood by the other. And finally, comparison between one's meta-metaperspective and the other person's meta-perspective results in realization or failure to realize the understanding or misunderstanding.

Laing studied two groups of married couples, specifically, clinic couples and non-clinic couples thought to be satisfied with their marriages, to assess the above mentioned relationships of perceptions and metaperceptions. Agreement, that is, husbands' and wives' direct perspectives on the same topic, was found to be consistently and significantly greater in the non-clinic group as opposed to the more disturbed group. Also, although in both groups husbands understood wives as much as wives understood husbands, there was considerably greater understanding in the non-clinic group. In both groups, agreement and understanding tended to go together, while misunderstanding occurred only rarely when there was agreement. But where agreement was characterized by misunderstanding, it was more frequent in clinic group marriages. In both groups, disagreement was less frequently recognized or understood than agreement. Disagreement was seldom assumed when agreement existed, but disagreement was often not recognized when it existed. But while to feel misunderstood was very rare in the non-clinic group, it was more frequent in the clinic group. The clinic group was not uncommonly in error to feel understood, and correct to feel misunderstood. Thus, the disturbed group was less sure of themselves and each other. They were more in disagreement, had more misunderstanding, and when realizing they were misunderstood were fairly often incorrect about which specific issues on which they were in fact

misunderstood. Capella's research (1976) utilized Laing's ideas in a probability model to explore the interactive aspects of these states.

## A Review of Process Research Applications

The theoretical underpinning regarding interpersonal process has begun to be reflected in a variety of process research studies. Many have been practical, clinical studies in the area of family interaction, while others have focused on dyadic interactions in both clinical and laboratory contexts.

The earliest important research on interpersonal process in families was done by Jackson, Bateson, Haley, Weakland, Satir and others at the Mental Health Research Institute in Palo Alto in the 1950's and 1960's, and continued into the present. For example, in "Method of Analysis of a Family Interview," Jackson, Riskin and Satir (1961) utilized "communication analysis" to note patterns of symmetrical and complementary responses of a couple and their therapist in a clinical interview. At the outset of the Palo Alto group's work, it was clear that a variety of data could be gathered about families via several methods: 1) Psychological, sociological and anthropological evidence using psychological tests, Q-sorts, and questionnaires about child rearing and roles in the family, 2) data obtained from individual family members that was then

coordinated (Lidz & Fleck, 1965), and 3) observation, often derived from treatment, of family and patients as a system. Obviously, the first two methods of approach are not primarily interactional, while the third is. Danziger (1976) referred to the first two methods as examples of the black box approach where "inputs and outputs are correlated without raising any questions about the interaction processes that produce correlations." Not surprisingly, it was the third method of inquiry that became the focus of the Palo Alto group, emphasizing the study of process.

Danziger (1976) also described two levels of process research. The first concerns rating qualities of the interaction, involves the use of skilled observers and includes the use of rating scales and dimensions such as warmth, permissivness, dominance, etc. Danziger stated:

> The disadvantages of this approach do not only lie in the fact that they may tell us more about the semantic space of the raters than about the nature of the processes taking place among the family members whose interaction is being observed. There is the additional problem that it is extremely difficult to construct rating scales that refer to truly interpersonal events. Most of the scales used in this context are based on the person style of individual interactants and so tell us little about the pattern of action and reaction that constitutes the actual process of interpersonal communication. (p.197)

Therefore, research has increasingly taken place on another level that is much closer to the models suggested by information theory, cybernetics and systems theory. Instead of relying on global assessments and qualitative

statements about the individual interactors, each separate unit of the sequence is categorized so that the interaction can be analyzed in terms of the patterning of the units.

There are now many examples of the different types of family research in the literature. Research on different outcomes in interaction in varied types of families have been done by Haley (1962), Caputo (1963), Ferreira and Winters (1965) and many others. In these studies, differences in spontaneous agreement, levels of fulfillment, and so forth have been compared to differentiate schizophrenic from normal member families.

At the first level of process research, a large variety of rating scales to assess qualities of interaction have been generated. Many studies have looked extensively at parent-child dyadic interaction, mainly mother-child pairs, and scale totals are correlated with outcome characteristics of the children independently obtained. Typically rated are such qualities of interaction as stimulation, reactivity, responsiveness, intrusiveness, competence, intensity, dominance, rejection and direction (Caldwell & Herscher, 1964; Escalona, 1969; Schulman, Shoemaker & Mocks, 1962; Yarrow, 1963). In a sense, these studies do not truly study process, but they do focus on one-way stimulus-response chains that make up part of that process. Still, they cannot give clear information

on the actual give and take of an interaction.

However, more purely process oriented studies at the second level of analysis described above have been undertaken. Some analyze aspects of communication devoid of their content such as the pattern of who speaks to whom, who follows whom, who starts the conversation, who talks most or least, and so on. Other studies that analyze content sequences of speech are even more sophisticated.

Communication patterns of sequences analyzed without regard to actual content have been quite informative, and several studies of this nature have been done. Drechsler and Shapiro (1963) have examined the relative frequency of parent to child and parent to parent exchanges among families with children exhibiting different types of symptoms. Haley (1964, 1967) examined the order in which family members spoke during conversations by testing the sequences for deviation from a random order, corrected for by the unequal contributions of the interactors, as did Waxler and Mischler (1970). Lennard and Bernstein (1965) and Mishel and Waxler (1968) have shown that compared to sons in normal families, schizophrenic sons show marked tendencies to address themselves to their mothers rather than their father. The fathers in the schizophrenic families were also shown to receive fewer messages from the mothers and addressed fewer speeches to their sons, although

this was not as extreme as the son's lack of address to their fathers. This pattern did not occur among schizophrenic daughters and their families, however.

Other contributions have occurred utilizing time factors, for example, the number of seconds each family member speaks, the length of overlap among speeches, length of silences and so forth. (Ferreira & White, 1968; Ferreira, Winter & Poindexter, 1966). Families with normal and abnormal children could be distinguished according to these factors.

Accordingly, another communicative feature studied has been interruption rate. Lennard, Beulieau and Embrey (1965) showed significantly lower intrusion rates in families with a schizophrenic child as opposed to normal families. Other features that have been studied are incomplete sentences and phrases, disconnected words, repititions of words, laughter and contentless sounds. As a result, two speech styles were differentiated, one pedantic and controlled and the other more spontaneous and informal. Mischler and Waxler (1968) showed that parents spoke in a more controlled style in the presence of a schizophrenic child, but their speech resembled more normal families' speech when they were in the presence of their non-schizophrenic offspring.

Some family process studies have also looked at

sequences in the content of family interactions. A complete review of family process studies occurring to date in 1971 was contributed by Riskin and Faunce and appeared in "Family Process" magazine. They noted that thematic content analysis had been done by Friedman and Friedman (1970), Winter (1966) and Goldstein et al. (1970). Such analyses appear to be more productive in clinical and research contexts, although a wide variety of classified content has been assessed in terms of process.

One example is the concept of acknowledgement suggested by Mischler and Waxler (1968). These authors coded each statement for the degree which it acknowledged the previous statement, as well as the degree with which it asks for acknowledgement from the next. Similarly, Riskin and Faunce (1970) developed several categories to assess "commitment," the degree to which the speaker is taking a clear stand, Lennard and Bernstein (1965) developed several coding categories for agreement and disagreement. An aspect of these concepts in process is given in that some researchers score each speech as a stimulus and a response both, other score each speech as a stimulus or a response but not both.

A major classification effort evolved out of the small group studies of Bales, resulting in Interaction Process Analysis, IPA, (Parsons & Bales; 1953). Over the past

20 years, this method has been among the most widely used instruments for studying family interaction, with modification (Mills, 1953; O'Rourke, 1963). The IPA involved the coding of interaction sequences into 12 categories, six of which refer to social-emotional areas and six to the task area. Of the socio-emotional categories, three code positive reactions (solidarity, tension release and agreement) and three code negative responses (antangonism, tension and disagreement). Some productive research has used the IPA to differentiate normal from pathological families (Mischler & Waxler, 1968). In addition, when a group or family interaction is coded into IPA categories and the response probabilities for each category to be followed by the others are calculated, it has been shown possible to achieve a high degree of prediction for the next speech if the last one is known. As a result, it has been possible to program computers to simulate interaction (Weisenbaum, 1967).

However, recent research has also noted serious problems with the use of the IPA. The reliability of the instrument has been challenged (Waxler & Mischler, 1970; Winter & Ferreira, 1965). Furthermore, it has not been of as substantial value in differentiating different family patterns as originally hoped. However, the use of this and the above described methods of family study added much to the progress of process research.

Another important category of research has focused specifically on two-person interaction. One relevant and practical area of dyadic research has focused on the exploration of the client therapist dyad.

> Their relationship (as in other situations that involve interpersonal communication) exists in the presentations they make to each other. But unlike ordinary relationships, this relationship is supposed to lead to some reliable change in the way which one of the participants presents himself in other relationships. (Danziger, 1976, p. 214)

To effect the change, it behooves a therapist to be aware of the ongoing communication process with the client as a prototype or guide to facilitate new sequences in the client's self-presentation and identity. Rice (1973) showed that communicative qualities of the therapist in particular sequence over the length of therapy are related to outcome. Rice defined three types of therapist behavior in interviews. Type I interviews include therapists using commonplace language, mundane voice quality and simple reflections of clients' statements. Type II interviews were marked by strain and distortion in the therapist's voice quality; and Type III interviews contain therapist's voice quality that is highly expressive, with language focused on the patient's experience that is creative and novel in phrasing and vocabulary. Rice found that the presence of Type II interviews either early or late in the therapy was correlated with poor therapeutic outcome. Type III interviews were related to successful outcome

only when they appeared late in the therapy, but not when they occurred early on. The type of interview based on the therapist's vocal style was also found to influence the patient's vocal style and involvement in the therapy.

Other studies have also looked at the therapist's influence on clients' communication in the sequence of their interaction as well. Schuld (1966) and Varble (1968) have shown that if a client's expression of hostility or dependency is followed by therapist avoidance of this material, the client is much less likely to continue such expressions than if the therapist addressed the topic. However, Heller (1968, 1972) has also shown that contrary to some theories that emphasize total positive regard, a therapist's disagreement or disapproval leads many subjects to continue talking about the topic that elicited the disapproval. Individual differences among clients appear to show consistency with regard to this. Isaacs and Haggard (1966) have also shown that therapist's follow up on a client's expressed affect tends to increase immediate expression of affect by the client and to increase the client's return to the topic in later sessions. Siegman and Pope (1972) found that ambiguous remarks by the therapist tend to be followed by longer interviewee responses, but if the ambiguous remark is also characterized by reduced length, the interviewee also shortens his response. It would appear that therapists seeking to facilitate clients'

expressiveness through their communication may wish to increase the ambiguity of individual messages while still maintaining adequate feedback and stimulation for the client.

Many studies have focused on the mutual interactive influence of client and therapist on each other. Mutual influence toward similar length of utterance has been noted (Matarazzo & Saslow, 1961). Movement toward similarity in loudness, precision of articulation and rate of speech has also been found (Moos & McIntosh, 1970; Webb, 1972). Jaffe (1964) showed that over several sessions, there is therapist-client convergence in sentence length, utterance length, use of "a" as opposed to "the," and ratio of usage of "I" to "you."

Reviewing this research, it does become apparent that therapy is a mutual influence process. In fact, many studies have shown that client behavior also certainly influences therapist communication as well. In a simulation study, Heller, Myers and Kline (1963) showed that naive therapists responded in a more friendly manner to actors behaving as friendly clients and were more hostile to actors playing hostile roles. A similar result was obtained in a study by Gansky and Farwell (1966). Rogers and his team (1967) concluded a study of therapy with schizophrenics with the assertion that a patient's interpersonal characteristics influence the nature of the

relationship between him and his therapist, and to some extent, thus, determine the therapeutic climate available to him. Truax (1966) showed that therapist behavior was systematically related to certain patient categories; that is, therapists were more empathic and positive when clients communicated insight, learning and a communicative style similar to the therapist's.

The mutuality and unique interactional qualities of client-therapist pairings further demonstrate the importance of process. Van der Veen (1966) showed that when three patients were seen by five therapists, no therapist communicated the same levels of congruence and accurate empathy to any two patients, and no patient showed the same level of problem expression or expression of immediacy of experience with any two therapists. Different therapists elicited different behavior from different patients and different patients elicited different responses from different therapists. Each dyad was unique, and the characteristics obtained in the process of communication could not be predicted.

Similarly, Moos and Clemens (1967) paired four therapists and four patients in counterbalanced order. Significant therapist-client interactions were found in ratio of feeling to action words as well as the number of "mmm-hmms" expressed. Although these results can hardly

be interpreted to discount the role of therapist planning and intention for facilitation of change, they do make clear the mutual finetuning in the communication of therapy dyads.

## Specific Methodological Examples for Studying Process

The study of family and therapy interaction processes has been fruitful and clinically useful. Apart from the practical value of these studies, there are many studies that will now be reviewed because of the special contribution they make to the methodology of researching interactional process. The remainder of this review will give special attention to methodology.

Duncan and Fiske (1977) offered a research approach that was exploratory in its attempt to find the important factors of sequential interchange in a dyad. These authors looked at complex interrelationships of verbal and nonverbal behaviors recorded from a small number of dyads in order to explore and develop better notions of how to study the interaction process. They suggested looking at a wide variety of possible variables to obtain a better "Natural History of the Interview," generating such observations as "rate of participant's smiling in response to and during partner's smiling." To deal with the complexity of their multidimensional data, these researchers utilized audio and visual tape recorders, computers, and a specially designed computer program (CRESCAT) to analyze interaction event

strings. Duncan and Fiske (1972) recommended gathering as much complex data for analysis as possible, and an abandonment of "external-variable studies, replacing them with studies based on analysis of interaction sequences."(p. 313)

Feldstein (1972) looked at the most basic features of speech behavior; that is, lengths of speeches, pauses that act as cues before giving up "the floor," instances of simultaneous speech, etc., to define individual and interpersonal aspects of personality an communication. Using sophisticated listening, recording and computer equipment, he was able to detect consistency in individual's "temporal style" over interviews with a variety of partners, consistencies in many conversations between the same two partners, and considerable interspeaker influence between changing partners that could be traced to effects of each partner's style on the particular partner with whom there was an interaction. Similarly, Rogalski (1968) found a small but significant relationship between patterns of altering temporal style in conversation and the speaker's cognitive style. Marcus (1970) found that the extent to which the temporal patterns of interacting speakers converged depended upon the interaction of their cognitive styles.

Sophisticated listening and recording instruments also characterized the extensive studies of Allen and Guy (1974). These researchers arranged 70 dyads, some with both partners

male, some with both partners female, and some male and female. They studied the data for such complex variables as speech intensity, temporal structure, vocabulary used, certain parts of speech, especially pronouns, somatic features such as smiling, and lexical elements of speech such as assertions, clarifications, supports, fragmentations and laughter. Only a few of their extensive findings will be presented here. For example, analysis of dyad sex type by sex of speaker was shown insignificant for patterns with regard to the use of pronounds. But males talking to males were found to alternate the speaker role more frequently than females talking to females. When males talked to females, there was a drop in this rate of speaker alteration, while females do more of this alteration when talking to a male than when talking to a female.

Lupei (1974) studied under Allen to investigate mutual and interactive processes in patterns of self-disclosure of men and women in heterosexual dyads as related to each member of the couple's personality type as measured by Schutz's FIRO-B. Subject's statements were defined in categories of question versus assertion, self-disclosure or non-self-disclosure, intimacy level of the disclosure and responsiveness to the preceding statement. For the analysis, a Sequence Probability Table (Allen, 1974) was used to ascertain the likelihood that a particular category of verbalization would be followed by any other category of

verbalization. Lupei found that dyads with partners compatible with regard to affection as defined by their FIRO-B scores were highest in self-disclosure and that in general, dyads compatible on the FIRO-B qualities disclosed more than dyads that were not compatible. Furthermore, he found questions were followed more by self-disclosing statements of partners than were self-disclosing statements of the speaker. Sex differences were not discovered.

Several researchers have given special attention to the lexical categories of conversational exchange to better understand interpersonal process (Danziger, 1974; Mark, 1970; Miller & Rogers, 1973, 1976). Of special interest was the coding system developed by Mark (1970) and revised by Miller and Rogers (1973). This scheme developed out of the ideas of Bateson, Jackson, Watzlawick and others, especially the notion that the punctuation of interchanges reciprocally defines the relationship between interactors. Mark stated:

> If we understand that every message in an interaction serves as either the definition, reinforcement or redefinition of the nature of the relationship, then it should be possible to determine the modal or typical interaction of any dyad. (1970, p. 223)

He noted that coded single messages are not sufficient since a relationship of speaker's statements cannot be determined without considering the preceding and following messages. Utilizing work previously done by Sluzcki and Beavin (1965), Mark operationalized the concepts of symmetry

and complementarity by coding messages and their feedback using two "cycles" of interchange, that is, Speaker A, Speaker B, Speaker B, Speaker A. The messages are coded in terms of their lexical structure as opposed to their content, thus, "how" as opposed to "what," process instead of content. Lexical categories such as question, assertion, instruction and order were used. Each statement was further defined in terms of its impact on previous or future statements, i.e., support, non-support, answer, extension, etc. Then, particular to its combination of these categories, each message was defined as an attempt to assert definition of the conversation (called "one-up"), an acceptance of the other speaker's definition of the conversational relationships (called "one-down"), or a levelling, non-reactive approach to the relationship (called "one-across"). Combinations of these three message types in sequence were then defined as kinds of symmetrical or complementary sequences, i.e., a "one-up" followed by a "one-up" by the other speaker defines competitive symmetry; "one-up" followed by the other speaker's "one-down" would indicate a complementary transaction.

Mark's system was refined slightly by Miller and Rogers (1973, 1976). All of these researchers utilized the coding system to investigate couple's interactions in several studies. Mark (1970) was able to predict different patterns of symmetry and complementarity according to a

couple's social class. Miller and Rogers and colleague Park (1976) used Markov chain analyses to better describe couple's patterns of interaction. For example, dyads with high levels of role inequality between husband and wife as measured on a paper and pencil test were found to have more competitive symmetry featured in their interactions than other couples. Couples with lower role discrepancy expressed more support statements, had fewer interruptions and more interchanges. Ericson (1972) used dominance-submission scores as predictors of interactions, but found no relationship of this personality variable to the presence of symmetry and complementarity. But Miller (1970) was able to differentiate stable-unstable and rigid/flexible styles among different couples.

Finally, in 1965, Rausch conducted a study which focused on the relationship between stable personality variables and interpersonal interaction sequences. Specifically, groups of normal and institutionalized hyperagressive boys were observed in interaction with their peers in different settings, and their behavior transcribed to note sequences of friendly and unfriendly (aggressive) behavior. The sequences of behavior were then analyzed using methods derived from information theory in which sequences of events are represented by probabilities that are then transformed into a computation of informational reduction in uncertainty, called T. Thus, a technique

of Smith (1953), McGill (1954) and Garner (1958) called uncertainty or multivariate information analysis was employed. Utilizing this model, Rausch showed the various contributions of information accounted for by setting, group, and effect of the preceding act. This last component was shown to be the most important determinant of the occurrence or non-occurrence of aggressive acts by the boys. Submissive antecedent acts of one child were strongly associated with immediately subsequent dominant acts of another. Dominant acts also tended to be followed by submissive behavior of another child, but this occurred at a lower level of probability.

Rausch also used a second method to analyze his data called the Transition Probability Model, previously used by Ashby (1958). This method treats chains of interaction sequences according to mathematics pertaining to a Markov process. Thereby, insight into the process of interaction can be gained from the beginning to the natural end of an interaction. This method enables comparisons between events predicted using Markov chains derived from selected sequences, and the actual events as they occur, in fact.

Using Transition Probability Analysis, Rausch was able to pinpoint different points in each group of boys where the interactors would stabilize or change, i.e., hyperaggressive boys who had been in therapy longer main-

tained friendly interactive sequences to a farther point in their interactions than boys who had just begun receiving therapy. Furthermore, over entire interactions, normal boys increased friendly sequences as a faster rate than their early-on interactions would predict. Rausch concluded from these analyses:

> The results from the transition probability analyses thus suggest an organizational component in the flow of social interaction. Interaction does not proceed in an automatic fashion based on its beginnings. The process of interaction appears rather to be modified systematically by a component which differed among the groups studied,...organizing the sequential process of interchange, that has been called ego control. (Redl & Weinmann, 1957, cited by Rausch, 1965, p. 495).

In systems terms, this component might be called the feedback servomechanism that maintains the system.

# CHAPTER III

## STATEMENT OF THE PROBLEM

The review of the literature addressed theoretical, research and methodological issues to demonstrate the ramifications of a major development in psychology. Individuals need no longer be viewed in artificial isolation from their environments. They can be regarded instead as in ongoing processes of acting upon and being acted upon their interpersonal contexts, namely via communication with other people. The central problem of this study, therefore, is to shed light on the mutual processes of individual personality and interpersonal perception and communication. The literature review suggests a delineation of the problem in terms of three researchable aspects.

### Sex, Defense and Self-Concept

The first aspect concerns the self-concepts of individuals, since self-concept or self-perception can reasonably be thought of as an internalized base from which an individual enters into communication with others and selectively enacts aspects of the self into the interaction. How do individuals view themselves? Evidence presented above indicates that self-concepts and self-perceptions as denoted by self-descriptions are related to a person's sex and style of defense. Repressors see and describe themselves differ-

ently from sensitizers; men claim and admit personal characteristics differently from women. There are many words which people use to describe themselves and each other, some of which may be especially interesting in an exploration of self-image as it relates to interpersonal situations. For the present study, a list of such words was chosen from the Gough Adjective Checklist because they appeared promising variables for investigation of aspects of self-concept that might reveal impact of interpersonal perception between men and women. Because of the exploratory nature of the research, hypotheses were generated regarding some, but not all, of the adjective variables. Diagram A presents those adjectives that will be specifically hypothesized to reveal defense-related perception and sex-stereotyping, both on self-concept, being considered here, and on other aspects of interpersonal perception considered throughout the study.

Using subject's differential endorsements of adjectives as characteristic or not characteristic of themselves as measures of aspects of self-concept that may be related to sex and defense style, the study will test the following hypotheses:

Hypothesis 1: (Defense Style & Self-Concept)

> Repressors will be more likely to consider adjectives with positive connotations, specifically "happy," "intelligent," "enthusiastic" and "easy-going," to be characteristic of themselves, while sensitizers will be more likely to endorse as self-descriptive adjectives with negative or conflict-laden connotations, specifically, "angry," "critical," "excitable," and

Diagram A

Adjective Variables used to Measure Self-Concept and Other Aspects of Interpersonal Perception

Adjectives Hypothesized to Indicate Defense-Related Perception:

| Associated with Repression | Associated with Sensitization |
|---|---|
| Happy | Angry |
| Intelligent | Critical |
| Enthusiastic | Excitable |
| Easy-Going | Self-Critical |

Adjectives Hypothesized to Indicate Sex-Stereotyping in Perception:

Associated with the Male Stereotype

Decisive
Dominating

Associated with the Female Stereotype

Influenceable
Submissive
Self-Critical

Additional Adjectives Explored

Honest
Realistic
Fair
Calm
Humorous
Mature
Interested in questionnaire

perhaps, "self-critical."

Hypothesis 2: (Sex & Self-Concept)

> Men will be more likely to endorse adjectives related to male sex-stereotyped behavior, that is, "decisive" and "dominating," while women are expected to endorse adjectives more consistent with female sex-typing, that is, "influenceable," "submissive" and also "self-critical" in describing themselves.

In light of Zalman's (1981) findings, statistical interaction effects of sex and defense style are not predicted for these self-descriptions given apart from an actual specific interpersonal context. (This is in contrast to expectations in such an interpersonal context, which will be presented later in this chapter.

## Interpersonal Perception of Heterosexual Interactors

The literature review also cited many examples where the sex and defense styles of people in interpersonal contexts showed relationship to their perceptions of themselves and the people with whom they interacted. The second aspect of the present study, then, is whether perception of self and partner in interaction is related not only to the sex and defense style of the individual in question, but also to the interpersonal interaction context. For the sake of research, it is assumed that even a heterosexual dyad interacting in a laboratory setting will behave and perceive in a manner that can shed light on such natural interacting pairs as therapist and client, or husband and wife.

Therefore, by assigning subjects to interact with each other in male-female dyads that are either homogeneous or heterogenous with regard to the partners' defense styles, complex issues of person perception and self-concept may be addressed.

First, a simple question might be asked as to whether people's self-concepts are subject to measureably more change and variation in an interpersonal context as opposed to when they are not. In essence, the general question is how powerful is an actual interaction in producing changes in self-perception?

Hypothesis 3: (Overall Change in Self-Concept)

> Subject who are placed in the experimental dyad interaction will show more evidence of change and variability in their self-descriptions than control subjects, whose self-perceptions are measured in a non-interaction context only.

Still, it is hardly enough to assess the global impact of interpersonal interaction on self-perception, per se. More complicated questions about interpersonal perception of heterosexual interactors can be delineated. Conceivably, a person's self-perceptions, as well as her/his perceptions of her/his partner, may be complexly determined by 1) each person's own sex, 2) each person's own style of defense, 3) each partner's sex, 4) each partner's defense style, and 5) the actual combination of the interactor's sexes and defense styles. In addition, the relationship of a person's self-perception measured in the specific interaction

context to her/his self-perception measured apart from the dyadic interaction may also be determined by such factors.

To facilitate the investigation of the effects of these various factors on person perception, a split plot repeated measures design was employed, with the pair as the basic unit of analysis. The subjects were assigned to heterosexual pairs characterized by the sex and defense styles of the members of the pairs. Four types of pairs were created: Homogenous repressor pairs in which both the male and female members utilized the repressor defense style, (RR pairs); homogenous sensitizer pairs where both male and female were sensitizers, (SS pairs); heterogenous pairs in which the females were sensitizers and the males were repressors, (SR pairs); and heterogenous pairs in which the females were repressors and the males were sensitizers (RS pairs). Thus, one independent factor for analytical consideration was the combination, or homo- or heterogeniety of the defense styles of the pair, called "HH." Another main effect to be investigated was the defense of the male member of the pair only, called "MD," and so was the defense of the female member of the pair only, called "FD." Because all pairs were made up of one male and one female, it is apparent that the HHxMD and FD effects will be confounded in the results. If the pair is homogenous then the FD effect is the same as the MD effect, but these effects differ in heterogenous pairs. The pair aspect of the study, thus the

particular dyad type factor, is nested within the HHxMD combination. The gender or Sex of the members of the dyad is treated as the trial factor or repeated measure; thus, each pair has a measure for both its male and its female. In addition, other trial factors were included in the design, because each subject was measured in terms of both self and partner perception, called Target, for each variable, and was also measured both prior to (apart from) and after (in reference to) dyadic interaction concerning self-perception, called Context. Diagram B presents the design concisely.

This design allows the conceptualization of several complex hypotheses that pertain to person perception, including self-perception and partner perception, as well as self-perception both within and without an interactional context. First, hypothses will be presented regarding person perception, with Target of description, either self or partner, treated as a repeated measure.

To begin with, several null hypotheses are specified concerning main effects, keeping in mind that the pair is the basic unit of analysis. First, because the HH factor describes subject categories that cut across Sex, Male and Female Defense, and Target measures, no specific effect is predicted according to this factor of homo- or heterogeniety of the pair. Second, Sex, in and of itself, is not predicted

Diagram B

The Split Plot Repeated Measures Design

| | | | SEX | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Male | | | | Female | | | |
| | | | Target | | Context | | Target | | Context | |
| HH | MD | | Self | Partner | Indiv. | Interac. | Self | Partner | Indiv. | Interac.* |
| Homogenous | Repressor (FD is Repressor) | 1. | | | | | | | | |
| | | 2. | | | | | | | | |
| | | 3. | | | | | | | | |
| | | 4. | | | | | | | | |
| | | 5. | | | | | | | | |
| | | 6. | | | | | | | | |
| | Sensitizer (FD is Sensitizer) | 1. | | | | | | | | |
| | | 2. | | | | | | | | |
| | | 3. | | | | | | | | |
| | | 4. | | | | | | | | |
| | | 5. | | | | | | | | |
| | | 6. | | | | | | | | |
| Heterogenous | Repressor (FD is Sensitizer) | 1. | | | | | | | | |
| | | 2. | | | | | | | | |
| | | 3. | | | | | | | | |
| | | 4. | | | | | | | | |
| | | 5. | | | | | | | | |
| | | 6. | | | | | | | | |
| (continued) | Sensitizer (FD is Repressor) | 1. | | | | | | | | |
| | | 2. | | | | | | | | |
| | | 3. | | | | | | | | |
| | | 4. | | | | | | | | |
| | | 5. | | | | | | | | |
| | | 6. | | | | | | | | |

Main Effects

HH - The homogeniety or heterogeniety of defense style in the pair.

MD - The defense style of the male partner.

FD - The defense style of the female partner.

Sex - The sex of the subject.

Target - Self-description or partner description.

Context - Self-description in individual or interactional context.

HH x MD(or FD) - The pair factor, either RR, SS, SR or RS.

*Additional dependent variables were also tested in this study: accuracy of perception, agreement, liking for partner, perception of being liked, percent of Control Direction utilized, percent of Control Direction Response to stimuli, percent of Control Direction Transaction, and percent of Control Direction Response in first and second halves of an interaction.

to produce significant effects, since it also includes measures that cut across Target, thus combining perceptions regarding different sex subjects. Finally, Target is also not expected to predict differential endorsement of adjectives here, since no generalized tendency to describe self as different from partner is expected. However, some specific hypotheses are offered.

The MD and FD factors are unlikely to affect sex-stereotype related adjectives, because they too, cut across subjects of both sexes describing both self and partner Targets. However, MD is expected to predict differential endorsement of adjectives that may be defense-related. This is because the defense style of the male members of heterosexual pairs are expected to have a predominant effect on the general style of the pair. In contrast, such a predominant effect if not predicted for the FD, or defense style of the female characterizing the pair.

Hypothesis 4: (MD and Defense-related Perception)

> Subjects of both sexes in pairs with male repressors will be more inclined toward person perception (thus, of both self and partner) that is positive or repressive of the negative, including adjectives such as "happy," "intelligent," "enthusiastic" and "easy-going," while subjects in pairs with male sensitizers will be more likely to claim or admit adjectives for both self and partner that relate to negative or conflictful aspects of personality, such as "critical," "self-critical" and "excitable" and "angry."

Several interactions effects are expected to be significant:

Hypothesis 5: (Sex x Target and Sex-Stereotyping)

Sex x Target interactions are expected with respect to adjectives associated with sex-stereotypes. Males will perceive themselves as more "dominating" and "decisive" than they perceive their partners, while females will find themselves more "submissive" and "influenceable" than they perceive their male partners to be.

Hypothesis 6: (MD x Sex x Target & Sex-Stereotyping)

MD x Sex x Target interactions are expected related to adjectives that pertain to sex-typing. The Sex x Target effects described in the preceding Hypothesis will be significantly more apparent in pairs in which there is a male repressor compared to pairs where the male is a sensitizer.

Hypothesis 7: (FD x Sex X Target and Defense-related Perception)

The FD x Sex x Target interaction is expected for defense-related adjectives of females describing themselves and their partners. In pairs with female sensitizers, females will see themselves as more "critical," "self-critical," "angry" and "excitable" than they see their partners. This pattern will not appear among females in pairs where the female is a repressor; these females will see themselves and their partners more similarly and positively.

Hypothesis 8: (HH x MD(FD) x Sex Target, Sex-Stereotyping and Defense-related Perception)

The prediction of complex HH x MD(FD) x Sex x Target interactions is at the heart of this study. It is expected that numerous complex interactions of this type will appear in the data. With respect to the sex-typing of perception, it is predicted that males and females in the RR pairs will utilize sex-typing in both self and partner descriptions, while neither the males nor females will do so in the SS pairs. In the SR pairs, the female sensitizers will show a lack of sex-typing in their perceptions, while the male repressors will retain their sex-stereotyping patterns. But in RS pairs, the male sensitizers will not only show a lack of sex-typing in their perceptions, but will also effect their female partners to produce less sex-stereotyped descriptions of themselves and the males. Similarly, with respect to defense-related perception, both males and females in the

RR pairs will respond most positively or repressively, especially compared to the members of SS pairs who will be most negative, in considering such adjectives as "happy," "intelligent," "enthusiastic," "easy-going," "angry," "excitable" and "critical." In the SR pairs, the repressor males are expected to describe themselves more positively than they describe their partners, but the females in these pairs may also appear less negative to themselves. In RS pairs, perceptions of both males and females are expected to be moderately positive and fairly similar.

The above hypotheses concerned analyses in which the self and partner Targets of perception are treated as repeated measures. The following hypothses will concern analyses in which the Context of self-perception, either interactional or non-interactional, is treated as the repeated measure or trial factor. Therefore, only hypotheses in which Context is predicted as a significant factor will be outlined.

Hypothesis 9: (Context)

Context will be a significant factor in and of itself on a number of adjectives, especially those with normative implications for interpersonal behavior. For example, subjects' endorsement of "fair" is expected to be generally greater in the interactional context than apart from it.

Zalman's (1981) research found that the use of a repressive defense mechanism, called Principalization, increased among couples in which the male partner was a repressor, and decreased in pairs where the male was a sensitizer, as a result of interpersonal interaction. Therefore, in the present investigation, it is predicted that a MD x Context interaction will be significant.

Hypothesis 10: (MD x Context and Defense-related Perception)

MD x Context interactions are expected to appear regarding defense-related self-perceptions such as "happy," "intelligent," "angry" and "critical." Pairs in which the male is a repressor will show increased positiveness of perception in the interactional compared to the non-interactional Context, while members of pairs in which the male is a sensitizer will perceive themselves somewhat more negatively in the interpersonal situation.

Zalman's (181) study also found an increase in sex-typed utilization of the specific defense mechanisms Turning Against the Self and Turning Against the Other in interactional contexts, when the male members of the pairs were repressors as opposed to sensitizers.

Hypothesis 11: (MD x Sex x Context and Sex Stereotyping)

Therefore, it is likewise predicted here that MD x Sex x Context interactions will be significant. In pairs where there is a male repressor, females will perceive themselves as somewhat more "influenceable" and "submissive" in the interactional context than a part from it, and the males will see themselves as more "dominating" and "decisive." This pattern will not occur in pairs where the male is a sensitizer.

Hypothesis 12: (FD x Sex x Context and Sex Stereotyping)

A similar FD x Sex x Context interaction will occur, but the pattern will be evident for females only. In pairs with female sensitisers, females will be less likely to express sex-stereotyped endorsement of adjectives in interaction than they did apart from interaction; the opposite pattern is expected in pairs where the females being measured are repressors.

Hypothesis 13: (HH x MD(FD) x Sex X Context, Sex-Typing and Defense-related Perception)

Significant interactions of the HH x MD(FD) x Sex x Context variables are indeed predicted. With regard to sex-typing, both males and females in RR pairs are expected to increase sex-typing in characteristic directions in the interactional context, while subjects in

the SS pairs may show little change or actual decrease in sex-typing on the usual adjectives. It is also expected that while female sensitizers in the SR pairs may tend to change little in self-descriptions pertaining to sex-typing, males in these pairs will endorse increasingly "dominant" and "decisive" self-perceptions in the dyadic context. RS pairs will show a decrease in sex-typing, especially among the females. Defense-related responses will also indicate the interaction of the HH x MD x Sex x Context factors. For example, while males in RR pairs simply maintain positive self-perceptions, females in these pairs may be even more positive in the dyadic context than they are apart from it. Both males and females in SS pairs are expected to endorse "critical," "angry" and "excitable" indices more in an interaction context than apart from it. In SR pairs, females will see themselves as increasingly "critical," etc. while their male partners show greater repression of the negative, in the dyadic context. Both male and female subjects will tend to express more moderate self-concepts after as opposed to before interaction in RS pairs.

By creating a variable derived from the absolute value of the discrepancy of a subject's estimate of his/her partner and the partner's actual self-estimate, a measure of interpersonal accuracy, similar to Laing's metaperspective concept, may be achieved. With regard to this variable, the following hypothses are offered:

Hypothesis 14: (HH and Interpersonal Accuracy of Perception)

A main effect of the HH factor is expected in the data regarding interpersonal accuracy. Subjects in homogenous pairs will perceive each other more accurately than subjects in heterogenous pairs.

As past literature indicates, female sensitizers' opinions of themselves are often difficult for others to perceive accurately. Also the SR interactions may tend to exascerbate the defense style differences of the interactors.

Hypothesis 15: (HH x MD x Sex and Interpersonal Accuracy)

> Therefore, pertaining to heterogenous pairs, partners and especially the repressor males in the SR pairs will be least accurate among all subjects in estimating their partner's self-concepts. In contrast, RS partners may be inclined to more accuracy. Thus, an HH x MD x Sex interaction is predicted here.

Similarly, a hypothesis regarding subjects stated perceived agreement of opinion about an anxiety-provoking Topic of Discussion is also offered:

Hypothesis 16: (FD x Sex and Agreement)

> Repressors, especially female repressors, will perceive more agreement of opinion of a conflict-provoking topic than other subjects. Thus, the FD x Sex interaction is expected.

Finally, another aspect of interpersonal perception is also of interest. How much do interactors like their partners, and how much do they think their partners like them, based on the personal and interactional factors? The following hypotheses are generated, consistent with previous research:

Hypothesis 17: (FD x Sex and Liking)

> Repressors, especially repressor women, will indicate greater liking for their partners than sensitizers. The FD x Sex interaction is predicted.

Hypothesis 18: (MD x Sex and Perception of Being Liked)

> Repressors, especially repressor men, will perceive their partners to like them significantly more than sensitizers do. The MD x Sex interaction is predicted here.

Finally, a summary of all hypotheses pertaining to in-

terpersonal perception in interaction appears in Diagram C.

Interactors in Interactions

Consideration of the various combinations of self and partner interpersonal perceptions allows some insight into the complex relationships of individual and interactional realities. But the present study must also explore a more central issue regarding interpersonal dynamics. This is the phenomenon of behavioral process. What are the specificities of the process, or outline, of interactional events, by which individual defense and sex-related characteristics are translated into interactional behavior and modified by mutual interactional feedback?

The process aspect of this study owes many of its features to the advancing literature on interactional behavior described above. Specifically, the transactional coding system of Ericson and Rogers (1973) was selected to help provide a data base, since it defines operationalization of interactive behaviors that appear to be related to both defense style and sex-stereotyped characteristics. The coding system will be described in detail later in the Method section, but it will be remembered that this system allows for each speakers' messages to be coded in terms of a relationship Control Direction or CD. There are three directions of relationship control that a speaker may utilize in his/her spoken messages: messages with the direction

Diagram C

Summary of Hypotheses Pertaining to

Interpersonal Perception

| Hypothesis | Factor(s) Predicted Significant | Dependent Variable(s) and Prediction |
|---|---|---|
| 4 | MD | Defense-related adjectives: Pairs with male repressors endorse repressor-associated adjectives pairs with male endorse sensitizers associated adjectives |
| 5 | Sex x Target | Sex-stereotyped adjectives: Males and females described in terms of sex-stereotypes. |
| 6 | MD x Sex x Target | Sex-stereotyped adjectives: Pairs with male repressors more sex-stereotyping in endorsement of adjectives than pairs with male sensitizers. |
| 7 | FD x Sex x Target | Defense-related adjectives: Female sensitizers describe themselves with more sensitizing adjectives than they describe their partners; this is not true of female repressors. |

(continued)

| Hypothesis | Factor(s) Predicted Significant | Dependent Variable(s) and Prediction |
|---|---|---|
| 8 | HH x MD(or FD) x Target | Defense-related adjectives and sex-stereotyped adjectives: See text for specific predictions. |
| 9 | Context | Exploratory for all adjectives. |
| 10 | MD x Context | Defense-related adjectives: Pairs with male repressors more repressive and pairs with male sensitizers more sensitizing in interaction than apart from it. |
| 11 | MD x Sex x Context | Sex-stereotyped adjectives: Subjects are more sex-stereotyped in adjective endorsement when in interaction with male repressors, as opposed to male sensitizers. |
| 12 | FD x Sex x Context | Sex-stereotyped adjectives: Female repressors see themselves in more sex-stereotyped ways in interaction if they are repressors than if they are sensitizers. |
| 13 | HH x MD(or FD) x Sex x Context | Defense-related adjective and sex-stereotyped adjectives: See text for specific predictions. |
| 14 | HH | Accuracy of perception: Subjects in homogenous pairs more accurate than partners in heterogenous pairs. |
| 15 (continued) | HH x MD x Sex | Accuracy of perception: SR pairs less accurate than RS pairs. |

| Hypothesis | Factor(s) Predicted Significant | Dependent Variable(s) and Prediction |
|---|---|---|
| 16 | FD x Sex | Agreement on Discussion Topic: Female repressors perceive more agreement than others. |
| 17 | FD x Sex | Liking for partner: Repressors, especially females, endorse more liking than sensitizers. |
| 18 | MD x Sex | Perception of being liked: Repressors, especially males perceive themselves as liked more by their partners than sensitizers. |

of "one-up," or relationship defining messages, coded (1); "one-down" messages that submit to, or approve the relationship definition implied by the partner, coded (2); and "one-across" or neutral messages that are non-committal with regard to defining a relationship, coded (3). Such a coding system makes it possible to calculate not only the percentages of the Control Directions exercised by specific subject and dyad categories, but also the contingencies of CD responses in relation to CD stimuli provided by the partner's preceding message. Within the design of the present study, percentages of the three Control Directions, and percentages of the contingencies of CDs, were used as repeated measures for the subjects and pairs.

Since previous research indicates that men tend to be more dominating and women more supportive or submissive in heterosexual interactions, Sex is expected to produce a significant effect with respect to the percentage of subjects' messages belonging to the three CDs.

Hypothesis 19: (Sex and Control Directions)(One-Up and One-Down)

> Sex x CD interactions are predicted such that men will use higher proportions of "one-up" (1) CDs than women, while women will use higher proportions of "one-down" (2) CDs than men. No differences between men and women in the use of "one-across" (3) CDs are anticipated.

Scarpetti's (1973) interpersonal reward and punishment research regarding defense style as well as Zalman's (1981) finding that repressors use more Principalization as

a defense while sensitizers utilize more Turning Against the Self and Turning Against the Other suggest another interaction.

Hypothesis 20: (Defense and Control Direction One-Across)

It is anticipated that repressors will tend to use higher percentages of "one-across" (3) or neutral CDs than sensitizers. This would be reflected in the MD x Sex x CD and FD x Sex x CD interactions, with respect to each sex.

Hypotheses can also be generated regarding the contingency relationships of CD stimuli and responses of interactors.

Hypothesis 21: (Sex x CDR, MD x Sex x CDR and CD Stimulus-Response Contingencies)

A Sex x CD Stimulus-Response Contingency (called CDR) interaction is predicted. Men will be more likely to answer with a "one-up" (1) response to "one-up" (1) stimuli than women are. This may be especially true of male repressors, so that a MD x Sex x CDR interaction is also predicted. Also, women will be more likely to answer "one-up" (1) stimuli with "one-down" (2) responses than men, especially when they are paired with a male repressor.

Generating specific hypotheses regarding the contingency relationships for particular subjects in particular dyads is clearly an extremely complex task, especially in light of the pioneer stage of this kind of interaction research. Therefore, no specific hypotheses will be stated pinpointing subject contingency feedback behavior pertaining to the dyadic combinations. The data gathered will instead be scrutinized for trends which appear valuable for subsequent research on this important issue. However, without antici-

pating individual subject behavior, some patterns of dyadic behavior per se, in terms of the symmetry or complementarity of the CD transactions that characterize the pairs' interactions, may be expected:

Hypothesis 22: (Complementarity and Symmetry)

> It is expected that homogenous repressor pairs will be characterized by the highest percentage of "one-up"/"one-down" complementary transactions, as well as high levels of "one-across" symmetry. Homogenous sensitizer pairs will demonstrate higher proportions of both "one-down"/"one-down" and "one-up"/"one-up" symmetry, with lower levels of one across symmetry. This is because the RR pairs are anticipated to exhibit more sex-typed and conflict avoidant patterns of feedback, while sensitizing pairs will engage in more competition and mutual submission. Transitional interchanges of "one-up"/"one-across" and "one-down"/"one-across" are expected to be more common within the heterogenous SR and RS pairs. Thus, a HH x MD x CD transaction (called CDT) interaction effect is predicted.

As discussed in the literature review, information theory has also provided concepts that aid in the examination of feedback patterns. Rausch (1965) utilized the information metric in bits, called T, by Attneave (1956), to represent the actual information or reduction in uncertainty value of interactor's behavior in response to each other. While Rausch used the T to construct the Multivariate Information Analysis of his data, in the present study the T for each subject will be utilized as a repeated measure for each pair to represent the information communicated between one speaker's message to the other speaker's following message, in an analysis of variance. Some subjects may be expected to utilize more information than others, and some

pairs may show greater interactional responsiveness in information bits than others. Predicting these differences, several hypotheses are offered:

Hypothesis 23: (Defense and Information)

> Sensitizers of both sexes will be expected to utilize more information in determining their responses to the CD messages of their partners than repressors. Therefore, with respect to the T results, a significant interaction of MD x Sex (and FD x Sex) is predicted.

Hypothesis 24: (Sex and Information)

> Females may be expected to use more information, indicating their greater sensitivity to relationship control messages from their partners compared to males. Sex is expected to be a significant main effect in the analysis of T values.

Finally, an investigation of the process by which interactional events relate to relationship definition and self and interpersonal perception must not fail to assess the development of interactional behavior over time. Inherent in the notion of process is the idea that certain events lead to others in a meaningful fashion, but that the outline that creates meaning in interpersonal relating occurs in a gradual, and hopefully, measureable progression. To assess the temporal aspects of interpersonal process, two methods were chosen.

According to the first method, the proportions of CDs and CDRs were examined after the conversational sequences were divided in half, so that equal numbers of messages were exchanged in the first and second halfs of the interactions. Then, behavior in the first and second halves of

an interaction could be compared.

Hypothesis 25: (Interactions with Time)

> The CD and CDR interaction effects with the other factors predicted in Hypotheses 19-21 will be expected to be more prominent in the second half of the interactor's conversations than they were in the first. This hypothesis is based on an assumption that personality characteristics and the interpersonal process allowing for their expression and/or mitigation operate gradually over time.

The second method of investigating the gradual development of the interpersonal outline or process will utilize a modification of the Transition Probability Analysis used by Rausch (1965). In fact, this procedure utilizes the mathematics of Markov chains (Rausch, 1970). From the sequences of interactional exchanges for each subject, the average probabilities for any category of CD exchange to be followed any other category can be obtained. These are the transitional probabilities. Based on the application of Markov matrix mathematics according to the regularities of matrices that can be derived from these transition probabilities, the progression of sequence behavior over time can be simulated. If the results of this simulation produce a regular Markov chain of behavior, this predicted progression can be compared to the actual progression of transitions for subjects in particular dyad types. Matrices based on average transition probabilities for each sex will be produced, and manipulated to discover whether Markov chains result. If so, these chains will be compared with actual subject behavior

in the four types of dyads to define at what point and to what extent the actual behavior sequences differ from the behavior that would be predicted by a Markov chain. It will be assumed that such differences may be related to the subject and dyad characteristics, but no specific hypotheses are offered due to the complex nature of this analysis. Finally, a summary of hypotheses pertaining to interactional process appears in Diagram D.

Diagram D

Summary of Hypotheses Pertaining to

Interactional Process

| Hypothesis | Factor(s) Predicted Significant | Dependent Variable(s) and Prediction |
|---|---|---|
| 19 | Sex x CD | Percent of CD* utilized: Males utilize more "one-up" and females use more "one-down." |
| 20 | MD(or FD) x Sex x CD | Percent of CD utilized: Repressor, both male and female, will use more "one-across" than sensitizers. |
| 21 | Sex x CDR<br>MD x Sex x CDR | Percent of CDR** utilized: Males, especially repressor males, use more "one-up" responses to "one-up" stimuli than females, who use more "one-down" responses to "one-up" stimuli. |
| 22 | HH x MD(or FD) x CDT | Percent of CDT*** utilized: See text for specific predictions. |
| 23 | MD(or FD) x Sex | Information (T): Male and female sensitizers utilize more information than sensitizers. |

(continued)

| Hypothesis | Factor(s) Predicted Significant | Dependent Variable(s) and Prediction |
|---|---|---|
| 24 | Sex | Information (T): Females use more information than males. |
| 25 | Time | Percent of CD and CDR utilized: Hypothesis 19-21 gain increased support in the 2nd compared to the 1st half of dyadic interaction. |

*CD - Control Direction
**CDR - Control Direction Response to CD Stimuli
***CDT - Control Direction Transaction

# CHAPTER IV

## METHOD

### Subjects

The initial subjects of the study were 97 undergraduate introductory psychology students (50 men and 47 women) at Loyola University of Chicago. These subjects included all the students from a required introductory course in psychology and randomly selected students from the psychology subject pool. All students were fulfilling the requirements for course credit by becoming research subjects.

The 97 students were administered pre-test measures which included the Repression-Sensitization scale. Three subjects were eliminated because their Repression-Sensitization scores fell at the median of the total sample. The remaining 94 were classified as either repressors or sensitizers according to their scores. Of these, 35 men and 35 women of equal numbers of repressors and sensitizors were randomly selected and assigned to four experimental interaction groups and a control non-interaction group. They were assigned to these groups so that each experimental group consisted of seven heterosexual pairs combined according to their R-S status, and the control group consisted of seven men and seven women. The experimental groups were thus, 1) the female repressor/male repressor pairs group,

2) the female sensitizer/male sensitizer pairs group, 3) the female sensitizer/male repressor pairs group, and 4) the female repressor/male sensitizer pairs group. Of these 28 experimental pairs, three pairs, one from each of three experimental groups, were eliminated because their taped interaction data was lost due to tape recorder malfunction. To balance the data, a fourth pair was randomly selected from the remaining experimental group and eliminated. Thus, the final sample consisted of six female repressor/male repressor or RR pairs, six female sensitizer/male sensitizer or SS pairs, six female sensitizer/male repressor or SR pairs, six female repressor/male sensitizer pairs or RS pairs, and twelve control subjects consisting of three female repressors, three male repressors, three female sensitizers and three male sensitizers.

Materials

Two tests were used in the present study.

1). The Health and Opinion Survey. This is Byrne's (1964) Repression-Sensitization Scale, described and reviewed in the literature discussed earlier.

2). The Defense Mechanism Inventory (Ihilevich & Gleser, 1969). The DMI consists of 10 brief stories of life situations, two each in conflict areas characterized as authority, independence, sex, competition and situational.

The subject answers four questions following each story pertaining respectively to actual behavior, thoughts and feelings evoked by the story situation. Five responses operationally defined as instances of five distinct kinds of defense mechanisms are provided for each question. The five kinds of defenses measured are: 1) Turning Against the Other (TAO), 2) Projection (PRO), 3) Principalization (PRN), which is similar to intellectualizing and neutralizing rationalization, 4) Turning Against the Self (TAS) and 5) Refersal (REV) similar to denial and repression. The subject chooses from the five response alternatives provided for each question the one he believes most representative of his reaction and the one least representative. The choices are summed according to a formula of addition and subtraction so that the subject accumulates scores for TAO, PRO, PRN, TAS, and REV. The DMI thus provided a measure of subjects' defensive organizations and was the focus of a previous study by the present author which involved the same subjects who participated in the current investigation. However, the DMI results are peripheral to the present study. They will be referred to only if aspects of the current study are elucidated by them.

Subjects in the experimental interaction dyad groups received three other materials, as well.

First, two Topics of Discussion, which were presented

to the subjects orally and in printed form. The first Topic of Discussion introduced to each pair stated, "Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important things incoming students should know to get the most out of being at the University." The second Topic of Discussion stated, "Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important effects of the changing ideas about sex roles on school, work and social relationships for young men and women today." Each discussion of these topics was followed by the administration of a written question with response alternatives assessing the perceived agreement with the partner. Second, the Defense Mechanism Inventory was also readministered, with a major modification. Each DMI story (except story #4 which is completely dissimilar in the male and female versions) was presented to the subjects as a Topic of Discussion. The written DMI questions pertaining to the stories, and questions assessing the perceived agreement of the partners were presented, to be answered by the partners as they completed each discussion. These answers were also peripheral to the present investigation, however. Third, each subject also received a questionnaire assessing mood, self-perception and perception of the partner, as well as other aspects of the experiment. Included was an adjective endorsement section basically identical

to the one presented at the pre-test sessions, with the new feature that now the adjectives were to be endorsed for both self and partner.

## Procedure

### Data Collection

In the pre-testing sessions, large mixed-sex groups of 15-25 subjects were administered first the R-S Scale, then the DMI, and last, the adjective checklist and questionnaire. The experimenter or an assistant read the instructions for the materials while the subjects followed along reading identical printed instructions. The pre-test sessions were held in large classrooms equipped with bright lighting and classroom desks. An hour and a half was provided for completion of the testing, which was sufficient for the subjects. The participants were informed that they might be called back for additional involvement in the experiment.

The experimental pair interaction groups and control groups sessions occurred two to three weeks after the pre-test sessions. Either the female experimenter, one female assistant or one of two male assistants instructed each pair prior to their interactions so that the sex of the experimenter administering instructions was roughly counterbalanced among all types of dyad types. The instructions were made

standard, and appear in the Appendices.

Each pair interaction was held privately in a comfortable and brightly lit carrel the size of a small office. The male and female members of each dyad were seated facing each other across a standard size office desk. The desk top was divided by a seven inche high and twelve inche long cardboard obstruction, which allowed the partners full view of each others' faces and torsos but screened visual comparisons of written responses.

After briefly introducing the partners of the pair and providing a general orientation to the experiment, the experimenter or assistant asked the subjects to discuss the Two Topics of Discussion, encouraging fullest possible interaction between the dyad. The experimenter allowed the dyad 10 minutes for each of these discussions, leaving the room at the beginning of the time allowed and returning at the end.

After each 10 minute interaction, the experimenter gave each member of the dyad the written question to answer assessing perception of agreement regarding the topic just discussed. The members of the dyad were instructed to answer the question in silence, with no discussion with the partner about the answer. Next, the experimenter instructed the pair to discuss the DMI stories and answer the related written questions following their discussion of each story

and their reactions to it. The experimenter then left the room to allow the couple privacy for their DMI discussion, again having asked the subjects to interact as fully as possible during their discussions but to refrain from speaking with each other when answering the written questions.

A tape recorder was left running throughout, to record all of the pair's discussions, including the initial two Topics of Discussion conversations.

After their interaction experience was completed, usually after about one and a quarter hours, the pair was to notify the experimenter, who was available in a nearby room. The experimenter then separated the members of the dyad into two rooms in order to administer the adjective checklist and questionnaire to each subject privately. Following the completion of this form, the dyad was reconvened in the original carrel, where the experimenter explained the nature of the study to them.

Control subjects were simply required to retake the DMI and answer a mood and personality checklist that asked them to describe themselves and a generalized 'other.' Each control subject completed these materials separately in a private carrel.

## Coding the Conversation Data

Due to the large volume of data generated by two people

conversing over even short periods of time, it was decided that a representative sample of each couple's interaction should be selected for analysis. The conversations regarding the second Topic of Discussion were chosen for actual coding and analysis. This particular discussion was chosen for several reasons. First, since it followed a prior discussion of the first Topic of Discussion, this second conversation thereby had the merit of allowing for the subjects to have had some "warm-up" or "ice-breaking" experience with each other and the interactional context. It is assumed that because of their experience in discussing one topic prior to the recording of their second conversation, the subjects' would exhibit greater stability and characteristic pattern in this latter conversation. Second, the initial Topics of Discussion were set to have a specific duration of 10 minutes, unlike the discussions following the DMI stories which were allowed to have unspecified time limits depending only on the dyads' rates of completing them. Thus, analysis of the second Topic of Discussion is based on data that is more clearly specified in terms of time parameters. Finally, the second Topic of Discussion dealt with the question of changing sex roles. It is likely that such a topic arounsed some anxiety in this population of male and female college students. It is assumed that such a topic aroused greater mobilization of subjects' defensive styles, as determinants of their communicative and

perceptual behavior.

Four trained judges coded the tape excerpts containing the conversations regarding the second Topic of Discussion. As stated above, the coding system utilized was that of Ericson and Rogers (1973), derived from that of Mark (1970). According to this procedure, a three digit designation is applied to code each utterance. The first digit represents the speaker. The second digit refers to the grammatical form of the message. The third digit indicates the meta-communicative or feedback aspect of the message, as it relates to the previous statement made by the other speaker. Thus, the coding categories are:

| 1st Digit | 2nd Digit | 3rd Digit |
|---|---|---|
| 1. Speaker 1 | 1. Assertion | 1. Support |
| 2. Speaker 2 | 2. Question | 2. Nonsupport |
| | 3. Talk-over | 3. Extension |
| | 4. Noncomplete | 4. Answer |
| | 5. Other | 5. Instruction |
| | | 6. Order |
| | | 7. Disconfirmation |
| | | 8. Topic change |
| | | 9. Initiation-Termination |
| | | 10. Other |

A full description of the meaning of the second and third digit categories is given in detail by Ericson and Rogers (1973) and will not be given here.

The next step in the coding procedure requires a translation of the last two digits for each message into a one digit code representing the Control Directions, or relationship defining impact of the speaker's message.

Certain combinations of the second and third digits indicate that the speaker is using the Control Direction called "one-up" and coded as (1). Other combinations indicate the speaker is using the Control Direction called "one-down" and coded as (2), and other combinations comprise instances of the "one-across" Control Direction, coded as (3).

The essence of "one-up" (1) messages is that they indicate the speaker's attempt to enact dominance in the interaction by using combinations such as those involving non-supports, questions that demand an answer, instructions, orders, disconfirmations, topic changes, initiations or terminations, and all talk-overs except those expressing support.

The essence of "one-down" (2) messages is that they indicate that the speaker is seeking or accepting dominance by the other interactor, thus including such combinations as those that include support, such as assertions that give

or questions that seek support, incomplete phrases that invite completion by the partner, support talkovers and questions that extend the previous speaker's point.

"One-across" (3) messages indicate that the speaker is making little attempt to dominate or accept dominance by the partner, and use such categories as assertions extending the previous speaker's response, and filler phrases.

Four judges (one of whom was the experimenter) trained extensively using this coding procedure over a series of training sessions. During the final training sessions, several lengthy sections of the first Discussion Topic from various tapes were coded independently by each judge, and a criterion of .90 of interjudge agreement was reached. The 24 data tapes were then randomly distributed among three of the judges, who were not aware of any experimental hypotheses. A final check of reliability was obtained when the experimenter coded two randomly selected tapes of the second Discussion Topic coded by each of the three blind judges. On these six tapes, a mean reliability of .88 was obtained.

# CHAPTER V

# RESULTS

## Self-Concept, Defense Style and Gender

Although each adjective related to self-perception measured apart from the interactional context was analyzed separately, Table 1 presents all the adjectives upon which significant effects pertaining to the defense factor were hypothesized and/or discovered. The first part of the Table presents the means of the appropriate groupings related to significant effects, the second part presents the ANOVA results.

According to the Table, repressors were significantly greater in the degree of their endorsement for the following adjectives as self-descriptive: "mood: happy," $F$ (1,54) = 3.87, $p < .05$; "happy," $F$ (1,54) = 4.98, $p < .03$; "intelligent," $F$ (1,54) = 8.27, $p < .006$; "decisive," $F$ (1,54) = 5.21, $p < .03$ and "enthusiastic," $F$ (1,54) = 5.31, $p < .03$. Sensitizers endorsed as self-descriptive the following adjectives to a significantly higher degree than repressors: "critical," $F$ (1,54) = 2.88, $p < .09$ (or $p < .04$ one-tailed). These results suggest that defense style is related to self-concept in ways largely anticipated by Hypothesis 1, with the exception that the self-descriptions "angry" and "self-critical"

Table 1

Results of Means and ANOVAs in which Defense Style Hypothesized Significant Factor in Self-Perception Apart from Interpersonal Interaction

Means:

| Adjective | Repressor Mean | Sensitizer Mean |
|---|---|---|
| Mood (Happy) | 2.34 | 2.80 |
| Intelligent | 1.86 | 2.31 |
| Decisive | 2.00 | 2.54 |
| Enthusiastic | 1.76 | 2.15 |
| Easy-Going | 2.10 | 2.26 |
| Critical | 2.89 | 2.46 |
| Angry | 3.34 | 3.53 |
| Self-Critical | 2.52 | 2.11 |

(continued)

| Adjective | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Mood (Happy) | 2.94 | 1 | 2.94 | 3.87 | .05 |
| Total | 45.53 | 54 | | | |
| Ingelligent | 2.72 | 1 | 2.72 | 8.27 | .006 |
| Total | 19.70 | 54 | | | |
| Decisive | 3.97 | 1 | 3.97 | 5.31 | .03 |
| Total | 44.43 | 54 | | | |
| Enthusiastic | 2.14 | 1 | 2.14 | 5.31 | .03 |
| Total | 28.84 | 54 | | | |
| Critical | 2.59 | 1 | 2.59 | 2.88 | .09 |
| Total | 49.74 | 54 | | | |
| Easy-Going | .38 | 1 | .38 | .43 | ns |
| Total | 46.18 | 54 | | | |
| Excitable | 2.26 | 1 | 2.26 | 3.14 | .08 |
| Total | 39.34 | 54 | | | |
| Angry | .51 | 1 | .51 | .45 | ns |
| Total | 59.53 | 54 | | | |
| Self-Critical | 2.20 | 1 | 2.20 | 2.36 | ns |
| Total | 52.11 | 54 | | | |
| Other adjectives | | | | | ns |

failed to differentiate repressors from sensitizers, though the means of critical and self-critical do suggest the differences expected. The significant finding regarding "decisive" was not specifically predicted, but is certainly not incompatible with the general thrust of Hypothesis 1.

Table 2 indicates results pertaining to differences in self-perception related to gender or Sex. Men were found to give significantly higher endorsements of the following variables as self-descriptive than women: "mood-happy" $F(1,54) = 6.63$, $p < .02$. These results do not give specific support to the predictions made in Hypothesis 2. However, once again, differences in the means pertaining to "decisive," "dominating" and "self-critical" do show the expected patterns for men and women.

Interpersonal Perception in the Heterosexual Dyad

Change in Self-Perception: Experimental vs. Control Subjects

Table 3 depicts the results of an analysis of variance and means comparing the total amount of absolute change, either increase or decrease, in adjectives of self-perception endorsed by subjects who participated in the experimental dyad interactions and subjects who were in the non-interaction control group. No significant differences were found. Thus, Hypothesis 3 obtained no support in the data.

Interpersonal Perception of Self and Partner in Dyads

Table 2

Results of Means and ANOVAs in which Sex was Hypothesized a Significant Factor in Self-Perception Apart from Interpersonal Interaction

Means:

| Adjective | Female Mean | Male Mean |
|---|---|---|
| Happy | 2.79 | 2.31 |
| Interested in questionnaire | 2.86 | 2.19 |
| Decisive | 2.41 | 2.07 |
| Dominating | 2.93 | 2.69 |
| Influenceable | 2.96 | 2.88 |
| Submissive | 3.37 | 3.34 |
| Self-Critical | 2.13 | 2.53 |

(continued)

| Adjective | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Mood (Happy) | 3.23 | 1 | 3.23 | 4.25 | .04 |
| Total | 45.53 | 54 | | | |
| Interested (in questionnaire) | 6.15 | 1 | 6.15 | 6.63 | .02 |
| Total | 53.64 | 54 | | | |
| Decisive | 1.55 | 1 | 1.55 | 2.04 | ns |
| Total | 44.44 | 54 | | | |
| Dominating | .78 | 1 | .78 | .62 | ns |
| Total | 66.18 | 54 | | | |
| Influenceable | .09 | 1 | .09 | .08 | ns |
| Total | 57.71 | 54 | | | |
| Submissive | .01 | 1 | .01 | .02 | ns |
| Total | 34.73 | 54 | | | |
| Self-Critical | 2.20 | 1 | 2.20 | 2.36 | ns |
| Total | 52.11 | 54 | | | |
| Other adjectives | | | | | ns |

Table 3

Total Changes in Self-Perception from Pre-Test to Post-Interaction

Means

| Pair Typed | Mean Change |
|---|---|
| RR | 13.27 |
| SS | 14.90 |
| SR | 14.09 |
| RS | 11.83 |
| Control Group | 12.09 |

| Source | df | MS | F | p |
|---|---|---|---|---|
| Pair Type | 4 | 18.40 | .62 | .65 |
| Total | 54 | 1540.18 | | |

The following tables present the results of repeated measures analyses of variance that found significant effects regarding self and partner. (Analyses pertaining to adjectives where no significant effects were discovered will not generally be presented in the text, due to the large volume of results). Although the hypotheses in the above section were presented in terms of main factor and interaction effects, it is difficult to present the results in this format since separate analyses were conducted on each adjective. Therefore, results on interpersonal perception will be presented in terms of each adjective, and the hypotheses which these results have bearing upon will be commented on. First, results pertaining to defense-related characteristics are presented, next those pertaining to sex-stereotyping will be reviewed, and subsequently, results on adjectives not specifically addressed by the hypotheses that nevertheless reflected significant effects will be shown.

Tables 4A and 4B present results pertaining to the interactors' perceptions of themselves and their partners regarding the characteristic "intelligent." The significant effect of MD, the male member of the pair, $\underline{F}$ (1,20) = 8.62, $\underline{p} < .008$, is elucidated by the means, which indicate that both members of heterosexual dyads in which the male is a repressor see themselves as more intelligent than the members of pairs in which the male is a sensitizer.

Table 4A

Perception of Self and Partner as "Intelligent": Means

| Factor Name | Mean* |
|---|---|
| MD | |
| Subjects in Male Repressor Pairs | 1.67 |
| Subjects in Male Sensitizer Pairs | 2.15 |
| MD x Sex | |
| Females in Male Repressor Pairs | 1.54 |
| Males in Male Repressor Pairs | 1.79 |
| Females in Male Sensitizer Pairs | 2.25 |
| Males in Male Sensitizer Pairs | 2.04 |
| HH x MD x Sex | |
| RR Pairs | |
| Females | 1.50 |
| Males | 1.92 |
| SS Pairs | |
| Females | 2.42 |
| Males | 1.83 |
| SR Pairs | |
| Females | 1.58 |
| Males | 1.66 |
| RS Pairs | |
| Females | 2.08 |
| Males | 2.25 |
| FD x Sex | |
| Females in Female Repressor Pairs | 1.79 |
| Males in Female Repressor Pairs | 2.08 |
| Females in Female Sensitizer Pairs | 2.00 |
| Males in Female Sensitizer Pairs | 1.75 |

*Note: Scores range from - 1=Very intelligent to 5=Not at all intelligent.

Table 4B

Perception of Self and Partner as "Intelligent": ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD | 5.51 | 1 | 5.51 | 8.62 | .008 |
| MD x Sex | 1.26 | 1 | 1.26 | 4.23 | .05 |
| HH x MD x Sex | 1.76 | 1 | 1.76 | 5.91 | .02 |
| FD x Sex | 1.76 | 1 | 1.76 | 5.91 | .02 |
| Pair (HH x MD) | 12.79 | 20 | .64 | | |
| Sex x Pair (HH x MD) | 5.96 | 20 | .30 | | |
| Sex x Pair (HH x FD) | 5.96 | 20 | .30 | | |

This result confirms one of the predictions of Hypothesis 4A concerning this adjective. The MD x Sex interaction was also significant $F$ (1,20) = 4.23, $p < .02$, and the related means show that females in pair with male repressors endorsed higher levels of intelligence for both self and other than their partners did, while in pairs with male sensitizers, the females were slightly less positive about the intelligence of themselves and their partners than their male partners were. The HH x MD x Sex interaction (and thus, due to the confound in the design, the FD x Sex interaction) was also significant $F$ (1,20) = 5.91, $p < .02$. This result was not specifically hypothesized. The means indicate that female repressors in their own pairs perceived mutual intelligence at a somewhat higher level than their male partners did, while female sensitizers showed the opposite pattern. In the heterogenous pairs with regard to defense style (SR and RS pairs), females perception of mutual intelligence appears more similar to the males they were paired with.

No significant effects were found regarding the characteristic "happy." Hypotheses 4, 7 and 8 had suggested such an effect would occur, and were not confirmed.

Table 5 shows that MD was a significant effect regarding the interpersonal perception of the characteristic "enthusiastic" $F$ (1,240) = 7.49, $p < .01$. The means indicate that both male and female subjects perceived more enthusiasm

Table 5

Perception of Self and Partner as "Enthusiastic": Means and ANOVA

| Factor Name | Means* |
|---|---|
| MD | |
| Subjects in Male Repressor Pairs | 2.15 |
| Subjects in Male Sensitizer Pairs | 2.66 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD | 6.51 | 1 | 6.51 | 7.49 | .01 |
| Pair (HH x MD) | 17.38 | 20 | .87 | | |

*Note: Scores range from 1=Very enthusiastic to 5=Not at all enthusiastic.

in each other and themselves when the male in the pair was a repressor as opposed to a sensitizer. This result confirms the prediction of Hypothesis 4 concerning this adjective.

Table 6 depicts the significant interaction of Sex x Target pertaining to the personal characteristic "angry," $F$ (1,20) = 6.79 $p < .02$. Examination of the means indicates that females saw themselves as slightly less angry than their partners, while the opposite pattern appeared for males. Since Hypothesis 5 had predicted the Sex x Target interaction for sex-stereotyping rather than defense-related characteristics, this is an unanticipated result. However, if angry is instead viewed as an aspect of aggression which is, of course, a sex-related quality, the result seems to suggest sex-stereotyping of perception that is consistent with other predictions.

According to Table 7, the perception of being "critical" was affected by the HH x Sex interaction $F$ (1,20) = 6.59, $p < .02$. The means indicate that females in dyads that were heterogenous with respect to defense style perceived both members of their couples as more critical than did their male partners, a pattern not found in homogenous pairs. This is an unpredicted result; support for Hypotheses 4, 7 and 8 which concerned perception of the characteristic "critical" was not obtained.

Table 6

Perception of Self and Partner as "Angry":

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| Sex x Target | |
| Female Perception of Self | 4.54 |
| Female Perception of Partner | 4.25 |
| Male Perception of Self | 4.04 |
| Male Perception of Partner | 4.25 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sex x Target | 1.50 | 1 | 1.50 | 6.79 | .02 |
| Sex x Pair (HH x MD) | 43.92 | 20 | 2.20 | | |

*Note: Scores range from 1=Very angry to 5=Not at all angry.

Table 7

Perception of Self and Partner as "Critical":

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| HH x Sex | |
| Homogenous Pairs | |
| Females | 2.83 |
| Males | 2.88 |
| Heterogenous Pairs | |
| Females | 2.92 |
| Males | 3.25 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x Sex | 10.01 | 1 | 10.01 | 6.59 | .02 |
| Sex x Pair (HH x MD) | 30.38 | 20 | 1.52 | | |

*Note: Scores range from 1=Very critical to 5=Not at all critical.

Table 8 presents results for the adjective "excitable" indicating a strong main effect of Target, $F$ (1,20) = 9.10, $p < .001$. According to the means, subjects saw themselves as more excitable than their partners. This result was not predicted. Also, Hypotheses 4, 7 and 8 predicted that defense style and dyad characteristics might influence perception of this characteristic, but these results were not found.

The following tables pertain to adjectives specifically predicted to reflect sex-stereotyping of perception in the dyads. Table 9 presents results regarding subjects' perceptions of each other and themselves as "dominating." Although not predicted, the Sex effect was significant $F$ (1,20) = 5.07, $p < .04$. So was the Sex x Target interaction $F$ (1,20) = 4.71, $p < .02$, as was predicted by Hypothesis 5. The means show that females generally perceived both themselves and their partners as less dominating than males did, but in addition females saw themselves as less dominating than their male partners, while men saw themselves as more dominating than their partners, who were, of course, females. However, several of the interaction effects suggested in Hypotheses 6 and 8 relevant to this variable failed to result.

Tables 10A and 10B presents results pertaining to perception of the personal characteristic "influenceable."

Table 8

Perception of Self and Partner as "Excitable":

Means and ANOVA

| Factor Means | Mean* |
|---|---|
| Target | |
| Self | 2.50 |
| Partner | 2.87 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Target | 3.38 | 1 | 3.38 | 9.10 | .007 |
| Target x Pair (HH x MD) | 7.42 | 20 | .37 | | |

*Note: Scores range from 1=Very excitable to 5=Not at all excitable.

Table 9

Perception of Self and Partner as "Dominating":

Means and ANOVA

| Factor Name | Means* |
|---|---|
| Sex | |
| Females | 3.19 |
| Males | 2.56 |
| Sex x Target | |
| Female Perception of Self | 3.29 |
| Female Perception of Partner | 3.08 |
| Male Perception of Self | 2.29 |
| Male Perception of Partner | 2.83 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sex | 9.37 | 1 | 9.37 | 5.07 | .04 |
| Sex x Target | 3.38 | 1 | 3.38 | 4.71 | .02 |
| Sex x Pair (HH x MD) | 37.00 | 20 | | | |
| Tests x Sex x Pair (HH x MD) | 14.33 | 20 | | | |

*Note: Scores range from 1=Very dominating to 5=Not at all dominating.

Table 10A

Perception of Self and Partner

as "Influenceable": Means

| Factor Name | Means* |
|---|---|
| HH x MD | |
| Subjects in RR Pairs | 3.17 |
| Subjects in SS Pairs | 2.75 |
| Subjects in SR Pairs | 2.33 |
| Subjects in RS Pairs | 2.92 |
| FD | |
| Subjects in Female Repressor Pairs | 3.04 |
| Subjects in Female Sensitizer Pairs | 2.54 |
| MD x Target | |
| Perception of Self in Male Repressor Pairs | 2.88 |
| Perception of Partner in Male Repressor Pairs | 2.63 |
| Perception of Self in Male Sensitizer Pairs | 2.67 |
| Perception of Partner in Male Sensitizer Pairs | 3.00 |
| Sex x Target | |
| Females Perception of Self | 2.54 |
| Females Perception of Partner | 2.96 |
| Males Perception of Self | 3.00 |
| Males Perception of Partner | 2.67 |

*Note: Scores range from 1=Very influenceable to 5=Not at all influenceable.

Table 10B

Perception of Self and Partner as "Influenceable": ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD | 6.00 | 1 | 6.00 | 4.21 | .05 |
| FD | 6.00 | 1 | 6.00 | 4.21 | .05 |
| MD x Target | 2.04 | 1 | 2.04 | 5.10 | .04 |
| Sex x Target | 3.38 | 1 | 3.38 | 12.66 | .002 |
| Pair (HH x MD) | 28.50 | 20 | 1.43 | | |
| Pair (HH x FD) | 28.50 | 20 | 1.43 | | |
| Target x Pair (HH x MD) | 8.00 | 20 | .40 | | |
| Sex x Target x Pair (HH x MD) | 5.33 | 20 | .27 | | |

significant effects of FD (thus, also HH x MD) were discovered $F$ (1,24) = 4.21, $p < .05$. Pairs in which the females were sensitizers indicated perceptions of higher influenceability for both self and partner than pairs in which the females were repressors. Particularly, subjects in the SR pairs indicated the greatest endorsement of this variable, while partners in the RR pairs endorsed the least influenceability. This result contradicts Hypotheses 6, 7 and 8 in which influenceability was predicted to be a sex-typed variable, with differential perception for male and female targets based on a repressor presence in the pair. Still, some support is given to these expectations due to the significance of the MD x Target interaction $F$ (1,20) = 5.10, $p < .04$. In pairs with male repressors, both members of these dyads saw their partners as more influenceable than themselves while in pairs with male sensitizers, subjects saw themselves as more influenceable than their partners. Thus, male defense style appears to set a pattern for self-other comparisons on this characteristic. In addition, a Sex x Target interaction was highly significant $F$ (1,20) = 12.66, $p < .002$. Females saw themselves as more influenceable than their partners, while males indicated they perceived their partners to be more influenceable than themselves. This finding certainly confirms Hypothesis 5 concerning this adjective.

Table 11A and 11B indicates results pertaining to the adjective "decisive." The significant main effect of MD, $\underline{F}$ (1,20) = 6.58, $\underline{p} < .02$ is explained by the means which show that subjects in pairs with male repressors saw both themselves and their partners as more decisive than did subjects in pairs where the male was a sensitizer. This result was not predicted by Hypotheses 4 and 6 which had regarded this characteristic as a sex-stereotyping indicator that would reflect differences specifically based on whether the target of the perception was a male or female, according to subject and dyad variables. However, if "decisive" is seen instead a positive or repressor defense-associated indicator, this result may be considered consistent with Hypothesis 4. The FD x Sex (and thus, HH x MD x Sex) interactions were also significant F (1,20) = 4.52, $\underline{p} < .05$. The means indicate that in pairs with female repressors, females tend to perceive even greater decisiveness in both self and partner than the males, while females in pairs with female sensitizers perceive less decisiveness overall than do their male partners. Specific dyad means show that males and females in RR pairs perceived decisiveness most similarly to each other, while in SS pairs, females perceived less decisiveness than the males, who were, nevertheless lower in endorsement of this characteristic than subjects in the RR pairs. Repressor males in SR pairs perceived greater decisivness than their female sensitizer partners, while re-

Table 11A

Perception of Self and Partner as "Decisive": Means

| Factor Name | Means* |
|---|---|
| MD | |
| Subjects in Male Repressor Pairs | 1.90 |
| Subjects in Male Sensitizer Pairs | 2.33 |
| FD x Sex | |
| Females in Female Repressor Pairs | 2.04 |
| Males in Female Repressor Pairs | 2.25 |
| Females in Female Sensitizer Pairs | 2.38 |
| Males in Female Sensitizer Pairs | 1.79 |
| HH x MD x Sex | |
| RR Pairs | |
| Females | 1.83 |
| Males | 1.83 |
| SS Pairs | |
| Females | 2.50 |
| Males | 1.91 |
| SR Pairs | |
| Females | 2.25 |
| Males | 1.67 |
| RS Pairs | |
| Females | 2.25 |
| Males | 2.67 |

*Note: Scores range from 1=Very decisive to 5=Not at all decisive.

Table 11B

Perception of Self and Partner as "Decisive": ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD | 4.59 | 1 | 4.59 | 6.58 | .02 |
| FD x Sex | 3.76 | 1 | 3.76 | 4.52 | .05 |
| HH x MD x Sex | 3.76 | 1 | 3.76 | 4.52 | .05 |
| Pair (HH x MD) | 13.96 | 20 | .70 | | |
| Sex x Pair (HH x MD) | 16.63 | 20 | .83 | | |
| Sex x Pair (HH x FD) | 16.63 | 20 | .83 | | |

pressor females in RS pairs perceived greater decisiveness than their male sensitizer partners. These results suggest perception of decisiveness was more related to defense style than to the sex-stereotyping it was anticipated to reflect in Hypotheses 5, 6 and 8.

Table 12 presents results for the subjects in the perception of self and partner as "self-critical." Some main effects were found significant. Contrary to expectation, Sex was a significant factor $\underline{F}$ (1,20) = 6.40, $\underline{p} < .02$, and the means show that females were likely to perceive self and partner as more self-critical than males. This effect does not reflect differences pertaining to Target that were anticipated by Hypothesis 5, but instead a general trend of sex stereotyping according to perceiver was discovered. The main effect of MD also tended toward significance $\underline{F}$ (1,20) = 4.06, $\underline{p} < .06$, and examination of the means confirms Hypothesis 4 if self-critical here is seen to reflect a defense-related rather than sex-stereotyping aspect of perception, since subjects in pairs with male sensitizers tended to view both themselves and their partners as more self-critical than pairs with male repressors. Finally, an unanticipated effect regarding this variable was Target $\underline{F}$ (1,20) = 11.90, $\underline{p} < .003$. The means show a clear tendency for subjects to have described themselves as more self-critical than they perceived their partners to be.

Table 12

Perception of Self and Partner as "Self-Critical":

Means and ANOVA

| Factor Name | Means* |
|---|---|
| MD | |
| Subjects in Male Repressor Pairs | 3.13 |
| Subjects in Male Sensitizer Pairs | 2.63 |
| Sex | |
| Females | 2.63 |
| Males | 3.13 |
| Target | |
| Perceptions of Self | 2.56 |
| Perceptions of Partners | 3.12 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD | 6.00 | 1 | 6.00 | 4.06 | .06 |
| Sex | 6.00 | 1 | 6.00 | 6.40 | .02 |
| Target | 9.38 | 1 | 9.38 | 11.90 | .003 |
| Pair (HH x MD) | 29.59 | 20 | | | |
| Sex x Pair (HH x MD) | 18.75 | 20 | | | |
| Target x Pair (HH x MD) | 15.75 | 20 | | | |

*Note: Scores range from 1=Very self-critical to 5=Not at all self-critical.

The remaining results pertain to variables for which specific hypotheses were not described, but significant effects were discovered. Table 13 presents results concerning description of self and partner as "easy-going." Here, a marked Sex x Target interaction occurred $F$ (1,20) = 7.96, $p < .005$. According to the means, females were likely to see their partners as more easy-going than themselves and males were likely to describe themselves as more easy-going than their partners.

Table 14 presents the results of the analyses pertaining to the perception of self and other as "calm." A significant interaction of MD x Sex $F$ (1,20) = 5.36, $p < .03$ occurred in the data. The means show that in pairs where the male was a repressor, the males perceived more calm in both self and other than their female partners, while the opposite pattern was reflected to a lesser extent where the male sensitizers perceived less calm than their partners.

Table 15 shows that a significant interaction of MD x Target $F$ (1,20) = 7.45, $p < .01$ occurred in terms of the perception of self or other as humorous. In pairs with male sensitizers, both female and males perceived themselves as more humorous than they saw their partners. This effect did not occur in pairs with male repressors. This is an unanticipated finding, but may relate to a use of humor in approaching conflict condoned among sensitizer men.

Table 13

Perception of Self and Partner as "Easy-Going":

Means and ANOVA

| Factor Name | Means* |
|---|---|
| Sex x Target | |
| Females Perception of Self | 2.04 |
| Females Perception of Partner | 1.79 |
| Males Perception of Self | 1.71 |
| Males Perception of Partner | 2.08 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sex x Target | 2.34 | 1 | 2.34 | 9.96 | .005 |
| Sex x Test x Pair (HH x MD) | 4.71 | 20 | .24 | | |

*Note: Scores range from 1=Very easy-going to 5=Not at all easy-going.

Table 14

Perception of Self and Partner as "Calm": Means and ANOVA

| Factor Name | Means* |
|---|---|
| MD x Target | |
| Females in Male Repressor Pairs | 1.88 |
| Males in Male Repressor Pairs | 1.38 |
| Females in Male Sensitizer Pairs | 1.83 |
| Males in Male Sensitizers Pairs | 2.08 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD x Target | 3.38 | 1 | 3.38 | 5.36 | .03 |
| Target x Pair (HH x MD) | 6.08 | 20 | .30 | | |

*Note: Scores range from 1=Very calm to 5=Not at all calm.

Table 15

Perception of Self and Partner as "Humorous": Means and ANOVA

| Factor Name | Means* |
|---|---|
| MD x Target | |
| Perception of Self in Male Repressor Pairs | 2.38 |
| Perception of Partner in Male Repressor Pairs | 2.25 |
| Perception of Self in Male Sensitizer Pairs | 2.33 |
| Perception of Partner in Male Sensitizer Pairs | 2.83 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD x Target | 2.34 | 1 | 2.34 | 7.45 | .01 |
| Target x Pair (HH x MD) | 6.29 | 20 | .31 | | |

*Note: Scores range from 1=Very humorous to 5=Not at all humorous.

Table 16 presents a significant interaction of HH x Target $F$ (1,20) = 4.44, $p < .05$ pertaining to the perception of being "honest." Members of pairs that were heterogenous pairs with respect to defense style saw themselves as more honest than their partners; this pattern does not emerge in homogenous pairs. An MD x Sex x Target interaction was found to further predict endorsement of honest $F$ (1,20) = 4.44, $p < .05$. The means demonstrate that for pairs with male sensitizers, both males and females saw each other as equally honest, but in pairs with male repressors, each individual saw himself or herself as more honest than their partner. This finding may suggest a covert mistrust in pairs where there is a male repressor, consistent with past research.

## Self-Perception in Interactional and Non-Interactional Contexts

The following results pertain to analyses in which subjects' perceptions of themselves directly related to and independent from a heterosexual dyad interactional context were treated as repeated measures of self-perception. Once again, defense-related adjectives are presented first, followed by sex-stereotyping adjectives, and other miscellaneous adjectives.

Table 17 presents results regarding "mood-happy."

Table 16

Perception of Self and Partner as "Honest": Means and ANOVA

| Factor Name | Means* |
|---|---|
| HH x Target | |
| Homogenous Pairs | |
| Perception of Self | 1.38 |
| Perception of Partner | 1.50 |
| Heterogenous Pairs | |
| Perception of Self | 1.46 |
| Perception of Partner | 1.42 |
| MD x Sex x Target | |
| Male Repressor Pairs | |
| Female Perception of Self | 1.33 |
| Female Perception of Partner | 1.25 |
| Male Perception of Self | 1.33 |
| Male Perception of Partner | 1.50 |
| Male Sensitizer Pairs | |
| Female Perception of Self | 1.50 |
| Female Perception of Partner | 1.58 |
| Male Perception of Self | 1.50 |
| Male Perception of Partner | 1.50 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x Target | .17 | 1 | .17 | 4.44 | .05 |
| MD x Sex x Target | .17 | 1 | .17 | 4.44 | .05 |
| Pair (HH x MD) | 12.92 | 20 | .65 | | |
| Sex x Pair (HH x MD) | 11.58 | 20 | .58 | | |

*Note: Scores range from 1=Very honest to 5=Not at all honest.

Table 17

Perception of Self as in a Happy Mood in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| HH x MD x Sex x Context | |
| RR Pairs | |
| Females in Interaction | 2.33 |
| Females not in Interaction | 2.50 |
| Males in Interaction | 1.83 |
| Males not in Interation | 2.00 |
| SS Pairs | |
| Females in Interaction | 2.50 |
| Females not in Interaction | 3.50 |
| Males in Interaction | 2.33 |
| Males not in Interaction | 1.66 |
| SR Pairs | |
| Females in Interaction | 2.00 |
| Females not in Interaction | 2.60 |
| Males in Interaction | 1.83 |
| Males not in Interaction | 2.00 |
| RS Pairs | |
| Females in Interaction | 2.17 |
| Females not in Interaction | 2.17 |
| Males in Interaction | 2.33 |
| Males not in Interaction | 2.50 |
| FD x Sex x Context | |
| Female Repressor Pairs | |
| Females in Interaction | 2.25 |
| Females not in Interaction | 2.33 |
| Males in Interaction | 2.08 |
| Males not in Interaction | 2.27 |

(continued)

| Factor Name | Means* |
|---|---|
| Female Sensitizer Pairs | |
| Females in Interaction | 2.25 |
| Females not in Interaction | 3.09 |
| Males in Interaction | 2.08 |
| Males not in Interaction | 1.88 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD x Sex x Context | 1.60 | 1 | 1.60 | 4.96 | .04 |
| FD x Sex x Context | 1.60 | 1 | 1.60 | 4.96 | .04 |
| Sex x Context x Pair (HH x MD) | 4.84 | 15 | .02 | | |
| Sex x Context x Pair (HH x MD) | 4.84 | 15 | .02 | | |

*Note: Scores range from 1=Very happy to 5=Not at all happy.

The HH x MD x Sex x Context interaction was significant $F$ (1,15) = 4.96, $p < .04$. The means for the subjects within the four dyad types indicate that all subjects reported greater happiness after involvement in the interactional context than they were apart from it with two exceptions; female subjects in the SS pairs showed no such increase in happy mood, while males in these dyads also actually endorsed less happiness in the interactional context than apart from it. This finding supports Hypothesis 13. Of course, the FD x Sex x Context interaction is also significant $F$ (1,15) = 4.96, $p < .04$, and it appears that males paired with female sensitizers endorsed less happiness in the interactional context than apart from it. This is an unexpectedly strong effect for the FD variable since Hypothesis 12 had suggested such interaction to affect female results only, but it is generally compatible with hypotheses related to defense-associated characteristics.

No significant effects were obtained regarding the perception of intelligence in this analysis. This contradicts one prediction made in Hypothesis 10 and 13 concerning this adjective, which was thought to be defense-related.

Table 18 indicates a simple significant effect of Context regarding perception of oneself as "enthusiastic," $F$ (1,20) = 4.32, $p < .05$. Subjects described themselves as slightly more enthusiastic apart from the interactional

Table 18

Perception of Self as Enthusiastic in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Context | |
| Self in Interaction | 2.31 |
| Self not in Interaction | 2.00 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Context | 2.21 | 1 | 2.21 | 4.32 | .05 |
| Context x Pair (HH x MD) | 10.25 | 20 | .51 | | |

*Note: Scores range from 1=Very enthusiastic to 5=Not at all enthusiastic.

context than in reference to it. This is an unexpected result, and furthermore, none of the predicted results mentioned in Hypotheses 10 and 13 pertaining to this defense-related characteristic appeared in the data.

Table 19 shows the finding of a very strong effect of Context on the self-perception of being "angry," $F$ (1,20) = $p < .006$. Subjects described themselves as less angry in the dyadic context than apart from it. This result supports neither of Hypothesis 10 nor 13 pertaining to angry as a defense associated variable.

Table 20 presents results regarding the subjects' perceptions of themselves as "critical." The HH x MD x Sex x Context interaction tended toward significance (thus, the FD x Sex x Context interaction showed this tendency), $F$ (1,15) = 4.24, $p < .06$. Examining the means, it appears that while males paired with female repressors endorsed "critical" less in the interactional context, males paired with female sensitizers described themselves as more "critical" in this context than apart from it. The means for subjects according to pair again indicate that the most substantial changes occurred for sensitizer males paired with female repressors in the RS pairs, these males saw themselves as less critical in the interaction context while the females in these pairs perceived themselves as more critical in the dyad than apart from it. This was predicted

Table 19

Perception of Self as Angry in the Interactional and Non-Interactional Contexts: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Context | |
| Self in Interaction | 2.50 |
| Self not in Intearction | 2.21 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Context | 17.28 | 1 | 17.28 | 16.39 | .0006 |
| Context x Pair (HH x MD) | 21.10 | 20 | 1.06 | | |

*Note: Scores range from 1=Very angry to 5=Not at all angry.

Table 20

Perception of Self as Critical in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| HH x MD x Sex x Context | |
| RR Pairs | |
| Females Self-Perception in Interaction | 3.50 |
| Females Self-Perception not in Interaction | 3.33 |
| Males Self-Perception in Interaction | 2.33 |
| Males Self-Perception not in Interaction | 2.60 |
| SS Pairs | |
| Females Self-Perception in Interaction | 3.33 |
| Females Self-Perception not in Interaction | 2.17 |
| Males Self-Perception in Interaction | 2.17 |
| Males Self-Perception not in Interaction | 2.25 |
| SR Pairs | |
| Females Self-Perception in Interaction | 3.00 |
| Females Self-Perception not in Interaction | 2.40 |
| Males Self-Perception in Interaction | 3.00 |
| Males Self-Perception not in Interaction | 3.00 |
| RS Pairs | |
| Females Self-Perception in Interaction | 2.67 |
| Females Self-Perception not in Interaction | 3.00 |
| Males Self-Perception in Interaction | 3.00 |
| Males Self-Perception not in Interaction | 2.20 |
| FD x Sex x Context | |
| Female Repressor Pairs | |
| Females Self-Perception in Interaction | 3.08 |
| Females Self-Perception not in Interaction | 3.16 |
| Males Self-Perception in Interaction | 2.67 |
| Males Self-Perception not in Interaction | 2.40 |
| Female Sensitizer Pairs | |
| Females Self-Perception in Interaction | 3.16 |

(continued)

| Factor Name | Means* |
|---|---|
| Females Self-Perception not in Interaction | 3.16 |
| Males Self-Perception in Interaction | 2.58 |
| Males Self-Perception Not in Interaction | 2.70 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD x Sex x Context | 2.30 | 1 | 2.30 | 4.24 | .06 |
| FD x Sex x Context | 2.30 | 1 | 2.30 | 4.24 | .06 |
| Context x Sex x Pair (HH x MD) | 8.15 | 15 | .54 | | |
| Context x Sex x Pair (HH x FD) | 8.15 | 15 | .54 | | |

*Note: Scores range from 1=Very critical to 5=Not at all critical.

by Hypothesis 13.

The analyses pertaining to "excitable" and "self-critical" found no significant effects, disconfirming Hypotheses 10 and 13 which had predicted these characteristics to show effects that were defense-related.

With regard to characteristics associated with sex-typing, none of the predictions in Hypothesis 11 concerning "dominating," "submissive" or "self-critical" were found. However, according to Table 21A and 21B, the HH x MD x Context (or FD x Context)interactions affected "influenceable" $F$ (1,20) = 5.28, $p < .03$. Subjects in pairs with female repressors reported themselves as less influenceable in the interactional context, while subjects in pairs with female sensitizers reported themselves as more influenceable with reference to the dyadic experience than apart from it. Differences among the various dyad types are consistent with this, although unique patterns beyond this one do not appear dramatic. These results are not consistent with Hypothesis 12, which viewed "influenceable" as a sex-typing description for females that would be more likely used by or about repressors. However, the result is interesting if being influenced may be seen as a conflictful and therefore, defense-related experience that female sensitizers more willingly claim.

Table 21A

Perception of the Self as Influenceable in the Interactional and Non-Interactional Context: Means

| Factor Name | Means* |
|---|---|
| HH x MD x Context | |
| RR Pairs | |
| Self in Interaction | 3.33 |
| Self not in Interaction | 3.18 |
| SS Pairs | |
| Self in Interaction | 2.66 |
| Self not in Interaction | 2.80 |
| SR Pairs | |
| Self in Interaction | 2.41 |
| Self not in Interaction | 3.00 |
| RS Pairs | |
| Self in Interaction | 2.66 |
| Self not in Interaction | 2.27 |
| FD x Context | |
| Female Repressor Pairs | |
| Self in Interaction | 3.00 |
| Self not in Interaction | 2.73 |
| Female Sensitizer Pairs | |
| Self in Interaction | 2.54 |
| Self not in Interaction | 2.90 |

*Note: Scores range from 1=Very influenceable to 5=Not at all influenceable

Table 21B

Perception of Self as Influenceable in the Interactional and Non-Interactional Context: ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD x Context | 2.24 | 1 | 2.24 | 5.28 | .03 |
| FD x Context | 2.24 | 1 | 2.24 | 5.28 | .03 |
| Context x Pair (HH x MD) | 8.51 | 20 | | | |
| Context x Pair (HH x FD) | 8.51 | 20 | | | |

Table 22 presents results pertaining to the adjective "decisive." Here, the HH x Sex x Context interaction was significant $F$ (1,15) = 13.08, $p$ < .03. All subjects with the exception of males in heterogenous dyads with respect to defense style indicated an increase in decisiveness when self-estimates prior to interaction are compared to those made after the interaction experience. This is an unpredicted result, and predictions of Hypotheses 11 and 12 concerning sex-typing pertaining to this characteristic were not confirmed.

Table 23 shows another effect of Context on self-perception of subjects regarding being "easy-going," $F$ (1,20) = 8.53, $p$ < .009. Subjects saw themselves as more easy-going after interaction in a dyad than apart from one. There was also an interaction of MD x Context on this variable, $F$ (1,20) = 5.65, $p$ < .03, and the means indicate that subjects in pairs where there was a male repressor showed a more marked endorsement of "easy-going" in the interactional context than subjects in pairs where the male was a sensitizer. This finding agrees with Hypothesis 10, where easy-going is viewed as a defense-related adjective.

A simple main effect of Context was also discovered in the self-perception of being "calm," $F$ (1,20) = 5.60, $p$ < .02. As seen in Table 24, subjects reported being more calm after their dyadic interactions than apart from them.

Table 22

Perception of Self as Decisive in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| HH x Sex x Context | |
| Homogenous Pairs | |
| Females in Interaction | 1.50 |
| Females not in Interaction | 1.75 |
| Males in Interaction | 1.58 |
| Males not in Interaction | 2.11 |
| Heterogenous Pairs | |
| Females in Interaction | 1.58 |
| Females not in Interaction | 1.90 |
| Males in Interaction | 1.75 |
| Males not in Interaction | 1.72 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x Sex x Context | 1.55 | 1 | 1.55 | 13.08 | .003 |
| MD x Sex x Context | .60 | 1 | .60 | 6.81 | |
| Sex x Context x Pair (HH x MD) | 1.32 | 15 | | | |

*Note: Scores range from 1=Very decisive to 5=Not at all decisive.

Table 23

Perception of Self as Easy-Going in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Context | |
| In Interaction | 1.87 |
| Not in Interaction | 2.19 |
| MD x Context | |
| Male Repressor Pairs | |
| In Interaction | 1.67 |
| Not in Interaction | 2.23 |
| Male Sensitizer Pairs | |
| In Interaction | 2.08 |
| Not in Interaction | 2.14 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Context | 2.19 | 1 | 2.19 | 8.53 | .009 |
| MD x Context | 1.45 | 1 | 1.45 | 5.65 | .03 |
| Context x Pair (HH x MD) | 5.15 | 20 | .26 | | |

*Note: Scores range from 1=Very easy-going to 5=Not at all easy-going.

Table 24

Perception of Self as Calm in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Context | |
| In Interaction | 1.87 |
| Not in Interaction | 2.37 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Context | 5.60 | 1 | 5.60 | 6.59 | .02 |
| Context x Pair (HH x MD) | 17.00 | 20 | .85 | | |

*Note: Scores range from 1=Very calm to 5=Not at all calm.

Table 25 presents results pertaining to the perception of self as "honest" and "realistic." Context was a simple main effect for both honest, $\underline{F}$ (1,20) = 6.17, $\underline{p}$ < .02 and realistic, $\underline{F}$ (1,20) = 5.48, $\underline{p}$ < .03, respectively. Subjects described themselves as more honest and more realistic in the interactional context than apart from it. These results support Hypothesis 9.

An interaction effect of FD x Context (and, thus, HH x MD x Context) was discovered regarding the description of oneself as "fair," $\underline{F}$ (1,20) = 4.24, $\underline{p}$ < .05, according to Table 26A and 26B. Subjects in pairs with female repressors saw themselves as quite a bit more fair in the dyadic interactional context, while subjects in pairs with female sensitizers felt about as fair when interacting as they did apart from such interaction.

Table 27 indicates a main effect of Context in the endorsement of the adjective "mature," $\underline{F}$ (1,20) = 18.59, $\underline{p}$ < .0003. Subjects saw themselves as more mature apart from the interactional context than in reference to it. This is an unanticipated and contradictory result in light of the hypotheses.

Finally, Table 28A and 28B pertains to subjects' endorsements of interest in the questionnaire. A Sex x Context interaction was highly significant $\underline{F}$ (1,20) = 28.82,

Table 25

Perception of Self as Honest and Realistic in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Honest Context | |
| In Interactional | 1.41 |
| Not in Interaction | 1.74 |
| Realistic Context | |
| In Interaction | 1.60 |
| Not in Interaction | 1.86 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Honest | | | | | |
| Context | 2.43 | 1 | 2.43 | 6.17 | .02 |
| Context x Pair (HH x MD) | 7.88 | 20 | .39 | | |
| Realistic | | | | | |
| Context | 1.49 | 1 | 1.49 | 5.48 | .03 |
| Context x Pair (HH x MD) | 5.44 | 20 | .27 | | |

*Note: Scores range from 1=Very honest (Realistic) to 5=Not at all honest (Realistic).

Table 26A

Perception of Self as Fair in the Interactional and Non-Interactional Context: Means

| Factor Name | Mean* |
|---|---|
| HH x MD x Context | |
| RR Pairs | |
| Self-Perception in Interaction | 1.58 |
| Self-Perception not in Interaction | 1.73 |
| SS Pairs | |
| Self-Perception in Interaction | 1.58 |
| Self-Perception not in Interaction | 2.10 |
| SR Pairs | |
| Self-Perception in Interaction | 1.67 |
| Self-Perception in Interaction | 2.18 |
| RS Pairs | |
| Self-Perception in Interaction | 2.16 |
| Self-Perception not in Interaction | 1.63 |
| FD x Context | |
| Female Repressor Pairs | |
| Self-Perception in Interaction | 1.62 |
| Self-Perception not in Interaction | 2.14 |
| Female Sensitizer Pairs | |
| Self-Perception in Interaction | 1.68 |
| Self-Perception not in Interaction | 1.87 |

*Note: Scores range from 1=Very fair to 5=Not at all fair.

Table 26B

Perception of Self as Fair in the Interactional and Non-Interactional Context: ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD x Context | 2.86 | 1 | 2.86 | 4.23 | .05 |
| FD x Context | 2.86 | 1 | 2.86 | 4.23 | .05 |
| Context x Pair (HH x MD) | 13.54 | 20 | .68 | | |
| Context x Pair (HH x FD) | 13.54 | 20 | .68 | | |

Table 27

Perception of Self as Mature in the Interactional and Non-Interactional Context: Means and ANOVA

| Factor Name | Means* |
|---|---|
| Context | |
| Self-Perception in Interaction | 2.52 |
| Self-Perception not in Interaction | 1.93 |

| Source | SS | df | NS | F | p |
|---|---|---|---|---|---|
| Context | 7.41 | 1 | 7.41 | 18.59 | .0003 |
| Context x Pair (HH x MD) | 8.51 | 20 | .43 | | |

*Note: Scores range from 1=Very mature to 5=Not at all mature.

Table 28A

Interest in Questionnaire in the Interactional and Non-Interactional Context: Means

| Factor Name | Mean* |
|---|---|
| Sex x Context | |
| Females in Interaction | 2.79 |
| Females not in Interaction | 2.96 |
| Males in Interaction | 2.46 |
| Males not in Interaction | 2.15 |
| HH x Sex x Context | |
| Homogenous Pairs | |
| Females in Interaction | 3.17 |
| Females not in Interaction | 3.17 |
| Males in Interaction | 2.17 |
| Males not in Interaction | 2.00 |
| Heterogenous Pairs | |
| Females in Interaction | 2.42 |
| Females not in Interaction | 2.73 |
| Males in Interaction | 2.75 |
| Males not in Interaction | 2.25 |
| MD x Sex x Context | |
| Male Repressor Pairs | |
| Females in Interaction | 2.91 |
| Females not in Interaction | 3.27 |
| Males in Interaction | 2.42 |
| Males not in Interaction | 2.18 |
| Male Sensitizer Pairs | |
| Females in Interaction | 2.67 |
| Females not in Interaction | 2.67 |
| Males in Interaction | 2.50 |
| Males not in Interaction | 2.11 |

(continued)

| Factor Name | Mean* |
|---|---|
| FD x Sex x Context | |
| Female Repressor Pairs | |
| Females in Interaction | 2.83 |
| Females not in Interaction | 2.83 |
| Males in Interaction | 2.66 |
| Males not in Interaction | 2.27 |
| Female Sensitizer Pairs | |
| Females in Interaction | 2.75 |
| Females not in Interaction | 3.09 |
| Males in Interaction | 2.25 |
| Males not in Interaction | 2.00 |
| HH x MD x Sex x Context | |
| RR Pairs | |
| Females in Interaction | 3.33 |
| Females not in Interaction | 3.33 |
| Males in Interaction | 2.33 |
| Males not in Interaction | 2.20 |
| SS Pairs | |
| Females in Interaction | 3.00 |
| Females not in Interaction | 3.00 |
| Males in Interaction | 2.00 |
| Males not in Interaction | 1.67 |
| SR Pairs | |
| Females in Interaction | 2.50 |
| Females not in Interaction | 3.20 |
| Males in Interaction | 2.50 |
| Males not in Interaction | 2.16 |
| RS Pairs | |
| Females in Interaction | 2.33 |
| Females not in Interaction | 2.33 |
| Males in Interaction | 3.00 |
| Males not in Interaction | 2.33 |

*Note: Scores range from 1=Very interested to 5=Not at all interested.

(continued)

Table 28B

Interest in Questionnaire in the Interactional and Non-Interactional Context: ANOVA

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sex x Context | 1.31 | 1 | 1.31 | 28.82 | .0001 |
| HH x Sex x Context | .73 | 1 | .73 | 16.07 | .001 |
| MD x Sex x Context | .20 | 1 | .20 | 4.35 | .05 |
| FD x Sex x Context | .24 | 1 | .24 | 5.26 | .04 |
| HH x MD x Sex x Context | .24 | 1 | .24 | 5.26 | .04 |

$p$ <.0001. Means indicate that females saw the experiment as more interesting within the interactional context, while males perceived it as more interesting to answer the questionnaire apart from an interactional experience. The HH x Sex x Context interaction was also significant $F$ (1,20) = 16.07, $p$ < .001. Females endorsed greater interest if their interaction experience occurred in a heterogenous pair with regard to defense style, as opposed to a homogenous pair. Furthermore, the MD x Sex x Context interaction was also significant, $F$ (1,20) = 4.35, $p$ < .05. The means here indicate that females paired with repressors showed more interest in the experiment after dyadic interaction than before than females paired with male sensitizers. No such differences were observed among males. Finally, the FD x Sex x Context, or thus, the HH x MD x Sex x Context interactions, were also significant $F$ (1,20) = 5.26, $p$ < .04. Female sensitizers in their own pairs, and especially in dyads with male repressors or SR pairs, indicated the most apparent increase in interest in the experiment in the dyadic context compared to the non-interaction context. These results, though unpredicted by the hypotheses for this specific variable, do give clear representation of the complex interaction effects of subject sex and defense, partner influence, and dyadic situation on self-concept compared to description of the self apart from interaction with a partner. Therefore, they are consistent with,although not specifically

described in terms of this particular variable, Hypotheses 10, 12 and 13.

Other Aspects of Interpersonal Perception

Several hypotheses concerned other aspects of interpersonal perception. The sum of the absolute differences (summing over all adjectives) between each subject's estimate of her/his partner and the partner's actual self-description was computed. The analyses of the results was, thus, a method of exploring subjects' accuracy of perception in terms of subject and dyad variables. Table 29 incates a significant interaction effect of HH x MD x Sex, $F(2,20) = 4.90$, $p < .02$. The means show that accuracy is somewhat higher in pairs where the female is a repressor (RR and RS pairs) than in pairs where the female is a sensitizer, (SS and SR pairs), but also that males and females are more similar in accuracy in pairs where the female is a repressor than those in which she is a sensitizer, where men become less accurate than their female partners. Thus, it would appear that the female's defense style has an influence on the metaperspective or accuracy of the male evaluating her. This confirms certain aspects of Hypothesis 15, although simple effect of HH on Interpersonal Accuracy anticipated in Hypothesis 14 failed to occur.

Table 30 presents results concerning subjects' liking

Table 29

Accuracy of Perception

Means and ANOVA

| Factor Name | Means* |
|---|---|
| HH x MD x Sex | |
| RR Pairs | |
| Females | 4.53 |
| Males | 4.45 |
| SS Pairs | |
| Females | 5.04 |
| Males | 5.16 |
| SR Pairs | |
| Females | 5.27 |
| Males | 5.38 |
| RS Pairs | |
| Females | 4.83 |
| Males | 4.95 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x MD x Sex | 3.25 | 2 | 1.63 | 4.90 | .02 |
| Sex x Pair (HH x MD) | 6.30 | 20 | .33 | | |

*The higher the score the greater the discrepancy in perception.

Table 30

Liking for the Partner

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| RR Pairs | 2.00 |
| SS Pairs | 2.42 |
| SR Pairs | 2.33 |
| RS Pairs | 2.17 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| FD | 1.02 | 1 | 1.02 | 4.30 | .05 |
| HH x MD | 1.02 | 1 | 1.02 | 4.30 | .05 |
| Pair (HH x MD/FD) | 4.75 | 20 | .24 | | |

*Note: Scores range from 1=Like very much to 5=Like not at all.

for their partners and their estimations of being liked by their partners. Significantly different endorsements of the statement, "I liked my partner" occurred according to the interaction of HH x MD, and thus according to the effect of FD, $F$ (1,20) = 4.30, $p < .05$. Subjects in pairs with female repressors expressed more liking for their partners than subjects in pairs with female sensitizers. Further examination of the dyad means shows that subjects in RR pairs expressed greatest liking for each other, followed by subject in RS pairs. Subjects in SR and SS pairs expressed least liking for each other. Thus, compatible with Hypothesis 17, which predicted this effect for women, repression in females appear to have an effect on expressed liking for both male and female partners. No significant differences were found in subjects' perceptions of their partners' liking of them, however, so that Hypothesis 18 was not confirmed by the results.

Finally, the analyses concerning partners' perceived agreement on the particular Topic of Discussion which provided the actual data base for the process analyses to be presented subsequently are presented in Table 31. Sex was found to be a significant main effect, $F$ (1,19) = 7.29, $p < .01$; an interaction of HH x Sex was also significant, $F$ (1,19) = 4.86, $p < .04$. Thus, not only did females perceive higher mutual agreement than males during this dis-

Table 31

Perceived Agreement on Topic Discussion

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| Sex | |
| Females | 1.54 |
| Males | 1.91 |
| HH x Sex | |
| Homogenous Pairs | |
| Females | 1.83 |
| Males | 1.90 |
| Heterogenous Pairs | |
| Females | 1.25 |
| Males | 1.91 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Sex | 1.62 | 1 | 1.62 | 7.29 | .01 |
| HH x Sex | 1.08 | 1 | 1.08 | 4.86 | .04 |
| Sex x Pair (HH x MD) | 4.22 | 19 | .22 | | |

*Note: Scores range from 1=Very much agreed to 5=Agreed not at all.

cussion, but this difference was most pronounced in heterogenous pairs. Hypothesis 16 had predicted this result pertaining to female repressors only, but instead it occurred among females in general, particularly in pairs where the man shared the women's defense style.

## Results Pertaining to Interactional Process

The remainder of the results section will address findings of the analyses of the interactional verbal processes that occurred between subjects in the experimental dyads. The Ericson and Rogers' (1973) codes of Control Direction and stimulus-response contingencies of Control Direction feedback that were exercised by the subjects in their interactions provided the data for these repeated measures analyses.

Table 32 presents results of the analysis in which each subjects' percentages of utilization of each of the three Control Directions; that is, "one-up" (1), "one-down" (2) and "one-across" (3), throughout the recorded dyadic conversation provided three repeated measures of the CD variable. The table shows that CD itself is a highly significant factor, $F$ (2,40) = 12.07, $p < .0001$. The means show subjects in general were most likely to utilize the "one-across" (3) Control Direction in their conversations. They were next most likely to use the "one-down" (2) Control Direction, and they used "one-up" (1) the least. Most

Table 32

Control Direction Utilization

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| Control Direction | |
| One-Up (1) | 22.62 |
| One-Down (2) | 34.89 |
| One-Across (3) | 43.49 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| Control Direction | 10565.69 | 2 | 5287.845 | 12.07 | .0001 |
| CD x Pair (HH x MD) | 17509.32 | 40 | 8754.55 | | |

*Note: Amount indicates percentage of total control direction utilization for each specific control direction category.

notably, however, none of the predicted interactions of CD with MD or FD, with dyadic type (HH x MD), or even with Sex, occurred. Thus, it appears that Hypotheses 19 and 20, were given no support by the actual data.

However, analyses of Control Direction stimulus-response contingencies, in which the percent of CD responses that occurred after each use of the particular CDs as stimuli, were also undertaken, and will be reported next.

Table 33 presents results pertaining to the likelihoods of CD responses occurring after the Stimulus CD of "one-up" (1). There is a significant main effect of CD Response type (CDR), $F$ (2,40) = 3.38, $p < .04$. Examination of the means indicates that subjects most often respond to one-up stimuli with either one-down or one-across messages; they least often answer a one-up stimulus with a one-up response. However, an HH x CDR interaction was also significant, $F$ (2,40) = 4.31, $p < .02$. In homogenous pairs, one-up stimuli were most often followed by one-across responses but nearly one third of the time were followed by one-up responses; in contrast, in heterogenous pairs, one-up stimuli were most often followed by one-down responses, and least often by one-up responses. Heterogenous pair contingencies appear more complementary, and less symmetrical than homogenous pair contingencies in response to one-up. This finding was not anticipated by the process hypotheses. Also,

Table 33

Responses to One-Up(1) Stimuli

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| DR | |
| One-Up(1) | 22.44 |
| One-Down(2) | 35.36 |
| One-Across (3) | 38.04 |
| HH x CDR | |
| Homogenous Pairs | |
| One-Up(1) | 28.56 |
| One-Down(2) | 25.90 |
| One-Across (3) | 45.50 |
| Heterogenous Pairs | |
| One-Up(1) | 16.33 |
| One-Down (2) | 44.82 |
| One-Across (3) | 30.57 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| CDR | 6674.22 | 2 | 3337.11 | 3.38 | .04 |
| HH x CDR | 8497.80 | 2 | 4248.9 | 4.31 | .02 |
| CDR x Pair (HH x MD) | 39452.77 | 40 | | | |

*Note: Amounts indicate percentage of utilization of control direction category for response.

Hypothesis 21 was not supported by the data, since neither Sex nor Sex in relation to defense style (MD or FD) appeared to affect the utilization of the various Control Directions in response to one-up stimuli.

Table 34 presents results pertaining to response to one-down stimuli. Again, CD Response Type or CDR itself contributed a main effect that was highly significant, $F$ (2,40) = 22.70, $p < .0001$. Subjects were most likely to respond to one-down stimuli from their partners with one-across responses. They were least likely to produce one-down responses in reaction or as feedback to the one-down stimuli of their partners. Once again, however, no interaction effects of sex and defense style, were found.

Table 35 indicates a significant effect for CDR in relation to one-across stimuli, as well, $F$ (2,40) = 12.84, $p < .0001$. Subjects were most likely to respond to one-across stimuli with one-down responses, and next most likely to respond to one-across stimuli with one-across feedback. They were least likely to deliver one-up responses to one-across stimuli. Once again, no effects related to defense style were discovered.

Rather than regarding one-message as a stimulus and the other as a response, it is also possible to analyze the percentage of message/message interchanges in terms of the

Table 34

Response to One-Down(2) Stimuli

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| CD | |
| One-Up | 23.59 |
| One-Down | 14.54 |
| One-Across | 57.47 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| CDR | 49165.29 | 2 | 24582.65 | 22.70 | .0001 |
| CDR x Pair (HH x MD) | 2736.13 | 40 | | | |

*Note: Amounts indicate percentage of utilization of control direction category for response.

Table 35

Responses to One-Across(3) Stimuli

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| CDR | |
| One-Up(1) | 19.09 |
| One-Down(2) | 47.19 |
| One-Across(3) | 33.71 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| CDR | 18972.16 | 2 | 9486.08 | 1284 | .0001 |
| CDR x Pair (HH x MD) | 29551.49 | 40 | | | |

*Note: Amounts indicate percent utilization of control direction category for responses.

Control Directions used together. Conceived of as two message interchanges or transactions, the patterns of symmetry and complementarity discussed by Ericson and Rogers (1973) were, thus, also used as repeated measurements. As presented in Table 36, once again, the significant effect of CD transaction (CDT) indicated that 2/3, 3/2 and 3/3 sequences predominated in the data, $F$ (8,160) = 23.00, $p < .0001$. These are referred to as examples of transitory transactions by the authors mentioned. Nevertheless, the patterns of symmetry and complementarity according to dyad type predicted by Hypothesis 22 were not discovered in the data.

Another aspect of process was investigated using the computation of the information metric T. The T indicated the subject's sensitivity to the Control Directions utilized by his/her partner as reflected by his/her own choice of Control Dimension in responsive relationship. Table 37 presents the analysis in which the T for each male and female subject was treated as a trial measure for their dyad. No significant effect of subject variables, dyad variables, or trial or sex occurred. Thus, Hypotheses 23 and 24 were not given support by these results. Subjects of different sexes, defense styles and dyad combination appeared not to differ significantly in their responsiveness to each others' information about relationship control.

Finally, analyses pertaining to the investigation of

Table 36

Symmetry and Complementary Combinations

Means and ANOVA

| Factor Name | Mean |
|---|---|
| CDT | |
| One-Up-One-Up(1-1) | 5.28 |
| One-Down-One-Up(2-1) | 5.90 |
| One-Across-One-Up(3-1) | 8.74 |
| One-Up-One-Down(1-2) | 6.20 |
| One-Down-One-Down(2-2) | 4.32 |
| One-Across-One-Down(3-2) | 27.26 |
| One-Up-One-Across(1-3) | 8.37 |
| One-Down-One-Across(2-3) | 17.66 |
| One-Across-One-Across(3-3) | 18.02 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| CDT | 11891.53 | 8 | 1486.44 | 23.00 | .0001 |
| CDT x Pair (HH x MD) | 10341.37 | 160 | | | |

Table 37

Information Metric T:

ANOVA Results

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH | .00 | 1 | .00 | .00 | ns |
| MD | .00 | 1 | .00 | .05 | ns |
| HH x MD | .13 | 1 | .13 | 2.88 | ns |
| Pair (HH x MD) | .93 | 20 | | | |
| Sex | .11 | 1 | .11 | 2.19 | ns |
| HH x Sex | .00 | 1 | .00 | .04 | ns |
| MD x Sex | .00 | 1 | .00 | .02 | ns |
| HH x MD x Sex | .05 | 1 | .05 | 1.06 | ns |
| Sex x Pair (HH x MD) | .97 | 20 | | | |

process behavior over time will be reported. Tables 38 through 40 show the results of analyses which examined differences in Control Direction and feedback behavior comparing first and second halves of the recorded interaction.

No significant effects appeared in relation to subjects' Control Direction usage when the first and second halves of their interactions were treated as trial measures.

However, as Table 38 shows, Time became a factor of importance in interaction with several other factors predicting CD Response to one-up stimuli, since the MD x Sex x CDR x Time effect was highly significant, $F$ (2,40) = 6.48, $p < .004$. The related means show that females in pairs with male repressors increased their one-down responding to one-up stimuli in the second half of the interactions, while the males decreased their one-down responses to one-up stimuli in the second half. This finding does support Hypothesis 25. Furthermore, while males in male sensitizer pairs showed little change from the first to the second half of their interactions, females paired with male sensitizers both increased their one-up responses to one-up stimuli and decreased their one-down responses to these stimuli. This result gives support to the notion that sex-typing of one-up and one-down stimulus response feedback did increase in male repressor pairs and decreased in pairs where the male was a sensitizer, in the second half of an ongoing

Table 38

Response to One-Up(1) Stimuli Over Time

Means and ANOVA

| Factor Name | Mean* |
|---|---|
| MD x Sex x CDR x Time | |
| Male Repressor Pairs | |
| Females use of One-Up first half | .32 |
| Females use of One-Up second half | .25 |
| Females use of One-Down first half | .17 |
| Females use of One-Down second half | .29 |
| Females use of One-Across first half | .43 |
| Females use of One-Across second half | .20 |
| Males use of One-Up first half | .26 |
| Males use of One-Up second half | .13 |
| Males use of One-Down first half | .36 |
| Males use of One-Down second half | .12 |
| Males use of One-Across first half | .28 |
| Males use of One-Across second half | .66 |
| Male Sensitizer Pairs | |
| Females use of One-Up first half | .11 |
| Females use of One-Up second half | .22 |
| Females use of One-Down first half | .40 |
| Females use of One-Down second half | .24 |
| Females use of One-Across first half | .32 |
| Females use of One-Across second half | .46 |
| Males use of One-Up first half | .24 |
| Males use of One-Up second half | .23 |
| Males use of One-Down first half | .41 |
| Males use of One-Down second half | .47 |
| Males use of One-Across first half | .29 |
| Males use of One-Across second half | .29 |

*Note: Amounts equal percent of CDR response to One-Up stimuli.

interaction. Thus, more support for Hypothesis 25 is present in these results.

Table 39 shows a significant interaction effect of HH x Sex x CDR x Time regarding subjects' responses to one-down stimuli given in first and second halves of their interactions, $F$ (2,40) = 3.13, $p < .05$. In homogenous pairs, females showed little change in their responses to one-down stimuli from first to second halves of the interaction; males, in contrast, showed a marked decrease in one-down responses to one-down stimuli and a substantial increase in one-across responses, in these pairs. Males in heterogenous pairs actually decreased their use of one-across messages by the second half of their interactions, while females here once again showed little mean change in their response to stimulus behavior. This result was not predicted.

Finally, Table 40 indicates a significant MD x Sex x CDR x Time interaction concerning subjects responses to one-across stimuli, $F$ (2,40) = 3.84, $p < .03$. Little change occurred in response percentages for either female or male members of pairs in which the male is a repressor, but in pairs where the male is a sensitizer, there was an increase in one-up responses to one-across stimuli and a decrease in one-across responses to one-across stimuli for males, while the females in these pairs increased their utilization of one-across responses and decreased their one-down messages

Table 39

Response to One-Down(2) Stimuli

Over Time: Means and ANOVA

| Factor Name | Mean* |
|---|---|
| HH x Sex x CDR x Time | |
| Homogenous Pairs | |
| Females use of One-Up first half | .37 |
| Females use of One-Up second half | .39 |
| Females use of One-Down first half | .08 |
| Females use of One-Down second half | .10 |
| Females use of One-Across first half | .47 |
| Females use of One-Across second half | .43 |
| Males use of One-Up first half | .24 |
| Males use of One-Up second half | .19 |
| Males use of One-Down first half | .24 |
| Males use of One-Down second half | .08 |
| Males use of One-Across first half | .45 |
| Males use of One-Across second half | .65 |
| Heterogenous Pairs | |
| Females use of One-Up first half | .20 |
| Females use of One-Up second half | .19 |
| Females use of One-Down first half | .12 |
| Females use of One-Down second half | .14 |
| Females use of One-Across first half | .52 |
| Females use of One-Across second half | .59 |
| Males use of One-Up first half | .26 |
| Males use of One-Up second half | .21 |
| Males use of One-Down first half | .14 |
| Males use of One-Down second half | .20 |
| Males use of One-Across first half | .60 |
| Males use of One-Across second half | .41 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| HH x Sex x CDR x Time | .41 | 2 | .21 | 3.13 | .05 |
| Sex x CDR x Time x Pair (HH x MD) | 2.60 | 40 | | | |

*Note: Amounts indicate percent of CDR response to One-Down stimuli.

Table 40

Response to One-Across(3) Stimuli

Over Time: Means and ANOVA

| Factor Name | Mean* |
|---|---|
| MD x Sex x CDR x Time | |
| Male Repressor Pairs | |
| Females use of One-Up first half | .14 |
| Females use of One-Up second half | .25 |
| Females use of One-Down first half | .42 |
| Females use of One-Down second half | .38 |
| Females use of One-Across first half | .41 |
| Females use of One-Across second half | .38 |
| Males use of One-Up first half | .24 |
| Males use of One-Up second half | .16 |
| Males use of One-Down first half | .41 |
| Males use of One-Down second half | .44 |
| Males use of One-Across first half | .34 |
| Males use of One-Across second half | .40 |
| Male Sensitizer Pairs | |
| Females use of One-Up first half | .21 |
| Females use of One-Up second half | .17 |
| Females use of One-Down first half | .54 |
| Females use of One-Down second half | .44 |
| Females use of One-Across first half | .25 |
| Females use of One-Across second half | .39 |
| Males use of One-Up first half | .15 |
| Males use of One-Up second half | .29 |
| Males use of One-Down first half | .36 |
| Males use of One-Down second half | .37 |
| Males use of One-Across first half | .44 |
| Males use of One-Across second half | .29 |

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| MD x Sex x CDR x Time | .42 | 2 | .21 | 3.84 | .03 |
| Sex x CDR x Time x Pair (HH x MD) | 2.20 | 40 | | | |

*Note: Means indicate percent of CDR response to One-Across stimuli.

as feedback to one-a-cross stimuli, from the first to second halves of interactions. This result was also not specifically anticipated in the experimental hypotheses, but it is compatible with the general theme of Hypothesis 25 regarding changes in process notable over time.

Finally, results of the attempted Markov chain analyses will be presented. Tables 41A and 41B show the average transitional probability matrixes for females and males. These were derived by constructing a transitional probability matrix for each subject based on his or her sequence of CD behavior in relation to the partner's behavior within their conversation, and averaging the results appropriately, according to sex. Using the computer to compute matrix manipulation, neither matrix produced a Markov chain pattern of stable probability. Therefore, it was not possible to compare the percent of behavior spent in the transitional states of each subject according to particular dyad type with an average hypothetical Markov sequence. Thus, the planned analysis could not be completed.

Finally,to clarify and reiterate the complex results reported summary tables of the findings will be presented. Table 42 and 43 summarize the results pertaining to interpersonal perception. Table 44 summarizes the results concerning interactional process.

Table 41A

Transitional Probability Matrices

Average Female Matrix

| | 1,1 | 1,2 | 1,3 | 2,1 | 2,2 | 2,3 | 3,1 | 3,2 | 3,3 |
|---|---|---|---|---|---|---|---|---|---|
| 1,1 | .085 | .096 | .102 | .065 | .020 | .247 | .145 | .088 | .153 |
| 1,2 | .090 | .063 | .090 | .068 | .053 | .214 | .039 | .276 | .106 |
| 1,3 | .044 | .090 | .059 | .078 | .039 | .124 | .078 | .254 | .254 |
| 2,1 | .061 | 0 | .055 | .056 | .050 | .175 | .089 | .171 | .340 |
| 2,2 | .065 | .054 | .049 | .049 | .075 | .276 | .059 | .139 | .219 |
| 2,3 | .051 | .026 | .135 | .076 | .023 | .318 | .066 | .102 | .207 |
| 3,1 | .041 | .071 | .224 | .046 | .010 | .224 | .056 | .176 | .148 |
| 3,2 | .042 | .096 | .051 | .056 | .040 | .236 | .158 | .170 | .155 |
| 3,3 | .079 | .080 | .052 | .024 | .031 | .220 | .161 | .199 | .156 |

Table 41B

Transitional Probability Matrices

Average Male Matrix

| | 1,1 | 1,2 | 1,3 | 2,1 | 2,2 | 2,3 | 3,1 | 3,2 | 3,3 |
|---|---|---|---|---|---|---|---|---|---|
| 1,1 | .067 | .067 | .081 | .116 | .012 | .236 | .073 | .180 | .154 |
| 1,2 | .050 | .047 | .068 | .047 | .047 | .304 | .110 | .166 | .243 |
| 1,3 | .072 | .029 | .093 | .113 | 0 | .224 | .086 | .178 | .205 |
| 2,1 | .078 | .044 | .156 | .073 | .123 | .317 | .058 | .094 | .141 |
| 2,2 | .067 | 0 | .050 | .079 | .060 | .275 | .050 | .246 | .156 |
| 2,3 | .101 | .046 | .200 | .072 | .049 | .224 | .101 | .091 | .155 |
| 3,1 | .084 | .075 | .101 | .048 | .071 | .223 | .086 | .210 | .091 |
| 3,2 | .084 | .103 | .063 | .081 | .078 | .158 | .070 | .181 | .180 |
| 3,3 | .050 | .109 | .103 | .099 | .111 | .142 | .031 | .217 | .145 |

Table 42

Summary of Results Pertaining to Specific

Interpersonal Perception Hypotheses

| Adjective or Variable | Factor(s) Predicted Significant | Hypothesis | Supported | Not Supported |
|---|---|---|---|---|
| Defense related: | | | | |
| Happy | MD | 4 | | X |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| | HH x MD(or FD x Sex x Context | 13 | X | |
| Intelligent | MD | 4 | X | |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| | HH x MD(or FD) x Sex x Target | 13 | | X |
| Enthusiastic | MD | 4 | X | |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| (continued) | HH x MD(or FD) or Sex x Context | 13 | | X |

| Adjective or Variable | Factor(s) Predicted Significant | Hypothesis | Supported | Not Supported |
|---|---|---|---|---|
| Easy-Going | MD | 4 | | X |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD x Sex x Target | 8 | | X |
| | MD x Context | 10 | X | |
| | HH x MD(or FD) x Sex x Context | 13 | | X |
| Angry | MD | 4 | | X |
| | FD x Sex x Target | 7 | X | |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | | X |
| Critical | MD | 4 | | X |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | X | |
| Excitable | MD | 4 | | X |
| | FD x Sex x Target | 7 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Context | 10 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | | X |

(continued)

| Adjective or Variable | Factor(s) Predicted Significant | Hypothesis | Supported | Not Supported |
|---|---|---|---|---|
| Sex-Stereotyped: | | | | |
| Decisive | Sex x Target | 5 | | X |
| | MD x Sex x Target | 6 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Sex x Context | 11 | | X |
| | FD x Sex x Context | 12 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | | X |
| Dominating | Sex x Target | 5 | X | |
| | MD x Sex x Target | 6 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Sex x Context | 11 | | X |
| | FD x Sex x Context | 12 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | | X |
| Influenceable | Sex x Target | 5 | X | |
| | MD x Sex x Target | 6 | | X |
| | HH x MD(or FD) x Sex x Target | 8 | | X |
| | MD x Sex x Context | 11 | | X |
| | FD x Sex x Context | 12 | | X |
| | HH x MD(or FD) x Sex x Context | 13 | | X |

(continued)

| Adjective or Variable | Factor(s) Predicted Significant | Hypothesis | Supported/Not Supported |
|---|---|---|---|
| Submissive | Sex x Target | 5 | X |
| | MD x Sex x Target | 6 | X |
| | HH x MD(or FD) x Sex x Target | 8 | X |
| | MD x Sex x Context | 11 | X |
| | FD x Sex x Context | 12 | X |
| | HH x MD(or FD) x Sex x Context | 13 | X |
| Self-Critical | Sex x Target | 5 | X |
| | MD x Sex x Target | 6 | X |
| | HH x MD(or FD) x Sex x Target | 8 | X |
| | MD x Sex x Context | 11 | X |
| | FD x Sex x Context | 12 | X |
| | HH x MD(or FD) x Sex x Context | 13 | X |

Table 43

Exploratory Findings Pertaining to Interpersonal Perception

| Adjective | Factor Found Significant | Hypotheses |
|---|---|---|
| Enthusiastic | Context | 9 |
| Easy-Going | Context | 9 |
| Angry | Context | 9 |
| Calm | Context | 9 |
| | MD x Sex | nh* |
| Honest | Context | 9 |
| | HH x Target | nh |
| | MD x Sex x Target | nh |
| Realistic | Context | 9 |
| Mature | Context | 9 |
| Fair | FD x Context | nh |
| Interested in Questionnaire | Sex x Context | nh |
| | HH x Sex x Context | nh |
| | MD x Sex x Context | nh |
| | FD x Sex x Context | nh |
| | HH x MD x Sex x Context | nh |

*nh - No Hypothesis was specifically made pertaining to this variable.

Table 44

Summary of Results Pertaining to

Interactional Process Hypotheses

| Variable | Factor Predicted Significant | Hypothesis | Supported | Not Supported |
|---|---|---|---|---|
| CD | Sex x CD | 19 | | X |
| | MD x Sex x CD | 20 | | X |
| CDR | Sex x CDR | 21 | | X |
| CDT | HH x MD(FD) x CDR | 22 | | X |
| Information (T) | MD(or FD) x Sex | 23 | | X |
| | Sex | 24 | | X |
| Interactions with Time | MD x Sex x CDR x Time | 25 | X | |
| | Sex x CD | 25 | | X |

# CHAPTER VI

# DISCUSSION

The Discussion will be presented in three sections. First, the main conclusions supported by the data concerning self concept, interpersonal perception and interactional process based on sex and defense style will be reiterated. Second, the "pattern that connects" self-concept, interpersonal perception and interactional process will be considered, and the relationship of the current study to previous literature will be contemplated. Finally, problems in the present investigation will be examined and suggestions for future research will be offered.

## Conclusions from the Data

With respect to self-concept apart from interpersonal interaction, quite a bit of support was gained in the data for hypotheses which predicted that self-concept would be related to defense style. Repressors were more positive about themselves on many variables, while sensitizers endorsed characteristics associated more with conflict and negative arousal. As in Zalman's (1981) study, variables presumed to reflect sex differences according to sex-stereotypes failed to do so at this non-interactional stage of the study. A possible explanation may lie in the fact

that once socially-approved sex-role stereotypes have greatly diminished due to the women's liberation movement and other changes in the culture. These changes may be particularly applicable to a career-oriented college population in a major North American city like Chicago.

With regard to interpersonal perception, a number of hypotheses did receive some support from the data. First, the defense style of the male partner in heterosexual dyads did have an effect on the person perception of both members of the couple. Positive characteristics including intelligence, decisiveness and enthusiasm were associated with the presence of a male repressor in a pair, while self-criticalness was associated with the presence of a male sensitizer.

The defense style of the female partner in the pairs was not expected to have as strong an effect, and in fact, was not as often found significant as the male's defense style. There were more instances where females defense style did interact with the sex of the subject, regarding the perception of decisiveness, for example, so that the perceptions of female members of the pairs were more influenced by their own defense style than were the male members of these pairs. Still, there was a significant main effect of female defense style on perception of influenceability, so that both male and female partners were affected. Interestingly, in contrast to the hypothesis which had pre-

dicted deciveness to be regarded as a male sex-typed adjective that repressive females would endorse less as being self-descriptive than more cross-sex characteristic-admitting female sensitizers, female repressors described themselves as more decisive than female sensitizers. Also in contrast to the hypothesis which had proposed that influenceability would be associated with female sex-typed characteristics and endorsed more by female repressors than female sensitizers, once again, the opposite patterns emerged. As for males, influenceability was also found to be associated with sensitization, and decisiveness with repression, just as among women. These results tend to confirm sex-typing patterns of adjective endorsement for males, while contradicting them for females. A possible explanation is that college women, affected particularly directly by the cultrual changes that have accompanied the women's liberation movement, are no longer perceiving themselves in traditional ways about these characteristics. Thus, repressor women may no longer consider it conflictful or necessary to avoid perceiving themselves as decisive or less influenceable. Yet, it may remain conflict-arousing for repressor men to claim influenceability or less decisiveness, since the women's liberation movement may not provide college men with equal social reinforcement for abandoning traditional patterns of self-perception. Furthermore, decisiveness and some resistance to being influenced are probably both considered culturally

desirable today, regardless of sex.

However, the hypotheses also anticipated patterns of comparing self to partner for men and women that would reveal sex stereotypes that had not emerged in the non-interactional, original self-descriptions. These predicted interactions of Sex x Target did receive substantial support from the data, in fact. Females and males perceived significant differences between themselves and their opposite sex partners on the adjectives angry and dominating, where both males and females saw these characteristics at higher levels in the men than the women, and influenceable, where both sexes saw this characteristic at higher levels in the women than the men. Also of interest was the finding that overall, men perceived both themselves and their partners as more dominating than women did, while women perceived both themselves and their partners as more influenceable than men. It would seem that men and women in interaction may project some of their own sex-typed aspects of self-perception into members of the opposite sex, in addition to the above evidence that they also differentiate their perceptions of others according to sex-typed patterns.

The success of the specific interpersonal hypotheses regarding patterns of self and partner perception according to dyad combination, sex and defense style interactions are more difficult to evaluate. There was, indeed, evidence

of such complex interactions in the data, where fairly specific predictions were given support, i.e. regarding intelligence, decisiveness and influenceability, particularly for the males. As stated above, primarily concerning the endorsements of the repressor women did the pattern of results deviate from the predicted pattern. It may be possible to go so far as to say that due to the women's liberation movement, certain demand characteristics of the present study induced repressor women to become "counterphobic" about describing themselves (as opposed to their partners) according to sex-typed patterns. More detail about the demand characteristics of the present study that may have contributed to this phenomonon will be presented later in this section. Taking this phenomenon into account, the complex interactions found in the data may then be viewed as giving some support to the interactional hypotheses concerning perception, and thus gave support to the interactional point of view that was the essence of the study.

Regarding hypotheses in which perception of the self was analyzed in terms of whether the self-description was obtained in the interactional or the non-interactional context, a word of caution will be offered, since these results may be subject to the artifact of regression toward the mean. Still, in most cases, the interactional hypotheses ran counter to the direction of regression, so that this arti-

fact may be expected to have tended to mask significant differences rather than indicate them where they were not present. In that sense, these analyses may be considered conservative. Therefore, it may be especially noteworthy that subjects in the SS pairs failed to increase or actually decreased endorsement of being happy from the non-interactional to the interactional context, so that sensitizers' interactions with each other may uniquely and mutually increase their sensitizing style of self-perception. Also notable in confirming prediction was the finding that in RS pairs, compared to other pairs, female repressors here were influenced by their male sensitizing partners to see themselves as more critical, while the males in these very pairs were perhaps relieved by interaction with their repressor female partners to see themselves as less critical after their conversations than before.

One of the most interesting findings of the study was not hypothesized. The interactions of defense, sex and context with respect to expression of interest in the questionnaire were most noteworthy. In general, males expressed more interest in the self-descriptive questionnaire given in the non-interactional context than in the readministration of this questionnaire pertaining to self and partner in the heterosexual interaction context. Females, in contrast to males, showed greater interest in the questionnaire

in the interactional context, and also showed significant differences in their interest based on their own defense style as well as that of their partner. Females with male repressor partners, and in particular, female sensitizers with male repressor partners, showed the greatest increase in expression of interest in the questionnaire from the non-interactional assessment to the interactional context measure. Such a finding again provided a good example of the power of the interaction context to complexly affect the perceptions of the individuals who are its participants.

A final word is offered about these results pertaining to interpersonal perception of individual characteristics. As shown, there are many instances where the interactional predictions offered in the hypotheses were given support in the data. But there were also many instances where non-predicted interactions in the data were discovered, and many occasions where adjectives expected to display predicted patterns did not. In part, this outcome may be seen as typical of interactional research, which is so multidimensional in nature that simple results may be seen as quite unlikely to obtain. However, this situation may also have developed out of problems in the experimental design of this study. These problems will be discussed later in the chapter.

Hypotheses concerning other aspects of interpersonal

perception also received rather mixed support in the data. Homogenity of defense style in the couple did not increase accuracy of metaperspective perception of subjects toward their partners, as had been predicted. But the fact that accuracy for males was increased by the repressive defense style of female partners is, in retrospect, perhaps not surprising, in light of previous literature indicating the difficulty of accurately assessing female sensitizers and the increased compatability of perception in spouse pairs where there is a repressor. Female repression had also been predicted to be a factor in perceived agreement about the Topic of Discussion. However, such a finding was not discovered here, although in general, women perceived more agreement on this question than men. Again, the fact that this particular discussion pertained to changing women's roles may have also produced an artifact in which women would have wanted to perceive agreement with their male partners. Therefore, this perception of male agreement by the women, including both repressor and sensitizer women, may have indicated not only the traditional greater complementarity and supportiveness of women in conversation with men, but also may have reflected a general desire among women to find approval and reinforcement for their own perception of their sex roles among their male partners.

One finding that did confirm hypothesized predictions

was that expression of liking for the partner was associated with a repressive defense style, especially for women. Also, the pattern of means for the various dyad combination confirmed interactional patterns that had been expected, giving yet another instance of support for the interactional complexity that assumed of critical importance by the study.

The analyses of interactional process data, in contrast to the interpersonal perception measures, gave many fewer instances of support to the main experimental hypotheses. Virtually no support was obtained for the hypothesized patterns of one-up, one-down and one-across control direction and control direction contingency behavior that had been expected to differentiate subjects and pairs according to sex, defense and defense combinations. The expected one-up and one-down patterns for dominance in relationship definition for men and women, were thus, not discovered. Neither was the differential use of one-across that was expected to define the more neutral conversations of repressors in contrast to the conversational behavior of sensitizers. The failure to support these hypotheses presents a major difficulty for the individual in interaction focus that characterized the present study. However, some support for these hypotheses was obtained in the analyses in which the variables were assessed according to differences between the first and second halves of the recorded conversations. Fe-

males in pairs with male repressors did increase their percentages of one-down responses to one-up stimuli provided by their male partners in the second half of their interactions compared to the first, while the male repressors in these pairs decreased this one-down in response to one-up aspect of their behavior. This finding seems evidence of an increase in conventional male-female relationship dominance patterns for heterosexual repressors in the process of interaction, a finding quite consistent with experimental hypotheses. In contrast, females paired with male sensitizers actually increased one-up responses to one-up stimuli provided by these males in the second halves of their interactions, thus indicating greater competition and less conventional complementarity of dominance behavior that would be expected for couples in which the male's defense style was sensitization as opposed to repression. In these time focused analyses, other unanticipated complex interactions of individual characteristics and couple combinations were also found significant. These findings, too, support the major contention of the study, that individual and interactional pattern develops over the course of a process of relationship defining events.

The lack of significant differences among the information T scores according to subject and dyad factors gave no support to experimental hypotheses which had predicted

differential sensitivity to information among the subjects. Still, this result cannot be misinterpreted as indication that a lack of sensitivity to information existed, only that subjects were not significantly different in sensitivity according to the predictions. Clearly, sensitivity to information provided by stimulus messages to response messages did exist. As the CD results did show, as in Rausch's (1965) study, the major determinant of a interactional relationship defining act was the previous stimulus.

Indeed, process patterns of stimulus and feedback were quite significantly found in the data. The results of the Control Direction contingency relationships defined as CDR or Control Direction Responses to specified stimuli showed significant effects on all such analyses. Also, the investigation into transactional patterns of symmetry and complementarity showed corroborative evidence of the predominance of specific interactional sequences in the data. Subjects used one-across control direction messages most, one-down messages next most often, and one-up messages least. They least often followed one-up stimuli with one-up feedback, and one-down stimuli with one-down responses. Most often, they produced one-across responses to one-across or one-down stimuli, and vice-versa.

These findings suggest a fairly stable normative pattern of interaction in the conversations recorded to the

data that was irrespective of dyad combination or subject variables. Thus, the conversations analyzed in this study could be characterized as rather overwhelmingly neutral and supportive in terms of relationship definition through control direction. There was little evidence of symmetrical competition or mutual abdication of relationship definition to the partners. Instead, there was consistent evidence of transitory complementarity (thus, one-down/one-across transactions) and one-across/one-across symmetry that appeared to keep these normative conversations between strangers in the laboratory setting going. They seemed to be behaving as peers in a conventional and neutral exchange. Despite this existence of normative pattern in the data, however, matrix manipulations based on male and female averages of transitional probabilities failed to produce the Markov chain predictability that had been planned for use as a standard against which to compare the process activities of each specific dyad type. Rausch's method of generating Markov matrixes based on the first two acts of a sequence only was inapplicable to this data, since not only were the individuals interacting drawn from differing subject classifications, but also their interactional acts were draw from three categories of relationship control direction, rather than the dichotomous categories of Rausche's data. Thus, because of the nature of the present data, it was not possible to apply a Markov model approach to evaluating the

process behavior of different subjects in different dyad types.

## Integration

Is there a meaningful interpretation that can be offered for these many results? What does it mean that defense related differences between self-description or repressors and sensitizers appeared in both non-interactional and interactional context assessments, while sex-stereotypes in person perception appeared more clearly in a dyadic context? What does it say about interpersonal processes that the defense style of the male partner in a dyad appeared to have a prominent impact on the person perception for both members of the pair, since male repressors induced more positive perceptions than male sensitizers? What does it mean that the presence of a repressor female encouraged greater liking in subjects for their partners? And finally, what do these results have to do with the only positive process finding pertaining to subject and dyad classifications; that in the latter half of a conversation, female repressors and male repressors began to behave in more sex-stereotyped ways in defining dominance in their relationship, while females paired with male sensitizers, who were themselves reducing neutrality in their feedback behavior, began increasing dominance in their relationship definition?

In consideration of these questions, a speculative integration will be offered as an example of the interactional perspective that characterizes the study. First, people do indeed change their self-perceptions in light of context. A dyadic heterosexual context elicits greater sex-stereotyping and comparison than an individual or non-interactional assessment. Second, interpersonal phenomena are based on complex social and psychological realities, so womens' self and other perceptions are more readily influenced by male interacting partners than vice versa. Yet this pattern reverses where liking is concerned. Third, interactional behavior and interpersonal phenomena are complexly related so that female repressors, perhaps reacting to new social ideals and demand characteristics of the present study, failed to show sex-stereotyping in their stated self-perceptions and yet began to show acceptance for male dominance in the second half of their conversational interactions. The interactional behavior of female sensitizers, male repressors and male sensitizers was more consistent with their interpersonal perceptions, particularly of themselves. The possibility of such speculation here is owed to the essential aspect of the present study as a contribution to the existing literature. Many studies have explored differences between repressors and sensitizers. Only a few have attempted to assess sex differences in light of defense style. With the exception to Scarpetti (1973) very few have purposely ex-

plored behavioral contingencies with respect to defense style differences. Only a few have explored interpersonal behavior between men and women, and very few of these have explored the behavior in a process-oriented way. Here, all these aspects of subject, context and process have been taken into account.

Still, this speculative integration deals with only limited aspects of the study, those in which significant patterns did emerge. As stated, there were numerous instances where predicted hypotheses were not supported, unexpected results occurred, and consistent trends impossible to define. In light of these facts, perhaps attention to aspects of the study design is indicated.

Constraints Resulting from the Specific Design of the Study

The most obvious difficulty with the present study concerns the extremely large number of discrete dependent variables that were considered. Specifically, each analysis involved consisted of a minimum of three or four main factors, and many hypotheses concerned effects on up to eight separate adjectives upon which separate analyses were done. As a result, alpha error cannot be ruled out as an explanation for some of the significant results. Furthermore, support for hypothesized effects was obtained on some variables but not others, making a pattern of findings that was

unwielding and difficult to interpret. Perhaps this will always be a problem for interactional research, which by nature ought to be complex and multidimensional. However, it is clear that in the present case, a more reliable and indepth measure of self and person perception than the adjective endorsement method would have been helpful. For example, the use of Leary's or Schutz's scales pertaining to dominance and affection would have provided a clearer, axis oriented depiction of the personality characteristics related to sex and defense style.

Another constraint of the study was that a meaningful integration of interaction with interpersonal perception was limited to its assessment only of self-perception and to some extent, metaperspective. Laing's interesting concept of metameta-perspective was not operationalized and could not be explored. This concept of one's expectation of how another is perceiving him or her could have rich implications for an understanding of interactional process, and should be included in subsequent research.

The present study chose a small data base, that is, Discussion Topic Two, for process recording upon which to apply control direction coding. In contrast, the interpersonal perception and adjectival data was obtained after a much longer interaction experience of the dyad including their subsequent discussions of the Defense Mechanism Inven-

tory stories. Although a comparison of first and second halves of the Discussion Topic Two data based made some analysis of process over time available, it is also possible that control direction patterns that were related to the obtained interpersonal perception and adjectival data began to occur later in the interactors' experience with each other and were not as absent as some of the present interactional findings, which again, were limited to Discussion Topic Two, suggest.

Another consideration resulting from the use of Discussion Topic Two as the interactional data base was that this question apparently evoked a self-consciousness about sex-stereotyping among the subjects that may not have arisen if the discussion topics had simply aroused anxiety or defensiveness without reference to sexual dominance issues. As stated above, the interactional findings pertaining to female repressors, in general, may have been more clearly supportive of the experimental hypotheses if this had not been the case.

With regard to the study of process, in particular, several comments deserve mention. The use of the Markov model method in application to process data appears limited by the necessity of basing transitional probabilities on sequences of acts regardless of subject differences. Populations of interactional acts are the focus, rather than

interacting populations of subjects. Therefore, it is conceivable that if homogenous pairs of women, pairs of men, pairs of repressors and pairs of sensitizers had been assessed, their data may have produced matrixes of acts that could have then been manipulated to produce Markov chains that could have been compared to the mixed-sex and mixed-defense combinations of interest here. Rich conclusions about individuals in truly different contexts could be drawn from such data. This appears to be the best direction for subsequent research into the intraindividual-interactional interface that was the major focus of the present study.

A final word pertains to the concepts of relationship definition through control direction provided by Erikson and Rogers (1973). The CD and especially the time phase analyses suggested these concepts were indeed fruitful in investigating the processes of interest in interactional research. Still, other aspects of interpersonal behavior were clearly available to the subjects in this experiment in defining their relationship, over and above the control directions of the verbal statements.

Length of utterances, verbal pitch, kinesic behavior and the like are clearly important aspects of personal and interpersonal behavior, and surely contributed to the interpersonal perceptions measured by the adjective endorsements in the study. Thus, control direction is one, but only one,

valuable method by which to investigate relationship definition as it relates to self and other perception. Utilizing it as a method apart from other important indices of interactional behavior perhaps artificially isolates an aspect of the complex process that researchers will wish to investigate.

In conclusion, it is hoped that future research in the present area will be much more detailed and multi-demensional than the present effort. The use of computer analyses of complex hypotheses and video-recording to permit analysis of additional behavioral cues is clearly in order. It is also hoped that husband-wife couples in interaction, or therapist-client pairs of the various sex and defense combinations may be employed to explore the questions considered here. Without such investigation, one can only speculate on the applicability of the interesting findings noted here to these intense and important dyadic contexts in the real world.

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# APPENDIX A

# Pre-Test Questionnaire

1. My mood at this time is:
   Very Happy 1 2 3 4 5 Very Unhappy

2. My responses to the questionnaire were:
   Very Mature 1 2 3 4 5 Very Immature

3. I think the questionnaire was:
   Very Interesting 1 2 3 4 5 Not at all Interesting

Rate yourself on the following adjectives, as you usually see yourself: compared to others:

| | | Very 1 2 3 4 5 Not at all |
|---|---|---|
| 4. | Honest | 1 2 3 4 5 |
| 5. | Realistic | 1 2 3 4 5 |
| 6. | Happy | 1 2 3 4 5 |
| 7. | Fair | 1 2 3 4 5 |
| 8. | Angry | 1 2 3 4 5 |
| 9. | Dominating | 1 2 3 4 5 |
| 10. | Intelligent | 1 2 3 4 5 |
| 11. | Calm | 1 2 3 4 5 |
| 12. | Influenceable | 1 2 3 4 5 |
| 13. | Critical | 1 2 3 4 5 |
| 14. | Humorous | 1 2 3 4 5 |
| 15. | Decisive | 1 2 3 4 5 |
| 16. | Enthusiastic | 1 2 3 4 5 |
| 17. | Submissive | 1 2 3 4 5 |
| 18. | Self-Critical | 1 2 3 4 5 |
| 19. | Easy-going | 1 2 3 4 5 |
| 20. | Excitable | 1 2 3 4 5 |

# APPENDIX B

EXPERIMENTER READS ALOUD:

In this experiment, we are interested in certain personality variables and how they influence behavior, experiences and opinions in a wide variety of situations. To make the experiment more interesting, we would like you to discuss your opinions with each other, first about some topics of interest and later, regarding a variety of different situations.

First, you will be given two topics to discuss. Please discuss each one as fully as you can with each other. Please involve yourselves as much as possible in each discussion. You may attempt to reach a consensus with your partner on each topic, but it is not necessary to do so. Your discussions will be taped. I will leave the room when you are talking with each other, but I will come back to tell you when to go on to the next phase of the experiment.

Here is your first discussion task:

(1) Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important things incoming students should know to get the most out of being at the University. You should have plenty of time to discuss this before I return with the second discussion topic. (Leave room after turning on tape recorder.) (Return in ten minutes).

(2) Here is your second discussion topic: Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important effects of the changing ideas about sex roles on school, work and social relationships for young men and women today. You will have as much time to talk about this as you did for the first topic.

Now we will begin the last part of the experiment, which should take not quite an hour.

A few weeks ago you answered some questionnaires for this experiment. One of these was called the DMI. As you remember, the DMI consisted of short stories or situations for which you were asked to indicate most representative, least representative, and generally true or generally false reactions, in terms of actual behavior, thoughts, fantasy and feelings. What we want you to do now is for both of you, each with your own copy, to read to yourselves each situation, as well as the choices of action regarding that situation. The situation and the choices of actual reaction will appear together on the same page. (Show the example page.) When you have finished the page, look up, so that your part-

ner will know that you are ready. Now, you are to discuss what you have read with your partner, exchanging your views with each other about what would be most and least representative for you to do and why. You may also discuss the situation in general in terms of what you would generally do or not do, imagine, think and feel, if you really were in that situation. (EMPHASIZE) The actual reactions that are printed following each situation are there ONLY TO GIVE YOU FOOD FOR THOUGHT FOR YOUR DISCUSSIONS. Once you have read them you should NOT make any effort to look at them again during the course of the discussion, so you should put the paper down. This is because we DO NOT want you MERELY TO READ to each other what you would or would not do. Instead, we want you to DISCUSS your reactions, thoughts and feelings WITH each other, EXCHANGING your ideas and INTERACTING with your partner as much as possible. YOU AND YOUR PARTNER MAY TRY TO REACH A CONSENSUS OF OPINION, BUT IT IS NOT NECESSARY TO TRY TO DO SO.

Expect to discuss each situation for about five minutes, which should allow you to discuss each situation as fully as you want. After you have finished each discussion, turn the page.

The next page will show four questions with a choice of five answers for each. Let's read the instructions of how to answer what is on this page. (Read DMI Instruction page as subjects read theirs).

Now, let's look at an example. Here is a situation followed by five choices of action regarding the situation. Read it to yourselves, put the paper down and look at your partner when you are ready to discuss the situation. Go ahead and discuss this example situation, so I can be sure you understand how to do it. (Allow subjects to discuss the situation. If they seem to finish without much discussion, tell them to discuss it more, stressing that they are to discuss each situation fully.) OK. That's the idea. Now, turn the page on the example. As you can see, here's an example of how you might mark your answers. Note that there is only one M and only one L, to indicate the one's that are felt most strongly about, and the remaining answers in each set are marked either True (T) or False (F). Finally, at the bottom of the page is a question which you should circle, either True or False.

Please make no special effort to remember the answers you marked when you took the DMI previously. Rather, answer the questions as if you were taking the questionnaire for the first time, trying to decide the answers that would describe how you would act and feel if you were to encounter

these situations today. Your discussions will be tape recorded.

You must finish each discussion before turning the page to make your answers. Please do not speak to each other while marking your answers. Also, please do not go on to the next story until both you and your partner are finished marking your answers and ready to go on to the next one.

When you are finished, there will be a very very brief set of questions and then I will explain the entire experiment to you. Are there any questions? I will be back in one hour, but you may get me if you finish before then. You may begin.

# APPENDIX C

DISCUSSION TOPIC 1

Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important things incoming students should know to get the most out of being at the University.

DISCUSSION TOPIC II

Taking into account your general knowledge and personal experiences, discuss what you consider to be the most important effects of the changing ideas about sex roles on school, work and social relationships for young men and women today.

# APPENDIX D

# Post Interaction Questionnaire

Rate yourself and your partner on the following adjectives:
(1-Very; 5-Not at all)

| | PARTNER<br>Very 12345 Not at all | SELF<br>Very 12345 Not at all |
|---|---|---|
| 1. Honest | 1 2 3 4 5 | 1 2 3 4 5 |
| 2. Realistic | 1 2 3 4 5 | 1 2 3 4 5 |
| 3. Happy | 1 2 3 4 5 | 1 2 3 4 5 |
| 4. Fair | 1 2 3 4 5 | 1 2 3 4 5 |
| 5. Angry | 1 2 3 4 5 | 1 2 3 4 5 |
| 6. Dominating | 1 2 3 4 5 | 1 2 3 4 5 |
| 7. Intelligent | 1 2 3 4 5 | 1 2 3 4 5 |
| 8. Calm | 1 2 3 4 5 | 1 2 3 4 5 |
| 9. Influenceable | 1 2 3 4 5 | 1 2 3 4 5 |
| 10. Critical | 1 2 3 4 5 | 1 2 3 4 5 |
| 11. Humorous | 1 2 3 4 5 | 1 2 3 4 5 |
| 12. Decisive | 1 2 3 4 5 | 1 2 3 4 5 |
| 13. Enthusiastic | 1 2 3 4 5 | 1 2 3 4 5 |
| 14. Submissive | 1 2 3 4 5 | 1 2 3 4 5 |
| 15. Self-critical | 1 2 3 4 5 | 1 2 3 4 5 |
| 16. Easy-going | 1 2 3 4 5 | 1 2 3 4 5 |
| 17. Excitable | 1 2 3 4 5 | 1 2 3 4 5 |

1. My mood at this time is:
   Very Happy 1 2 3 4 5 Very Unhappy

2. I think my partner's mood at this time is:
   Very Happy 1 2 3 4 5 Very Unhappy

3. Compared to my partner, my reactions to the questions were probably:
   Very Mature 1 2 3 4 5 Very Immature

4. Compared to my partner, my responses were probably:
   Much More Truthful 1 2 3 4 5 Much Less Truthful

5. I think the questionnaire was:
   Very Interesting 1 2 3 4 5 Not at all Interesting

6. I think this experiment is probably:
   Very Worthwhile 1 2 3 4 5 Not at all Worthwhile

7. I thought my partner was:
   Very Attractive 1 2 3 4 5 Very Unattractive

8. I would guess that my answers agreed with my partner's:
   All of the Time 1 2 3 4 5 None of the Time

9. I think my partner liked me:
   Very Much 1 2 3 4 5 Not at all

10. I liked my partner:
    Very Much 1 2 3 4 5 Not at all

11. I think my partner and I would act in similar ways under stress:
    True False

12. I think my partner and I have similar wishes, thoughts and feelings when under stress:
    True False

APPROVAL SHEET

The dissertation submitted by Rachelle Zalman has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

12/5/83
Date

Alan S. DeWolfe
Director's Signature