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PERCEIVED INTERPERSONAL STYLES AND PREFERENCE FOR INTERACTION: A PHENOMENOLOGICAL STUDY OF THE COMPLEMENTARITY HYPOTHESIS

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# PREFERENCE FOR INTERACTION: A PHENOMENOLOGICAL STUDY OF THE COMPLEMENTARITY HYPOTHESIS

Ву

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#### ABSTRACT

PERCEIVED INTERPERSONAL STYLES AND PREFERENCE FOR INTERACTION: A PHENOMENOLOGICAL STUDY OF THE COMPLEMENTARITY HYPOTHESIS

Bv

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A well-known theory of the complementarily of interpersonal style (Leary, 1957; Carson, 1969; Benjamin, 1979, in press) holds that similarity on the affiliation dimension but reciprocity on the interdependence dimension generally guide interpersonal behavior. It led to the hypothesis that individuals would prefer to interact with others having interpersonal styles which they perceived as complementary to their own.

To rigorously test this formulation, persons within small, interpersonally-oriented groups were studied. Samesex members of six different groups rank-ordered five coparticipants as preferred partners for dyadic discussion of their personal feelings about the group experience in both hypothetical (after 24 hours of small group participation) and actual (after 48 group interaction hours) pairings. Preferred partners proved very stable over the four intervening weeks. At the time of actual partner-rankings, all



all participants separately described their own interpersonal behavior toward each of their five coparticipants and also their perception of each other persons' behavior toward them using Benjamin's (1977a) social behavior model based on bipolar dimensions of affiliation and interdependence.

The complementarily hypothesis predicted that individuals' preferred dyadic partners would be perceived as more complementarity in interpersonal style, on the average, than each subsequent choice. Subjects' perceptions of both their own and others' affiliative behavior predicted partner preference very well (p's < .001), but complementarily on the combined affiliative and interdependence dimensions—as theoretically defined—was not a good predictor.

The potency of these two dimensions may differ with situations. In the present circumstance of choosing partners based upon acquaintence within an intensively interpersonal setting, perceived affiliative similarity was more potent than was reciprocity on the interdependence dimension. In highly task-oriented circumstances, the affiliation dimension's importance may diminish while the importance of reciprocity on the interdependence dimension increases. Role differences may also be crucial, since parent-child interactions are likely to have demands that are implicitly different than the peer interactions currently explored. Further investigations of the complementarity hypothesis should attend to both social role and situational factors.

#### DEDICATION

To my parents:

who ignited the flame of inquiry and in so doing, taught me to love learning, to revere wisdom, and to share what I had learned with others.

Sabbadanam dhammadanam jinati
The gift of Truth excels all other gifts.

Man is a thinking reed but his great works are done when he is not calculating and thinking, "Childlikeness" has to be restored after long years of training in the art of self-forgetfulness. When this is attained, man thinks yet he does not think. He thinks like the waves rolling on the ocean; he thinks like the stars illuminating the nightly heavens; he thinks like the green foliage shooting forth in the relaxing spring breeze. Indeed, he is the showers, the ocean, the stars, the foliage.

D. T. Suzuki

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#### INTRODUCTION

# The Bipolar Dimension of Personality

The focus on interpersonal interactions in the study of personality owes its theoretical genesis to Harry Stack Sullivan and Kurt Lewin. Sullivan, (1953) conceptualized personality as an interpersonal process and defined it as, "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (p. 110).

To account for an individual's behavior, Kurt Lewin, (1935) hypothesized that it was determined by both the perceived environmental situation and the individual's current behavioral disposition, (B = f[P,E]). Lewin's field theory was an attempt to psychologically conceptualize an individual's phenomenological experience. Thus, for Lewin, knowledge of a person's perception of themselves and their environment was of great importance in the explanation of their behavior.

When two individuals are observed in an interpersonal situation, the interaction becomes quite complex. Both individuals enter the phenomenal field with their own predispositions, constructs of self and other, and role expectations. This process is bi-directional in nature, because

each individual constantly screens the incoming data and reacts according to his/her perception of the existing explicit and implicit messages (Celani, 1974). Given the abundance of possible behavior interactions, the first task appears to be the systematic categorization of interpersonal behaviors in a manageable and conceptually fruitful way. Initially this task appears almost insurmountable, but it has been tackled by many researchers. One outcome of their efforts is the reduction of the seemingly infinite diversity of interpersonal behaviors into two principal dimensions. Although a comprehensive review of all researchers who have adopted this solution is beyond the scope of this paper, selected studies which are especially relevant to the present investigation will be examined.

An early conceptualization of interpersonal behavior along a circular continuum is attributed to Freedman, Leary, Ossorio, and Coffey (1951). In an attempt to examine social behavior within an interpersonal framework, Freedman et al. (1951) developed a theoretical model which systematized these researchers' ideas concerning the principal interpersonal mechanisms. Their model had two major bipolar axes labeled hostility-affiliation and dominance-submission. These dimensions form four major quadrants which were further divided into sixteen behavioral segments (see Figure 1). These segments represent an individual's behavioral responses during an interpersonal situation. The empirical support for these two dimensions was soon to follow.



Figure 1. The Leary (1956) bipolar circumplex illustrating the classification of interpersonal behaviors into 16 variable categories (sectors) and two principle factors (Love-Hate and Dominance-Submission. (From Leary, Multi-level Measurement of Interpersonal Behavior, Berkeley, Calif.: Psychological Consultation Service, 1956.)

Borgatta, Cottrell, and Mann (1958) used factor analysis to analyze interactions between members of small student groups and found that the major part of the variance was accounted for by factors of individual assertiveness and sociability. The results of two follow-up studies supported the salience of the same two factors (Borgatta, 1960, 1964). Schaefer (1959) factor analyzed data on mother-child interactions, and found two major factors, labelled controlautonomy and love-hostility. The two dimensions found by Schaefer are quite similar to those found by Borgatta. Although Borgatta et al. (1958) arranged their variables in a simplex pattern, i.e., a linear array, Schaefer (1959) like Freedman et al. (1951), arranged his data in a circular pattern. Labeled a circumplex by Guttman (1954), this pattern places two variables adjacent to one another when they share the largest portion of variance with each other. a later review article of several studies relating to child behavior, Schaefer (1961) sequentially ordered the data into a circumplex and concluded that when the spatial plots were examined: " . . . all studies are samples of the same universe, and all give similar circumplex organization of social and emotional behavior despite different methods and different conceptual schemas" (p. 146). His final conclusion was that there was a convergence of empirical support for a two dimensional circumplex model of interpersonal behavior.

In the summary of an extensive overview of both factorial and circumplex studies in this area Carson (1969) states:

The major portions of the domain of interpersonal behavior can profitably and reasonably accurately be conceived as involving variations on two independent bipolar dimensions. One of these . . . a dominance submission dimension . . . includes dominant, assertive, ascendent, leading, controlling (etc.) behaviors and submissive, retiring, obsequious, unassertive, following behaviors. . . . The poles of the second principal dimension include hateful, aggressive, rejective, punishing, attacking, disaffiliative (etc.) behaviors while the latter includes accepting, loving, affectionate, affiliative, friendly (etc.) social actions (p. 102).

Although there seems to be a basic agreement concerning the principal dimensions of interpersonal behavior, some researchers thought that a further substructure was needed to account for the circumpial bipolar pattern. Foa (1961) noted that dominance, submission, love, and hate could not only be directed toward another person, but also toward oneself. He derived three underlying facets of the dominance-submission and love-hate dimensions which include a content category (acceptance vs. rejection), an object category (self vs. other) and a mode category (emotional vs. social). Foa (1961) viewed the interpersonal act as "an attempt to establish the emotional relationship of the actor toward himself and toward the other, as well as to establish the social relationship of the self and the other with respect to a larger reference group" (p. 350). Following this frame of reference, Benjamin (1974) has synthesized the work of Leary (1957), Schaefer (1965), and Foa (1961) in her studies of interpersonal behavior. Although several models have been designed which derive from the Freedman et al. (1951) circumplex (LaForge and Suzeck, 1955; Becker and Krug, 1964; Lorr and McNair, 1965), Benjamin's (1974) is the most recent and promising. Her comprehensive three planar model of social behavior has affiliation on the vertical axis and interdependence on the horizontal axis. A simplified version of this model (Figure 2) labels the first plane OTHER (Benjamin, 1979). The vertical dimension of this plane integrated Schaefer's (1965) notion that autonomy is the opposite of control. Thus, at one end of the vertical axis is "endorse freedom," the opposite of "manage, control." first plane consists of behaviors done to or for others. Labeled, SELF, the second plane consists of behaviors done to or for the self. In this plane, submission, which is the opposite of autonomy, is labeled "freely come and go." Planes one and two depict interpersonal behaviors. third plane depicts intrapsychic behaviors which are the result of inwardly directing behaviors from the first plane. This third plane integrates the proposed importance of distinguishing between self-directed and other-directed behaviors (Foa, 1961; Hurley, 1976).

In conclusion, there appears to be a broad consensual agreement among workers in this sector that personality can systematically and meaningfully be conceived along two major bipolar dimensions. This configuration of personality

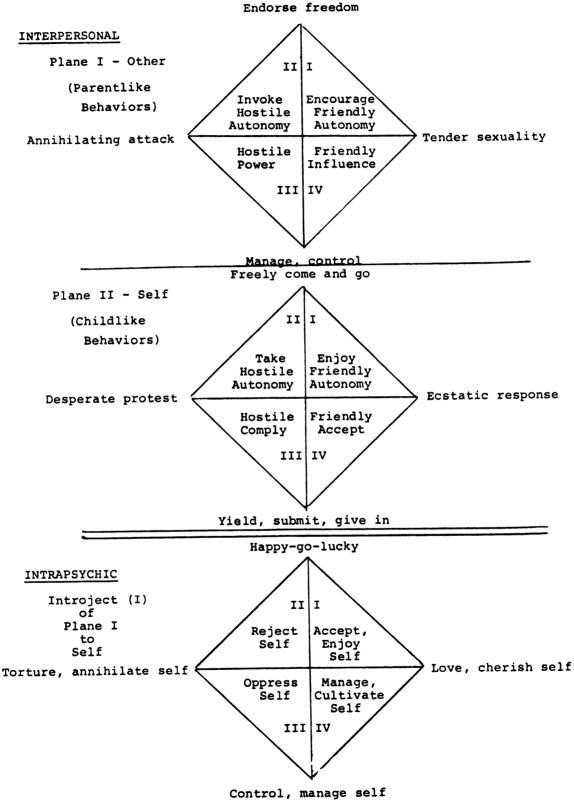


Figure 2. A simplified version of the chart of Social Behavior (Benjamin, 1979).

with its circumpial ordering has been an important step in making further research in this area both more systematic and more easily compared. One specific area which closely parallels the aforementioned studies has explored the relationship and patterns of interaction between individuals with different clusters of interpersonal behavior. The theoretical and empirical basis for one such pattern, entitled complementary or congruent interactions, will be discussed next.

# Theoretical Background for the Complementarity Hypothesis

The idea of complementary or congruent interpersonal relationships can be traced back to H. S. Sullivan (1953). While enumerating different aspects of the self-system which he defined as an organization of educative experience directed at interpersonal relations he noted that:

. . . the self-system from its nature--its communal environmental factors, organization and functional activity--tends to escape influence by experience which is incongruous with its current organization and functional activity (p. 190).

Sullivan's conceptualization of the self-system included its ability to selectively perceive the environment. This allowed the self to avoid anxiety by permitting only self-confirming information to enter awareness.

At present, there is much agreement with Sullivan's idea that a person's perceptions of the world do not occur directly. It is generally accepted that information from

the environment is processed as it is being encoded. Empirical support for this idea has been found in the area of physiological psychology. Sensory repression of environmental stimuli has been found on the neural level in frog's brains (Lettvin, Maturana, McCullough, and Pitts, 1959). Hall (1966) observed a number of cultures and reported distinct differences in the way individuals from various cultural backgrounds selectively screen data.

Both Adler (Ansbacher & Ansbacher, 1964) and Rogers (1959) have made note of perceptual selectivity and their explanations of its function are similar to Sullivan's (1953). Rogers (1959), in his development of client-centered therapy, observed that individuals having experiences that were incongruent with their self-construct, tended to deny awareness to such experiences or to distort their meaning. He saw selective perception as a means by which an individual could maintain his current self-structure while preserving it from threat. Adler viewed perception as more than just a mere physical process and stated, "our senses do not receive actual facts, but merely a subjective image of them, a reflection of the external world" (p. 182). Adler proposed that the purpose of this selectivity was to safeguard the self-esteem from disturbing external events.

George Kelly's (1963) conception of personality involved the idea that individuals differentially construe events in the world and this pattern or construct is then

fit over their experience. He saw the self as an important construct:

When the person begins to use himself as a datum in forming constructs... he finds that the constructs he forms operate as rigorous controls... upon his behavior. His behavior in relation to other people is particularly affected (p. 126).

Because of selective perception, one can develop a self-concept at an early stage in development which will be resistant to change even if subsequent external evidence is to the contrary. In fact, non-confirmatory feedback, even if it is positive and directed at a negative self-concept, tends to produce anxiety. But not only perception is influenced in this way, one's interpersonal behavior is as well. Interpersonal interactions that confirm one's self-concept promote internal security. Therefore, also implicit in Sullivan's conceptualization of the self-system, is that one's individual functioning, becomes stylistic. This preference for self-confirmatory interactions can be observed as a relatively enduring behavioral phenomenon.

This pattern, or interpersonal reflex as it is called by Leary and Coffey (1955), is a ramification of the self-system's need to avoid anxiety. Anxiety is considered by Leary to be an interpersonal process because in man's socially interdependent society, rejection by others greatly threatens self-esteem. Sullivan (1953), Rogers (1959), and Adler (1964) viewed anxiety as both an interpersonal process and an important motive force in personality.

Several other personality psychologists built a large part of their theory around this idea (Horney, 1937; Fromm, 1947; and Erickson, 1968). Thus, interpersonal behavior can be seen as an attempt to avoid anxiety and to maintain a confirmatory self-concept.

Leary (1957) noted several characteristics of the interpersonal reflex. It is considered to be somewhat flexible, although less so in the case of psychopathology. Reflexes are an automatic and spontaneous mode of interpersonal functioning. Each individual in a dyad has a preferred mode which can be observed by the frequency and generality with which it is displayed. Carson (1969), renamed the interpersonal reflex interpersonal style and conceived of it in terms of the bipolar circumplex that Leary and his colleagues at the Kaiser foundation developed (see Figure 1). Carson defined interpersonal style as:

. . . a discernible tendency to enact sets [of behavior] falling preponderantly, although often subtly, within a particular range of the interpersonal behavior circle (p. 142).

Because each member of the dyad is motivated to maintain security, each influences the other to respond in a way which is congruent with their own self-concepts.

Leary (1957) states this as a general principle:

Interpersonal reflexes tend (with a probability significantly greater than chance) to initiate or invite reciprocal interpersonal responses from the "other" person in the interaction that leads to a repetition of the original reflex (p. 123).

Carson (1969) extended and strengthened the above principal and depicted the induction of a particular interpersonal response as the purpose underlying all interactions:

The <u>purpose</u> of interpersonal behavior, in terms of its security-maintenance functions, is to induce from the other person behavior that is complementary to the behavior preferred (p. 112).

Complementarity, in terms of the two bipolar dimensions on the Leary (1957) circumplex in Figure 1, was hypothesized by both Leary (1957) and Carson (1969) as manifested by similar corresponding behavior on the affiliation axis, but by reciprocal behavior on the control dimension. Carson (in press), has summarized the joint relationship between these two dimensions as follows:

Initiator Behavior	Respondent Behavior
Affiliative Dominance	Affiliative Submission
Affiliative Submission	Affiliative Dominance
Hostile Submission	Hostile Dominance
Hostile Dominance	Hostile Submission

Since Benjamin's (1979) model includes autonomy as part of the control dimension, her conception of complementary behaviors is somewhat different than Carson's (1969). In her model complementary behaviors and their responses would be as follows:

## Initiator Behavior

Encourage Friendly Autonomy
Invoke Hostile Autonomy
Hostile Power
Friendly Influence

## Respondent Behavior

Enjoy Friendly Autonomy
Take Hostile Autonomy
Hostile Comply
Friendly Accept

As can be seen from Figure 2, complementary interactions are those in which the quadrant of the respondent's behavior in plane II is topologically the same as the quadrant from which the behavior was "sent" in plane I.

Since complementary interactions are security enhancing for both members, they can be seen as more rewarding and more likely to continue (Carson, 1969). This explains why one would expect a higher statistical probability for the occurrence of complementary interactions. Anticomplementary interactions threaten the security of both members because they threaten to disconfirm their self-concepts. These types of interactions are generally avoided whenever possible.

# Empirical Studies Concerned with the Complementarity Hypothesis

Although the individual's perception of his interpersonal sphere is an integral idea underlying complementarity (Secord and Backman, 1965), most studies in this area have focused on trained observers' evaluations of the interpersonal behavior in dyads according to the behaviors listed on Leary's (1957) circumplex.

One group of studies clearly supports the complete complementarity hypothesis, i.e., for correspondence on the love-hate axis and for reciprocity on the dominance-submission axis. An early study of this type by Raush, Dittman, and Taylor (1959) concerned the social behavior of six hyperaggressive boys in a residential treatment center. Multiple observations were made of the children in a variety of naturalistic settings at two time periods; near the start of treatment and one and one-half years later. The interpersonal behavior among the boys and also with the adults they interacted with was rated on a modified version of the Leary (1957) circumplex. Overall, the results supported the complementarity hypothesis for both the affect and control dimensions although these patterns were clearer for adult-child interactions than they were for child-child interactions.

Hellers, Myers, and Kline (1963) studied the relationship between fixed client roles and interviewer behavior. Leary's hypothesis that interpersonal behavior will "pull" reciprocal responses was tested. Four actors were trained to play the role of a client from one of the following four quadrants; friendly-dominant, friendly-submissive, hostile-dominant, or hostile-submissive. Each of the client-actors were then interviewed for thirty minutes by thirty-four therapists in training. The following specific hypotheses were proposed:

- 1. Dominant client behavior will evoke dependent interviewer behavior.
- 2. Dependent client behavior will evoke dominant interviewer behavior.
- 3. Hostile client behavior will evoke hostile interviewer behavior.
- 4. Friendly client behavior will evoke friendly interviewer behavior (p. 117).

A modified form of the Interpersonal Check List (LaForge and Suzeck, 1955) was used to judge the affect and control of the therapists. The results indicated that dominant client-actor behavior in the friendly or hostile affect category evoked a significantly greater degree of submission from the therapist than did submissive client-actor behavior. Also supportive of the original hypotheses was the fact that client-actor friendliness evoked a significantly greater degree of therapist friendliness than did client-actor hostility.

Another study involving interpersonal behavior in therapist-client dyads was that of Mueller and Dilling (1968). They used Leary's circumplex to test the hypothesis that a relationship exists between the interpersonal behaviors in this type of dyad. Nineteen dyads were taped and interview segments were rated by two judges. Judges then identified each unit of behavior with one of the four quadrants. A correlation matrix of therapist-client behaviors yielded the following results: competitive-hostile therapist behavior was positively correlated (p < .05) with client hostile-competitive behavior, and to a lesser extent with

client passive-resistive (submissive) behavior ( $\underline{p}$  < .10). Supportive-interpretive (friendly-dominant) therapist behavior was correlated with support-seeking (friendly-submissive) client behavior ( $\underline{p}$  < .01), and with low client hostility. Also, competitive-hostile (hostile-dominant) therapist behavior resulted in a negative correlation with support seeking (friendly-submissive) client behavior. In general, the results supported the complementarity hypothesis, although one finding was incongruent with this general hypothesis. Hostile-dominant behavior not only correlated with hostile-submissive behavior, it had an even stronger correlation with hostile dominant behavior. This particular deviant finding recurs in several other studies which will be reviewed subsequently.

In a second study by Mueller (1969), thirty-nine therapist-client pairs were rated using Leary's system at two points in therapy. Portions of the four audio-taped sessions were chosen at random from the initial interview and from three later sessions. The analysis of the initial interview data resulted in the following significant positive correlations: hostile-dominant with hostile-dominant, hostile-submissive with hostile-submissive, and hostile-dominant with hostile-submissive behaviors. When therapist client behaviors were rated at the later points in therapy, the aforementioned correlations were confirmed except that there was no longer a significant correlation between

hostile-dominant and hostile-submissive behavior and hostile-submissive behaviors did not provide any significant correlations. However, friendly-submissive behaviors were significantly and positively correlated with friendlydominant behaviors. These findings only partially supported the complementarity hypothesis. It was supported for the love-hate dimensions but the results regarding the dominancesubmission axis did not clearly support the expected reciprocity. The results for the behavior sampled at the beginning of the therapy indicate that at times behavior evokes complementary responses while at other times similarity of interpersonal style can be observed. gathered from the latter stages of therapy indicated reciprocity of dominance and submission only when they were paired with positive affect (i.e., friendliness) but similarity of style was found when dominance was paired with negative affect i.e., hostility). These findings are consistent with the earlier observations of Mueller and Dilling (1968).

Shannon and Guerney (1973) also used Leary's circumplex to test the hypothesis that interpersonal reflexes elicit reciprocal responses with a frequency which was statistically significant. Fourteen small groups of six college women each were used to obtain data on interpersonal behavior. These behaviors were coded in one of the following eight categories: leading-advising, self-enhancing-competitive, aggressive-rejecting, resisting-distrustful,

self-effacing-submissive, docile-dependent, cooperativefriendly and accepting-assisting. The hypothesis was supported. Significant stimulus-response bonds were found for all except the skeptical-rebellious category, which had the lowest reliability and the fewest number of responses. remaining octants appeared with enough frequency to make statistical tests and the outcomes clearly supported complementary behavior on the love-hate axis, i.e., hostility evoked hostility and friendliness evoked friendliness. However, the results less fully supported reciprocity (dominant behavior evoking submissive responses) for the dominant-submission axis. There appears to have been an interaction effect between affect and control. For example, when dominance was linked with friendliness, friendly submissive behavior ensued. On the other hand, when dominance was linked with hostility, hostile-dominant behavior was the result. Thus, in the latter cases, similarity of style was observed rather than the predicted reciprocity. Selfenhancing-competitive behavior elicited the same behavior with the highest frequency. The lowest frequency in response to this type of hostile-dominant behavior was in fact submissive behaviors. On this point, the authors conclude: " . . . the data suggest that a vicious cycle of selfenhancing behavior and competition, rejection and aggression, is likely to occur" (p. 147). These results closely resemble those reported by Mueller and Dilling (1968) and

Mueller (1969). Both studies raise the possibility that when dominance is linked with negative affect, a similar interpersonal style will be evoked.

A study by Kronberg (1975) tested the complementarity hypothesis with special concern for response patterns to flexible and inflexible response styles. Kronberg simulated eight different stimulus tapes each of which consisted of the same thirty-six statements. Some of these statements represented stylistically rigid individuals while others were most flexible. Each sentence was written to represent one of the four quadrants in the Leary (1957) circumplex. Ten subjects were randomly assigned to each tape and were asked to respond to each statement. The responses were then rated for the degree of dominance, submission, hostility or affection on a seven-point scale. Several hypotheses were made concerning the difference between the expected responses to rigid or more flexible stimuli. Both of these stylistic modes were expected to show evidence of complementarity. As was found in all of the previous studies, the complementarity hypothesis was supported with regard to the love-hate dimension. These types of behaviors evoked corresponding In terms of the dominance-submission dimension, responses. the results were not generally supportive when statistical comparisons were made.

Edquist (1972) also studied the complementarity hypothesis using subjects who were of the same age, sex, and

role status. He hypothesized that individuals with complementary interpersonal styles would prefer to interact with one another. Edquist sampled 144 female college students and measured their interpersonal style using Jackson's (1967) Personality Research Form. He also gathered data on each subject's self-concept using the Interpersonal Checklist developed by LaForge and Suzeck (1955). Tape recordings were made of the four interpersonal styles and were presented to each subject. They were then told that these recordings were of other subjects who were also in the experiment. After all four stimulus objects were presented, each subject was asked to make a series of choices concerning future behavioral interactions with these individuals that they believed were real participants. were asked to rank the four objects in order of their preference to pair with each given an impending discussion of their reactions to one another. Other choices included choosing only one of the four objects to write a message to and rank-ordering the objects after a simulated reply to a message written by the subject had been read. An overall summary of the results when the subjects were grouped according to interpersonal style indicated the following: friendly subjects tended to prefer friendly objects more than hostile subjects did. Hostile subjects preferred objects with the same affect. This result concurs with the portion of the complementarity hypothesis that deals with affect.

But again, the reciprocity expected between submission and dominance failed to appear. For example, the group with a hostile-submissive style consistently favored submissive objects. Similarity of object choice was also evident for hostile-dominant subjects on the first rank-ordering of objects and also for the friendly-submissive group on this choice. Both groups chose like objects to pair with. When the subjects were grouped according to their own selfconcept, i.e., their own perception of their interpersonal style, the choice of a similar rather than a complementary object again was apparent. A prime example of this similarity effect occurred on the first rank-ordering. All four subject groups chose similar rather than complementary objects. Not only did subjects who perceived themselves as friendly prefer friendly objects, but individuals who saw themselves as submissive also chose like objects. overall conclusion, Edquist (1972) states that his results indicate support for similarity of interpersonal style and perceived self-concept when specific choices for interaction are made.

Of the empirical studies reviewed, two support the complementariy hypothesis in its expectation of correspondence on the love-hate axis and reciprocity on the dominance-submission axis (Raush, Dittman, and Taylor, 1959; and Hellers, Myers and Kline, 1963). However, the studies of Mueller and Dilling (1968), Mueller (1969), Shannon and Guerney (1973), Kronberg (1975), and Edquist (1972) all

supported correspondence on the love-hate axis, but clearly did not consistently support the idea of reciprocity with regard to the dominance-submission axis. This finding appears when roles are initially highly divergent, as in the therapist-client dyad studies (Mueller and Dilling, 1968; and Mueller, 1969) and also when dyadic partner's roles are quite similar, as in the studies by Shannon and Guerney (1963), Edquist (1972), and Kronberg (1975). The disconfirmation arose in both long-term interactions (Mueller, 1969) and in initial interactions (Edquist, 1973). In the studies by Mueller and Dilling (1968), Mueller (1969), and Shannon and Guerney (1973), reciprocity of dominance and submission was observed when this dimension was paired with positive affect but a similarity of style was found when dominance was paired with hostility. This "similarity effect" was quite extensive in Edquist's study (1972), where subjects preferred to interact with others who possessed the same interpersonal style. This held for subjects described by each of Leary's (1957) four quadrants. This finding also applied to subjects when they were classified on interpersonal style by the experimenter and when they were grouped according to their own self-concepts. The investigation of the relationship between interpersonal preference and the perception of the interpersonal-style of self and other is an area of particular interest in the present work and it will be the focus of exploration.

#### STATEMENT OF THE PROBLEM

The overall focus of this study is phenomenological. The individual's self-perception and perception of others is the first point of inquiry. How these perceptions relate to the choices of persons with whom one interacts is the second area to be explored. There is much agreement that an individual's actual behavior as witnessed by trained observers often disagrees with self-reports. Nonetheless, the subject's perception of what has occurred in an interaction is an important variable in itself. Discrepancies between dyadic scores makes the interpretation of the data more complex (Crano and Brewer, 1973). To ignore phenomena because they do not lend themselves easily to statistical treatment and/or conceptual interpretation allows methodology to dictate what is studied. Defining trained observers as an absolute standard for tapping the "real" phenomenon is a mistake in understanding. Intra- and interpersonal perception can never be fully compared and so the issue becomes Subjective realities are no less "real" than consensually validated realities.

The study of interpersonal interactions with the perceiver as the primary and direct source of data is in

essence the study of the individual's phenomenal world and, as Kelly (1963) states: "basic to the concept of psychology as an objective science . . [is the idea] that the outlook of the individual person is itself a real phenomenon . . ."

(p. 40).

Individuals bring not only their personality as perceived by others into an interpersonal situation, but also their personality as perceived by themselves. The importance of both self-perception and one's perceptions of others has been stressed in personality theory in general (Lewin, 1935) and in theories concerning the patterns of interpersonal relations as well.

How an individual's self-perceived interpersonal style relates to his choices of others in a personal interaction situation is of primary interest. The theoretical formula to be explored is the complementarity hypothesis as stated by Carson (1969). To cite a few examples, complementarity is discussed in the social psychological literature as balance theory or congruent relations. Congruence is defined by Secord and Backman (1965) as: "a perceptual cognitive style representing the manner in which a particular individual views himself and his interactions with another person" (p. 96). Within the context of the interpersonal dyad, they state that congruence exists: "when the behaviors of the subject (S) and the other person involved in the system (O) imply [emphasis added] definitions of

self congruent relevant aspects of S's self-concept" (p. 91). Thus, congruence exists when an individual <u>perceives</u> the behavior of the other person to be consistent with his own self-concept and his own behavior in the interaction.

As may be recalled, the self-concept or self-system according to Sullivan (1953) is the gatekeeper of information. Data that do not confirm the concept of self are denied admission to awareness. By selectively inattending to non-confirmatory data the self-system functions to maintain intrapersonal security. The results of selective inattention are not only the avoidance of anxiety and the maintenance of interpersonal security, but also a stylistic and enduring pattern of behavior. This enduring pattern develops and maintains itself in an interpersonal sphere and it is the resulting pattern of interactions as perceived by each interactant that is of major interest in this study. Carson's (1969) formulation of the complementarity hypothesis will be tested in an actual interpersonal situation. Each subject's choice of an object for an intimate dyadic interaction will be analyzed to observe whether pairing supports the rules of complementarity, i.e., correspondence of the affiliation dimension and reciprocity on the interdependence dimension. The general hypothesis of this study is as follows:

An individual will prefer to interact with another individual whose interpersonal styles s/he perceives to be complementary to his/her own.

That is to say, each individual's first choice will be more complementary to them in interpersonal style than their subsequent choices for dyadic interactions. In terms of Benjamin's (1977a) model of social behavior, the more highly preferred the object, the higher the correlation between the perceived interpersonal behaviors of self and that object. Topologically, the first choice is expected to be the most similar to the subjects' perceived style when the two "maps" are compared. (A "map" refers to the structure of the social behavior planes that results when the items that received a rating at the median or above are shown along with the scores given each other item.)

The data source as has been stated, will be phenomenological. The individual's perception of their own and their partner's interpersonal style will be analyzed for correspondence with the theory. The importance of an individual's perception of what is occurring in a dyad has generally been overlooked as researchers try to objectively establish how a person behaves in an interaction. Almost all of the literature reviewed on complementarity has been based on data gathered by trained observers. Only in one study was the individual's perception of self seen as an important variable (Edquist, 1973). This latter study is a prime example of support for the relationship between one's perception of self and other in terms of style and one's subsequent interpersonal choice. Clearly this issue

deserves further elucidation. Edquist (1973) and Kronberg (1975) both collected their data in an artificial laboratory setting. Mueller (1969) and Mueller and Dilling's (1968) studies were limited to observing only two persons in a therapeutic situation. In this type of setting, the demand characteristics or role expectations are very strong.

The present study will employ a more dynamic and varied situation as the setting for data collection. Small groups will be used for several reasons. First, a group will have the advantage of greater equality of role and it will provide an intimate personal environment where meaningful interactions can take place. Second, a group will make it possible to collect data on each person's perceived relations with several other individuals. And third, since the group can be viewed as a social microcosm (Yalom, 1970), tapping choices in this type of environment will be less artificial and more highly related to choices that might be made outside the group.

In summary, it is the personal reality that is of primary concern to this investigator and this study is designed to explore this area through the perceiver's viewpoint.

### METHOD

# Sample

The sample consisted of six small interpersonal learning groups. Two of the groups had six males and four had six female members. (This ratio is fairly typical of course enrollment.) In total, twelve male and twenty-four female upperclassmen participated. They were recruited from ongoing 300 and 400 level psychology courses offered at Michigan State University (MSU). With the course instructor's permission, the researcher attended one session of several upper-level courses to briefly describe the nature of the small group experience and the questionnaires that were part of that experience. The small interpersonal groups were part of a psychology course offered each term at MSU, entitled Experiential Interpersonal Learning Groups (Psych 400). The potential group participants were told that the group's main focus was to learn about how others experience, perceive, and respond to them and to learn how to get more fully in touch with their own processes, reactions, thoughts, and feelings towards others. The students were also told that the small groups would meet for two 90-minute sessions weekly and would be led by

two experienced group facilitators selected by the instructor on the basis of their prior successful participation in Psych 400 and for their interest in acquiring group leadership skills. Two additional meetings of 12 uninterrupted hours each were also part of the small group experience and the students were told that these extended sessions would be held after 10 and 36 hours of group experience. researcher stated that part of the group experience included the completion of a questionnaire regarding how participants perceived themselves and other group members and also the completion of a rank-ordering of other group members for preferred partners in dyadic interaction. The strict confidentiality of the questionnaire and the rank-ordering were explicated as was the participants options to discuss his or her results with the researcher, after all questionnaires had been scored. Thus, feedback was made available to all participants. All interested students were to be directed to the Psych 400 instructor for permission to enroll.

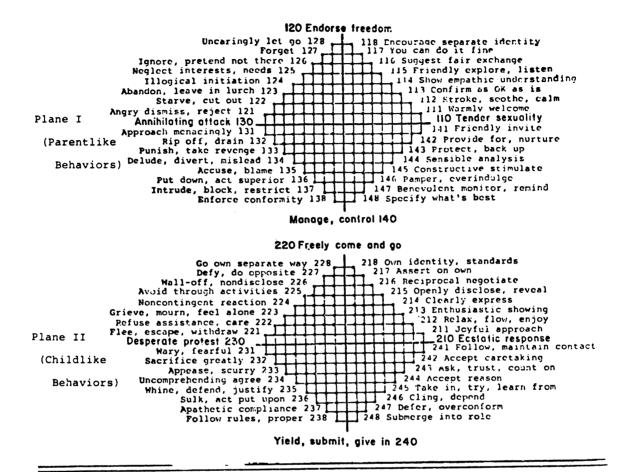
In Psych 400's initial class meeting, the nature and confidentiality of the questionnaire and rank order measure, the time of administration, and the option of receiving feedback were reiterated. Students who volunteered to participate were given research consent forms (see Appendix A). Group leaders were also part of this study. The researcher attended a group leader meeting and explained the nature and confidentiality of the questionnaire and rank

order measure. Group leaders were also given a research consent form which enumerated the details of their participation. Group leaders had the same consent form and feedback options as the other research participants.

## Measures

A series of questionnaires designed by Benjamin (personal communication) were used to gather data on intraand inter-personal perception among the small group participants. The items that make up the questionnaires administered to group members and leaders are given in Appendix B. These items comprise Benjamin's social behavior model illustrated in Figure 3. Each item was rated at 10-point intervals on a 0-100 scale. Four different series of the instrument, can be administered: Series A allows the subject to rate how a significant other behaves towards her/him; Series B permits the subject to rate how s/he behaves towards a significant other; Series C allows subjects to rate how they behave towards themselves; and Series E allows the subject to rate the way second and third persons behave toward each The instrument has both a long and short form. assessment of internal consistency yielded a coefficient of .92 for "normal" subjects on the long form and a coefficient of .89 (N = 36 medical students) for the shorter version used in the present research.

To test the structure of her social behavior model, shown in Figure 3, Benjamin (1974) made extensive statistical



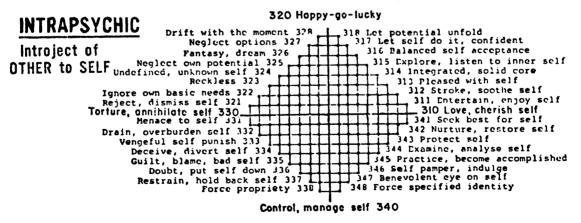


Figure 3. The Social Behavior Model. (Benjamin, unpublished paper, 1977b).

analyses. These statistical tests were based on: (a) maternal ratings of normal children and themselves (N = 171); (b) mothers ratings of their children whom they had brought to a child psychiatric clinic and of themselves in relation to these children, (N = 51); (c) undergraduate students' self-ratings (N = 200); and (d) 60 normal and 50 psychiatric patients took a complete series (A, B, and C) on themselves and another significant person along with their memory of their mother and father in early and middle childhood. Benjamin (1974) did within-subject analyses of data collected to confirm the structure of her model. When autocorrelations which paired adjacent items were made, the results were high and positive. When orthogonal points on the model were paired, the product-moment correlations were near zero. Opposite-point pairing yielded large negative correlations. All of these results are consistent with the theoretical basis of the model. When Guttman's (1966) description of a circumplex in matrix form was compared to a matrix of intercorrelations from two samples of maternal ratings of children, Benjamin's results again confirmed a circumpial ordering of her model. A factor analysis, using principal components with a varimax rotation, was applied to the data gathered from the four samples previously cited. Four factors emerged which were logically consistent with the four major poles in Figure 2. Thus, this third statistical analysis supplies further support for Benjamin's (1974) model of interpersonal behavior.

Benjamin (1977a) noted that response sets have long been viewed as a problem implicit in self-report measures. Acquiescence was controlled in her data analysis since all of the items that are endorsed by the subject above their median score are printed out and form the social behavior "map." Thus, even if individuals tend to give ratings that fall within a small range, the most important attributes remain identifiable. Another response set often cited as problematic is social desirability. Benjamin (1977a) stated that this type of response can be viewed as representing a particular style rather than an annoying source of error. Thus, she suggested that noncontingent socially desirable behavior in a dyad may be seen as representing submissive behavior. When questionnaires of a sample of fifty child psychiatric cases were examined for correspondence with other information available, Benjamin (1974) found only five cases which appeared distorted in the "fake-good" direction. Thus it appears that social desirability is not a pervasive problem in this method.

The principle of complementarity has been partially verified using this measure. Correlations between 171 mothers' ratings of their child's behavior and of their own maternal behavior showed consistency with the complementarity hypothesis (Benjamin, 1974). Powerful role differences and expectations which influenced this mother-child situation may limit the generality of this finding. The present

study will examine the complementarity hypothesis in adultadult interaction where individuals will have a much greater choice as to whom they wish to interact with.

Two rank-order measures were administered to group members. The first of these, entitled Group Member Ranking Form-A, is given in Appendix D. The second ranking form is given in its entirety in the next section.

#### **PROCEDURE**

All participants were given two separate measures.

The first consisted of Series A and B of the short form of Benjamin's social behavior questionnaire, given in Appendix B. After forty-eight hours of group experience, they were asked to rate each item on the following scale:

ver ot At	All									Always Perfect	ly
 0	10	20	30	4.0	5.0	60	70	80	90	100	

A rating of 50 or above indicates that the item was "true" while a rating of less than 50 indicates that it was "false." Each member also rated how they perceived each group member's behavior in relation to them (Series A) and how they perceived their own behavior in their relationship with each other group member (Series B). Thus, each member completed a total of 10 questionnaires. The introduction and directions that prefaced Series A and B were as follows:

## Introduction

The purpose of this study is to develop a fuller understanding of interpersonal behavior. The questionnaires that you are being asked to complete are intended to

give a comprehensive picture of yourself and others. All of the completed questionnaires will be held in strict professional confidence. I would very much appreciate your help and hope that you find this experience useful in developing your understanding of yourself and your relationship with others. If you wish, you may schedule an interview with me to discuss your results.

# Directions

The enclosed package of materials consists of questionnaires describing different ways of feeling about and relating to people. The questionnaire asks you to rate your perceptions of your relationship with other group members. Your answers will be recorded on IBM scoring sheets so please be careful not to bend or fold them. A number two pencil will be provided. It will ease your scoring if you check off each questionnaire when you have finished it in the space provided below. Thank you for your participation.

Rating o	of:	Check Here When Completed	Pages
1	in relation to you		1-3
2. you	in relation to		4-6
3	in relation to you		7-9
4. you	in relation to		10-12
5	in relation to you		13-15
6. you	in relation to		16-18
7	in relation to you		19-21
8. you	in relation to		22-24
9	in relation to you	**********	25-27
10. you	in relation to		28-30

(In practice, group members' names were placed in the blanks under Rating of: <a href="mailto:before">before</a> the materials were given to each participant.)

Additional data were obtained from the group facilitator. Each was asked to answer Series E for the same three dyads in their groups. (Given the length of the question-naire, asking the leaders to rate more than six members was considered by the researcher to be an unreasonable task.)

The items of Series E were identical to those in Series A except that the instructions were modified to permit a third person observer to rate the behavior between two members in a dyad. Thus, the instructions for the group facilitators were modified as follows:

Please place a number in the blank best indicating how well the following phrases describe the behavior of \_\_\_\_ in relation to \_\_\_\_.

The introduction to the study and the directions for the facilitators were also slightly modified and a complete description can be found in Appendix C. In total, the leaders completed six questionnaires by rating the behavior of each member of three different dyads.

On the second measure, the group members rankordered all other members in terms of their preference for interaction with each in a dyad. The instructions for this rank ordering were:

## Group Member Ranking Form-B

During the next group session, the group will break into dyads for the purpose of discussing personal feelings about your group experience. Please rank-order the members of your group from the most to the least prefered choice for this dyadic discussion. Group facilitators will try to give everyone their first choice if it is possible. Your rankings will be kept confidential and not be shared in any way with other members in your group.

Your name:	<del></del>
First choice:	
Second choice:	
Third choice:	
Fourth choice:	
Fifth choice:	

Thus, each member rated his or her preference for interacting with each other member in a real choice situation.

Both Benjamin's series of questionnaires and the Group

Member Ranking Form-B were administered after approximately forty-eight hours of group experience.

To test the stability of group members' rankordering between 24 and 48 hours, a modified version of the
Group Member Ranking Form-A was administered so that the
two sets of ranking could be compared. In this ranking,
participants were asked to hypothesize who their most to
least preferred choices for dyadic partners would be if the
group were to break into dyads. The instructions for this
ranking form, entitled Group Member Ranking Form-A, are
listed in Appendix D.

#### RESULTS

# Statistical Treatment of the Data

This study's main hypothesis was proposed to ascertain whether the theoretically defined concept of complementarity was valid in an interpersonal choice situation.

Same-sex participants of six small interpersonal learning groups rated their own and five others' interpersonal behaviors and also rank-ordered these group members as preferred partners for dyadic interaction.

Thus the pertinent data were a series of ranks depicting each subject's most to least preferred partner and the results from Benjamin's (personal communication) social behavior questionnaire. As was previously stated, Benjamin's (1977a) Social Behavior Model is constructed along two major bipolar dimensions: interdependence and affiliation (see Figure 1). When the concept of complementarity as theoretically defined is applied to this model, it is represented as correspondence on the affiliation dimension and reciprocity on the interdependence dimension. Thus if one individual initiates an interaction which encourages friendly autonomy (quadrant I, Plane I), in order to be complementary the response must come from quadrant I, Plane II which is

entitled "Enjoy Friendly Autonomy." Specific items found in Figure 3, Plane I also have their exact complements which are found in corresponding quadrants. For example, the exact complement of the item "pamper, overindulge" (#146 in Plane I, quadrant II) is "cling, depend" (#246 in Plane II, quadrant II). Other items in close proximity to "cling, depend" approach complementary but items in opposing plane such as "refuse, assistance, care" (#222, Plane II, quadrant IV) would be quite anticomplementary to "pamper, overindulge."

The structure of this model, i.e., its bipolarity and matching quadrants in two planes (I and II) makes it possible to obtain data on the theoretical degree of complementarity in any dyad. In this study data were obtained on each individual's perception of his/her own behavior as expressed to five other group members along with his/her perception of their contingent responses. Thus, for each subject within each group we have six sets of data obtained from Series A and B of Benjamin's questionnaire along with six ranks which were obtained from the Group Member Ranking Form (see Appendices B and D). To test the main hypothesis, the ratings from Series A and B had to be summarized and then converted into ranks. The summary stage required computation of a weighted affiliation score for the responses to the Plane I and II items. This was accomplished by multiplying the subject's response to each item with a weight, which ranged from -9 to +9 according to how close

it was to the Love pole or the Hate pole on the affiliation axis, and then summing the products for all thirty-six items. For example, the highest weighted item on Plane I is "tender, sexuality" (#110) thus +9 would be multiplied by the rating given to this item. The item at the opposite pole, "annihilating attack" (#130) is given the lowest score (-9). The weighted autonomy score for Plane I was similarly derived, but in this case the highest weight was assigned to the item "endorse freedom" (#120) whereas the lowest weight was given to "manage control" (#140). Next, the same weighting procedure was applied to the thirty-six items in Plane II. Weighted autonomy and affiliation scores were obtained for all possible dyads within each of the six person groups. The means and standard deviations of the weighted autonomy and affiliation scores for the thirty-six group members can be found in Appendix E.

each dyad was computed, a portion of one member's questionnaire ratings is reviewed in detail. Figure 4 shows a
typical computer output for one subject's description of the
behavior he offered to another group member (the lower two
planes), and the behaviors displayed by the other member
toward that subject (the top two planes). (The computer
programs which scored the data were generously provided by
Dr. Lorna Smith Benjamin.) The two sets of planes in
Figure 4 (which is called a map) are identical in structure
to Plane I and Plane II of the Social Behavior Model

## RATING OF ANOTHER MEMBER RE SELF

5-3 RATES MON 5-1 BEHAVES TOHARDS HIM/HER (A) 8513 3 RESIDENCE 48 IS MEDIAN: 48 IS MEDIAN CHART PRINTS ALL SCORES ABOVE HED START WITH E O ENDORSE FREEDON UNGARINGLY LET GO ANGRY DI SHISS , REJECT 58 FRIENDLY INVITE DELUDE, DIVERT, MISLEAD PUT DOWN, ACT SUPERIOR FORCE CONFORMITY WEIGHTED AFFILIATION SCORE = 21. NONCONTINGENT REACTION FLEE, RUN AWAY, WITH DRAW 50 FOLLD4, MAINTAIN CONTACT 30 ASK, TRUST, COUNT ON MPREHENDING ASSE INE DEFEND JUSTIFY SULK, ACT PUT UPON APATHETIC COMPLIANCE DEFER, OVERS ONF OR H WEIGHTED AFFILIATION SCORE = 19. WEIGHTED AUTONOMY SCORE = -3.

# SELF-RATING RE ANOTHER GROUP MEMBER

S-3 RETER MON SYME BEHAVES TOMERCS 5-1 (3)

THE SCORE 40 IS MEDIAN

CHART PRINTS ALL SCORES AFOVE MED STAFT MIT 4 50 70 EMCOUPAGE SEPARATE IDEN

CHART PRINTS ALL SCORES AFOVE MED STAFT MIT 4 50 70 EMCOUPAGE SEPARATE IDEN

CONTROL FREE MANGESTEN

Figure 4. One subject's dyadic weighted Autonomy and Affiliation Scores for his perception of his own and another group members interpersonal behavior. All items that were rated above the median are printed out in shortened form.

previously described (see Figure 3), except that only the items which received scores above the respondent's median rating are printed. The output also provides the results of weighting each item according to the subject's responses in the manner just described. Thus, for this subject, the weighted affiliation and autonomy scores for the thirty-six parentlike behavior items (Plane I), were 21 and 13 respectively, while the weighted scores for the childlike behavior items (Plane II) were 19 and -3, respectively. These coordinates summarize how the subject perceived the other group member in terms of affiliation and autonomy. The subject's perception of his own behavior as offered to this coparticipant are shown in the lower two planes of Figure 4. Comparison of the resulting weighted autonomy and affiliation scores for Planes I and II (49, 20 and 62, 34, respectively) with those in the upper section of Figure 4 reveals discrepancies between the subject's perception of behaviors expressed toward the coparticipant and the subject's description of the coparticipant's behavior. Visual inspection of Figure 4 also reveals that the subject perceives his coparticipant's behavior toward him as a mixture of "Encouraging Friendly Autonomy" (Plane I, quadrant I) and "Hostile Power" (Plane I, quadrant III), whereas he saw his own behavior toward this person as being considerably more affiliative (see second plane from the bottom in Figure 4). The visual comparison of the subject's

perception of self and other is especially valid in this case since the median score for both sets of ratings was 40.

In Figure 5, two sets of weighted scores generated by the subject for the dyad described above (the 4 points on the left portion of the graph) and the subject's summary scores of a different dyad (the 4 points toward the upper right hand corner) have been plotted on both bipolar dimen-The abbreviations " $P_S$ " and " $C_S$ " represent the subject's summary of his own parentlike and childlike behavior, while " $P_0$ " and " $C_0$ " are used to indicate the subject's perception of the object's parentlike and childlike behaviors. To display the theoretically complementary behaviors, lines were drawn between: (a) the parentlike behaviors of the object (Po) and the childlike behaviors of the subject  $(C_S)$ , and (b) between the parentlike behaviors of the subject  $(P_S)$  and the childlike behaviors of the object  $(C_0)$ . Inspection of Figure 5 reveals that the dyad described by the coordinates (21, 13 =  $P_{0_1}$ , (19, -3 =  $C_{0_1}$ ), and (49, 20 =  $P_S$ ), (62, 34 =  $C_S$ ) is less complementary than the second dyad which describes the subject's perception of his relationship with another group member (88, 61 =  $P_{O_2}$ ),  $(97, 56 = C_{0_3})$  and  $(85, 63 = P_S)$  and  $(94, 56 = C_S)$ . That is to say, the parentlike and childlike behaviors of first dyad are more discrepant than they are in the second dyad. A number representing the degree of complementarity or discrepancy of a dyad can be derived by the Pythagorean theorem (Benjamin, 1977b). An average within-subject discrepancy

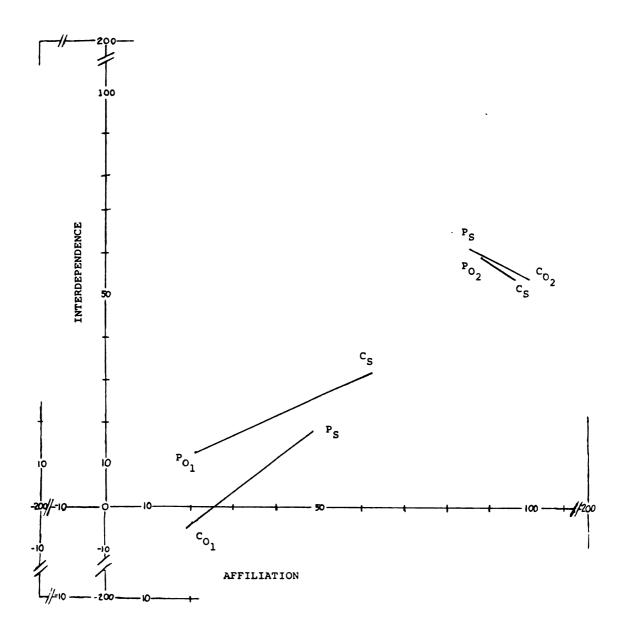


Figure 5. One subject's (S) view of his own Parentlike  $(P_S)$  and Childlike  $(C_S)$  behaviors towards two other persons and S's perception of their Parentlike  $(P_O)$  and Childlike  $(C_O)$  behaviors toward him. (Lines connect theoretically complementary points.)

score [Equation 3] is computed by averaging the distance between the weighted scores representing subject's parentlike behaviors and the objects childlike behaviors [Equation 1] and the weighted scores representing the object's parentlike and the subject's childlike behaviors [Equation 2] (Benjamin, unpublished paper, April 1976). The actual equation is as follows: (x and y represent the weighted score coordinates):

Eqn 1: 
$$\sqrt{(P_{S_x} - C_{O_x})^2 + (P_{S_y} - C_{O_y})^2} = Discrepancy Score_1$$

Eqn 2:  $\sqrt{(C_{S_x} - C_{O_x})^2 + (C_{S_y} - C_{O_y})^2} = Discrepancy Score_2$ 

Eqn 3: Discrepancy Score\_1 + Discrepancy Score\_2 = Average

Within-Subject Discrepancy Score Score For One Dyad.

In terms of the Figure 5 graph,

the discrepancy (score) is the hypotenuse of a triangle with one leg specified by the difference between the affiliation scores of the two vectors, and the other leg specified by the difference between the autonomy scores of the two vectors. The Pythagorean theorem specifies that these distances first be squared, added and then that the square root of the total be taken of them (p. 29) (Benjamin, unpublished paper, 1977b).

Five averaged within-subject discrepancy scores were required for each subject in the sample since each subject rated his/her own behavior relative to the five other group members and also rated the behaviors these five offered in return.

It may be recalled that each subject also rankordered from highest to lowest preference these five other members on two separate occasions, one hypothetical (using Group Ranking Form-A) and one real situation (using Group Ranking Form B). It is these two sets of data, i.e., ranks representing preferred interaction dyads and average withinsubject discrepancy scores, that must be compared to test the overall hypothesis. This was accomplished by converting the sets of five within-subject discrepancy scores to ranks, with the smallest designated one and the highest designated five, since the smallest discrepancy score represents the dyad with the highest degree of complementarity. The two sets of ranks representing the responses of each subject, preferred interaction dyads and average within-subject discrepancy scores, were next compared using Kendall's tau (Nunnally, 1967) to assess whether complementarity and preference for interaction related to a statistically significantly degree. Kendall's tau was also used to assess the test-retest reliability of the Group Member Ranking Form.

The resulting correlations were standardized using Fisher's <u>r</u> to <u>z</u> transformation so that the results could be averaged over all subjects in the six groups and also so that the data met the assumptions needed for univariate and multivariate analyses of variance (Glass and Stanley, 1970; Keppel, 1973). This transformation insured that the data were normally distributed having a mean of 0 and a standard deviation of 1.

Multivariate analysis of variance were used to determine whether the major hypothesis has been supported and whether the subject's sex or particular group was a significant source of variance. Using Pearson's productmoment correlation, the degree of agreement between the two group leaders' social behavior ratings of three random group member dyads was also examined to assess the inter-rater reliability of these untrained observer participants.

Post hoc analyses of the data investigated the two dimensions of the social behavior model separately, i.e., self-ratings and ratings of others' parentlike and child-like weighted autonomy and affiliation scores. The rationale for a further analysis was based on several previous studies whose results did not show consistent and clear support for the complementarity hypothesis as previously defined. Specifically the works of Mueller and Dilling, 1968; Mueller, 1969; Shannon and Guerney, 1973; Kronberg, 1975; and Edquist, 1972, supported correspondence on the love-hate axis but did not support the expected reciprocity with regard to the interdependence dimension. Therefore, a further univariate analysis of variance for the affiliation and autonomy dimensions was planned.

# The Test of the Overall Hypothesis

The overall hypothesis predicated a relationship between complementarity and preferred object and was stated as follows:

An individual will prefer to interact with another individual whose interpersonal style s/he perceives to be complementary to his/her own.

In statistical terms, this tests the null hypothesis; Ho:  $\overline{Z}_{\underline{r}} = 0$ . Means and standard deviations of  $Z_{\underline{r}}$  transformations of correlations between the Group Member Ranking forms and the weighted autonomy and affiliation scores are given in Appendix F. It was found that the null hypothesis could not be rejected for either the hypothetical or the actual preferred dyad conditions, (see Table 1 for the Grand Means). Thus, when the  $Z_{\underline{r}}$  correlations (derived from running a Kendall's tau between discrepancy Score ranks and the ranks from Group Member Ranking Form-A and B and transforming the correlations for each subject to  $Z_{\underline{r}}$  scores) were summed and averaged across groups irrespective of sex, the Grand  $\overline{Z}_{\underline{r}}$  did not differ significantly from zero. Therefore, these data do not support the main hypothesis.

## Additional Tests

The data were next examined for the possibility of a significant relationship between preferred dyadic partners and the weighted affiliation and/or autonomy scores, both for the subject's self-perceived behaviors and for his/her perception of other coparticipant's behaviors. These relationships were evaluated in a slightly different manner than the main hypothesis, as a multivariate analysis of variance was required. A summed score of the hypothetical dyadic preferences (Rank A) and actual dyadic preferences

Table 1.--Univariate Analysis of Variance for the Discrepancy Score, Hypothetical (Rank A) and Actual Dyadic Preference (Rank B) Rankings.

D/S Sources of Variance	<u>F</u>	df	<u>P</u> <
(Rank A)			
Grand Mean	2.68	1,30	.11
Sex Effect	3.14	1,30	.09
Group Nested Within Sex Effect	1.37	4,30	.27
(Rank B)			
Grand Mean	.25	1,30	.62
Sex Effect	. 45	1,30	.50
Group Nested Within Sex Effect	1.43	4,30	.25

(Rank B) data was computed such that: sum =  $Z_{\underline{r}Rank}$  A +  $Z_{\underline{r}Rank}$  B. The rationale behind summing these two sets of  $Z_{\underline{r}}$  scores is twofold. First, a Kendall's tau between each subject's ranks of Rank A and those on Rank B revealed that these two measures of choice correlated highly ( $\underline{r}$  = .83,  $\underline{p}$  < .002). Secondly, it was expected that the reliability of the measurement between the questionnaire and the rank-order measure would be augmented if the results were summed beforehand.

The top section of Table 2 shows the overall multivariate analysis of variance test for significance when the  $z_{\underline{r}}$  scores for eight dependent variables are summed and averaged for the six groups regardless of sex or group membership.

These eight dependent variables include the following weighted scores: (1) the object's parentlike affiliation score, (2) object's parentlike autonomy score, (3) the object's childlike affiliation score, (4) the object's childlike autonomy score, (5) the subject's parentlike affiliation score, (6) the subject's parentlike autonomy score, (7) the subject's childlike affiliation score, and (8) the subject's childlike autonomy score. It may be useful to recall that "parentlike" refers to the thirty-six items on Plane I of the social behavior model and "childlike" refers to the thirty-six items on Plane II of the model. The results indicate that the Grand  $\overline{z}_{\underline{r}}$  differed significantly from zero (F = 6.24,  $\underline{df}$  = 8,23;  $\underline{p}$  < .003) and thus the

Table 2.--Multivariate Analysis of Variance.

D/S Sources of Variance	<u>F</u>	df	<u>p</u> <
Grand Mean	6.25	8,23	.0003
Sex Effect	1.25	8,23	.32
Group Nested Within Sex	0.78	32,86.42	.78
D/M Sources of Variance	<u>F</u>	<u>df</u>	<u>P</u> <
Condition Effect	2.13	8,23	.07
D/S * D/M Sources of Variance			
Condition x Sex Effect	1.24	8,23	.32
Condition x Group Nexted Within Sex Effect	1.21	32,86.42	. 24

null hypothesis, (Ho:  $\overline{Z}_{\underline{r}} = 0$ ) was rejected. The results of the multivariate analysis of variance also indicate that the sex effect was not significant (F = 1.25;  $\underline{df} = 8,23$ ;  $\underline{p} < .32$ ), i.e., regardless of group membership and whether hypothetical or actual preference scores were used, the average  $Z_{\underline{r}}$  for male groups did not differ significantly from the average  $Z_{\underline{r}}$  for female groups across these eight dependent variables. Similarly, the group nested-withinsex effect was not significant (F = .78;  $\underline{df} = 32,86.42$ ;  $\underline{p} < .78$ ). Thus, regardless of the sex of the group or whether hypothetical or actual preference scores were used, the average  $Z_{\underline{r}}$  score for groups on the eight dependent variables did not differ significantly among the six groups.

The data were also examined for the possibility that the  $Z_{\underline{r}}$  scores under Condition (resulting from a Z score transformation of the Kendall's tau correlations between the hypothetical preferred dyads ranks (Rank A) and the eight dependent variables from the social behavior questionnaire) would be significantly different from the  $Z_{\underline{r}}$  scores under Condition 2 (Rank B  $Z_{\underline{r}}$  transformations). In statistical terms the null hypothesis expressed such that Ho:  $\overline{Z}_{\underline{r}}$  c<sub>1</sub> =  $\overline{Z}_{\underline{r}}$  c<sub>2</sub>. Inspection of Table 3 under the "C" effect reveals that regardless of sex and group membership, the average  $Z_{\underline{r}}$  for Condition 1 did not differ significantly from  $Z_{\underline{r}}$  for Condition 2 (F = 2.13;  $\underline{df}$  = 8,23;  $\underline{p}$  < .074). Thus, there was no main effect for condition and sex was also

To accomplish this, difference scores were computed for the two male groups and for the four female groups across the eight dependent variables. This test for the interaction can be viewed as an investigation of the difference between the differences, which in the case of the null hypothesis would be expected to be zero. The test for the interaction effect CX revealed that regardless of group membership, the difference between Condition 1 (Rank A) and Condition 2 (Rank B) for women was not significantly different from this same difference  $(C_1 - C_2)$  for men (F = 1.24,df = 8,23, p < .32). Thus, there was no interaction effect between sex and condition on the eight dependent variables. One final test was made to investigate whether group membership proved to be a significant factor for the  $\overline{z}_r$  scores across the eight dependent variables. Table 2 reveals that the condition times group nested in six effect (CG(x)) was not significant. This finding indicates that regardless of sex of the group, the difference between Condition 1 (Rank A) and Condition 2 (Rank B) does not differ significantly from one group to another.

# Univariate Analysis of Variance for the Eight Dependent Variables

Given the Table 2 finding that the test of the Grand Mean across the summed  $\overline{z}$  scores for the eight dependent variables was significant ( $\underline{p} < .0003$ ), the researcher examined the effect of each of eight dependent variables by means of a univariate analysis of variance testing the null

hypothesis Ho:  $\overline{Z}_r = 0$ . Table 3 lists these results based on the weighted  $\mathbf{Z}_{\mathbf{r}}$  scores for the affiliation and autonomy dimension for the subject's perception of him/herself and another member separately for parentlike items (Plane I) and childlike items (Plane II). Inspection of Table 3 reveals that all four of these summed affiliation scores were significantly different from zero. Specifically, the significant variables were self-ratings on (1) Parentlike Affiliative Behaviors (p < .0001) and (2) Childlike Affiliative Behaviors (p < .0001); and the subject's perception of other group members' (3) Parentlike Affiliative Behaviors (p < .0012) and (4) Childlike Affiliative Behaviors (p < .0005). Contrary to the findings for affiliation, none of the  $\overline{z}_r$ scores representing self-ratings or ratings of other members on parentlike or childlike behaviors on the autonomy dimension were significantly different from zero.

# Inter-rater Reliability

Data were gathered on three randomly selected dyads in each group as separately perceived by each group's two leaders. Using Series E of Benjamin's questionnaire, leader ratings were determined on weighted parentlike affiliation and autonomy behaviors and weighted childlike affiliation and automony behaviors. Based on these leaders' perceptions of each member of the same three dyads, a Pearson's productmoment correlation was calculated between the ratings of each group's two leaders (total N = 12 leaders rating 6

Table 3.--Univariate Analysis of Variance for the Eight Dependent Variables.

Variables	<u>F</u>	df	<u>P</u> <
(Weighted Z <sub>r</sub> Scores Summed over Condition T and Condition 2)			
Self Ratings			
Affiliation:			
Parentlike (Plane I) Childlike (Plane (II)	29.35 26.71	1,30 1,30	.0001
Ratings of Others			
Affiliation:			
Parentlike (Plane I) Childlike (Plane II)	13.03 15.85	1,30 1,30	.0012 .0005
Self Ratings			
Autonomy:			
Parentlike (Plane I) Childlike (Plane II)	3.12	1,30 1,30	.09 .68
Ratings of Others			
Autonomy:			
Parentlike (Plane I) Childlike (Plane II)	2.93 3.32	1,30 1,30	.10

members each). The results are shown in Table 4 and the mean  $\underline{r}$  for each of the four weighted social behavior ratings is given at the bottom. None of these mean correlations were statistically significant. The median correlation for each variable was also computed to yield an overall picture of the relationship between the ratings of the two group leaders. These median correlations were:

- 1.  $\underline{r}$  = .611 for parentlike affiliation behaviors,
- 2.  $\underline{r} = .633$  for childlike affiliative behaviors,
- 3.  $\underline{r}$  = .238 for parentlike autonomy behaviors, and
- 4. r = .567 for childlike autonomy behaviors.

Table 4 reveals that six of the affiliation correlations were above the grand median ( $\underline{r}$  = .53) while only two were below. This contrasts with the seven autonomy correlations which were below the median versus four which were above.

Table 4.--Group Leaders Inter-Rater Reliability as Measured by Pearson's Product-Moment Correlations ( $\underline{N}$  = 12 leaders each rating 6 members).

	Affiliation	Autonomy		
Group	Parentlike	Childlike	Parentlike	Childlike
1	.71	.71	.04	.63
2	.54	.52	.27	. 36
3	.68	.55	.23	.67
4	22	.73	.84	.45
5	. 35	.52	18	.51
6	.91	.93	.25	.94
Mean <u>r</u>	.58	.71	.29	.65
Median <u>r</u>	.61	.63	.24	.57

#### DISCUSSION

# The Major Findings

Interpersonal complementarity on the combined affiliation and autonomy dimensions, as theoretically defined, was not a good predictor of interpersonal choice in this study but subject's ratings on the affiliative dimension predicted interpersonal choice well. Specifically, four subsets of the weighted affiliation scores were examined. The first two of these related to the subject's view of his/ her own affiliative parentlike (Plane I) and childlike (Plane II) behaviors. Thus, the greater the degree of selfperceived parentlike affiliative behaviors offered by the subject to the other group member, the more the subject preferred that member in a theoretical and actual choice situation. This relationship also held for the self-rated affiliation score which summarizes the thirty-six Plane II childlike items. That is, the higher the subject's selfperceived affiliative childlike behaviors toward the other member, the higher the latter was preferred in the interpersonal choice situation. Not only did the subject's perception of his/her own affiliative behaviors have a significant relationship with interpersonal choice rankings, but self-perceived ratings of other members parentlike and childlike affiliative behaviors did as well.

Thus subjects were most likely to give first rank in the choice situation to the group member whom they perceived to be most affiliative towards them and with whom they also felt most affiliative. These results support that portion of the complementarity hypothesis which states that a complementary dyad corresponds on the affiliative dimension (Carson, 1969; Benjamin, 1974). It is also consistent with the results of eight previously reviewed studies (Raush, Dittman, and Taylor, 1959; Hellers, Myers, and Kline, 1963; Mueller and Dilling, 1968; Mueller, 1969; Shannon and Guerney, 1973; Kronberg, 1975; Edquist, 1972; and Benjamin, 1974).

This finding's importance is strengthened by the fact that these eight studies investigated a variety of interpersonal dyads (small same-sex groups, therapist-client dyads, mothers and their children, interactions between children and adults in a residential treatment center) using a diversity of methodological techniques (self-ratings, trained observers, simulated tapes, confederates, and actual as opposed to hypothetical interpersonal situation).

Although the results of three previous studies supported the entire complementarity hypothesis (Raush, Dittman, and Taylor, 1959; Hellers, Myers, and Kline, 1963; Benjamin, 1974) the present findings were in agreement with the five previous studies which failed to support the clear and

consistent reciprocity theoretically proposed to exist on the interdependence dimension (Mueller and Dilling, 1968; Mueller, 1969; Shannon and Guerney, 1973; Kronberg, 1975; and Edquist, 1972).

The lack of support for the hypothesis regarding the relationship between the dyadic within subject discrepancy score and the interpersonal choice rankings was clarified by the separate univariate analysis of variance findings for the affiliation and autonomy dimensions. Since the calculation of the discrepancy score takes into account the weighted scores on both the affiliation and autonomy dimensions, both of these dimensions must have a significant relationship with the preference for interaction rankings in order for the Discrepancy score to be significantly related to choice. The present findings show that only the affiliation dimension was significantly related to interpersonal choice. Thus, the weighted autonomy score was the factor which contributed negatively.

A case example illustrates this point. Figure 6 depicts the weighted autonomy and affiliation self-ratings of one group member and her ratings of the five other female members in her group. Kendall's tau correlation was .00 between the rank-order of these five members according to the rank of their dyadic Discrepancy score and the ranks they received from the interpersonal choice condition. That is, for this subject, no relationship was found between the degree of self-perceived interpersonal complementarity and

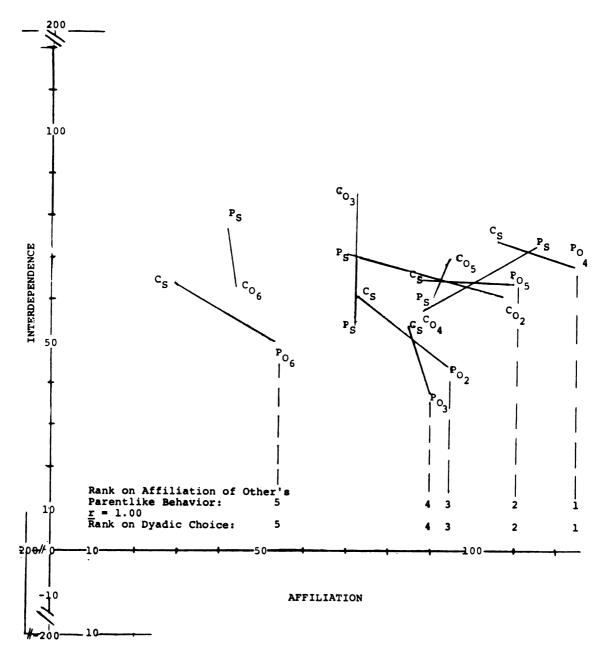


Figure 6. One subject's (S) perception of her own Parentlike  $(P_0)$  and Childlike  $(C_S)$  behaviors and her perception of five other group members Parentlike  $(P_S)$  and Childlike  $(C_O)$  behaviors towards her on the two bipolar dimensions.

interpersonal choices. Nor was there a significant relationship between the subject's parentlike autonomy behaviors and her preferred dyadic choices ( $\underline{r} = .00$ ). In contrast, a strong positive relationship was found between her own interpersonal preferences and her perception of the parentlike affiliative behaviors of both herself and those of her five partners ( $\underline{r}$ 's = .80 and 1.00, respectively).

In terms of Edquist's (1974) similarity hypothesis, it is apparent that these data provide support on the affiliation dimension but do not support his proposed similarity on the autonomy dimensions. It may be recalled that Edquist's results indicated that subject's preferred to interact with others who possessed the same interpersonal style on both dimensions. In Benjamin's (1974) model, the similarity effect would yield correspondence on both the affiliation and autonomy dimensions. Specifically parentlike dominant behavior would be met by childlike selfcontrolling behavior rather than by submissive behavior. Since the present findings found no significant relationship be it one of reciprocity or similarity between the autonomy dimension and preferred dyadic choice, Edquist's hypothesized similarity effect can neither be supported nor refuted.

In summary, the present findings indicate that selfperceived affiliative behaviors of self and others for both
the active parentlike and reactive childlike varieties is
the factor most highly and significantly related to

interpersonal choice. This raises questions concerning the role of the interdependence or autonomy dimension in interpersonal choice situations. One way in which the lack of relationship between autonomy and interpersonal choice can be understood may be to interpret affiliation in these situations as a more potent dimension. That is to say, when an individual is making an interpersonal choice in terms of preference for interaction, correspondence on the affiliative dimension may be considerably more important as a factor in the subject's choice process than reciprocity on the autonomy dimension. Four studies supporting this interpretation of the data concerned the prediction of marital adjustment. They are especially relevant for comparison with the present study because each investigated the subject's interpersonal perceptions. Kotlar (1965) compared adjusted and maladjusted married couples' interpersonal perceptions on Leary's (1957) Interpersonal Checklist. results indicated that each partner's perception of the degree of affiliation in the relationship predicted marital adjustment better than did the degree of dominance. Lucky (1964) also used the Leary Checklist to study interpersonal perceptions in marital couples. She found that the degree of marital satisfaction was most highly related to the perceived degree of affiliation in the dyad and was not specifically related to either correspondence or reciprocity of dominance or submission. Veenstra (1978), found that selfperceived dyadic affiliation was the most salient factor

in the prediction of marital adjustment, supporting the findings of Lucky (1964) and Kotlar (1965). Fineberg and Lowman (1975) used both a self-report measure and a behavioral measure to study the relationship between marital adjustment and the affiliation and dominance-submission dimensions. Both measures strongly supported the hypothesis that well adjusted couples would express more affiliation. The interdependence dimension was also predictive, but "the affective dimension clearly seemed to be more powerful of the two" (p. 158).

The results of these four studies consistently and clearly support the idea that affiliation is a better predictor of marital adjustment than interdependence. Although the present research investigated affiliation and interdependence in same-sex dyads, the results of the aforementioned studies are plainly congruent with the present. finding that affiliation was the better predictor of interpersonal choice. Thus the potency of the affiliation dimension appears generalizable to samples with divergent role expectations. That is not to say that the affiliation dimension will be the more potent of the two in all interpersonal interactions. Perhaps this dimension will prove to be more powerful when the degree of affiliation is of primary importance such as in intimate interpersonal rela-In task oriented dyads or groups, the importance of the interdependence dimension may be augmented such that it is equal to if not more important than the degree of

affiliation. Further investigations of these two bipolar dimensions in different situational contexts will aid in a clearer understanding of this issue.

The role of potency in interpersonal choice situation may be related to the differences found when the mean and standard deviations of the weighted affiliation and autonomy scores were compared (see Appendix E). Inspection of the data reveals that overall the subjects' gave higher ratings on the affiliation dimension and that these ratings deviated from the mean to a greater extent than did the weighted autonomy scores. Thus subjects used a more constricted range when rating their coparticipants on the autonomy dimension. Specifically, the average withinsubject range for the affiliation dimension was 33.31 points greater than the autonomy dimension. The use of a more restricted range found in autonomy scores may indicate that this dimension is less potent than affiliation in an interpersonal choice situation in small groups.

# The Stability of Interpersonal Choice

The Group Member Ranking Form-B was designed to present subjects with a real choice situation in which they were asked to rank-order five other group members after forty-eight hours of group experience in terms of their preference for a dyadic interaction with each of them. Another ranking from (Group Member Ranking Form-A) was also administered after twenty-one hours of group experience and its

instructions included a hypothetical choice situation (see Appendix D). Ranking Form-A was designed to provide a measure of reliability for the measurement of preference for interaction. The results showed substantial temporal stability to these interpersonal preferences between the twenty-first and forty-eighth hours of group interaction over the intervening five weeks as reflected by the .83 value of Kendall's tau.

# Leaders' Ratings of Group Members on the Two Bipolar Dimensions

The correlations between independent ratings by group leaders of the same three dyads within their group yielded overall correlations of about .60 which fell short of statistical significance. The median correlations indicated more reliability across leader's ratings for the affiliation dimension (.62) than for the autonomy dimension (.41).

Any interpretation of the correlations between of leaders ratings of group members must take into consideration that the leaders were untrained in the use of Benjamin's (1974) social behavior model and that they were few in number.

Since each group had two leaders the results of only twelve raters could be used to ascertain inter-rater reliability. Given the small number of raters, the magnitude of the correlation needed to reach a statistically significant level was quite high. Thus although the mean r

for childlike affiliative behaviors was .71, the correlation fell somewhat below the required .05 level value of .81 due to the stringent requirements imposed when sample sizes are very small. An equally important point concerns the leaders' dual status as participant/observers. Besides rating group members, each leader was actively involved with all members by virtue of their role. Individual relationships between leaders and members and personality differences appeared to influence these ratings. Thus, besides the factors of lack of training and sample size, the absence of significant correlations between leaders ratings may reveal more about individual differences between leaders' perceptions than it does about the reliability of the social behavior questionnaire.

#### Recommendations

Any inferences drawn from these data must take into account the limitations of the study which include the sample size (5 sets of ratings by  $\underline{N}=36$  subjects,  $\underline{N}=12$  participant/observers), the homogeneity of its members (middle class American, college students) and the nature of the experimental context (small nine week interpersonal learning groups). Given these limitations and the known influence of class status and cultural background (Hollingshead and Redlich, 1958; Opler, 1967) it is suggested that a similar experimental design be implemented using more divergent samples. This would permit the investigation of the way

self-perceived complementarity and interpersonal choice functions between different sub-populations.

Any findings derived from samples that were homogeneous in terms of age, sex, cultural and economic background should not be generalized beyond them. That is to say, if consistent results were found regarding complementarity and interpersonal choice for such samples, one could not generalize these results to dyads where role expectations were divergent (e.g., mixed sex dyads, husband and wife dyads, therapist client dyads). In these latter interpersonal situations, the role factor may interact with the subjects' behavior along the bipolar dimensions. Thus, the specificity of the sample and the demand characteristics of the dyad are important variables that must be attended to when interpreting results.

One interesting area of investigation not covered by the present design is the use of trained nonparticipant raters. These raters could assess each group member's most to least preferred object choice using the rank order measure, and could also rate all dyads on the social behavior model in terms of how each observer thinks each dyad is perceived by the subject. Since independent data could also be collected directly from the subject, a comparison could be made which would detect the accuracy with which an outside observer could portray a subject's phenomenal field.

The use of Benjamin's model and instrument need not be confined to a research setting. The author has described

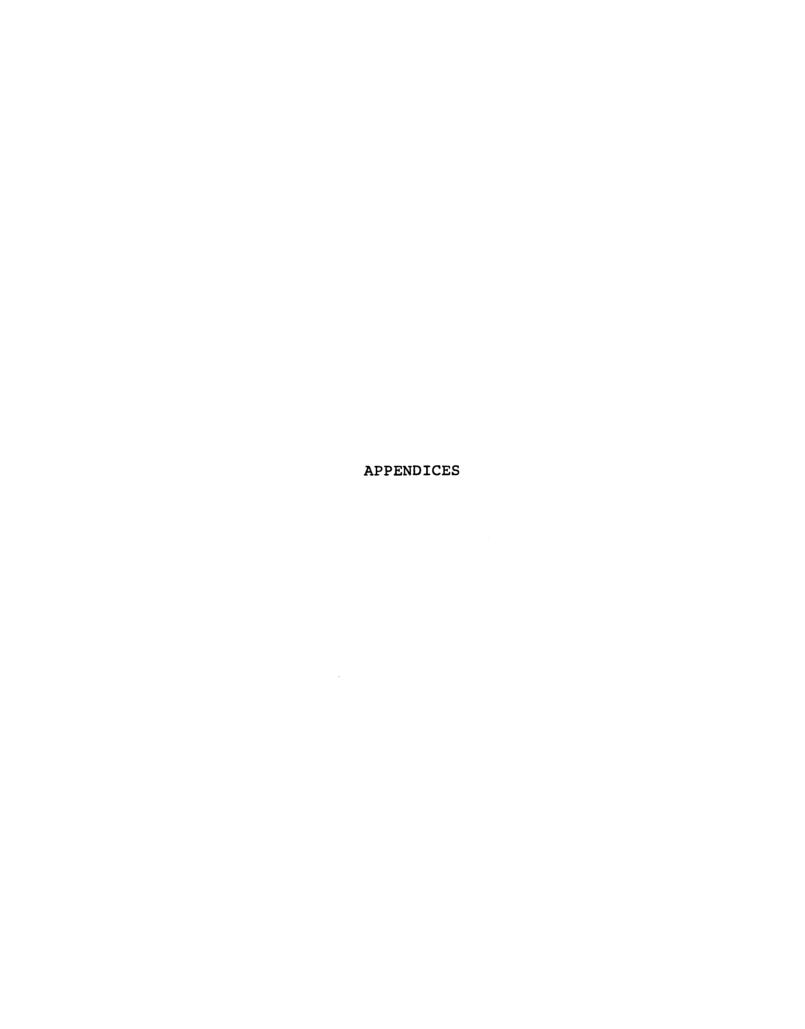
its effectiveness in her analysis and treatment of a family in therapy (Benjamin, 1977a). The analysis of various family members' questionnaires, provided important information which aided in the understanding of family dynamics, and helped Benjamin analyze resistances, observe changes in therapy, and to develop a treatment plan. Her use of the social behavior model through all phases of treatment indicates that it is a most promising clinical tool.

This study's strengths lie in two major areas.

First, by using small same-sex interpersonal learning groups an intimate personal environment could be explored. The small group permitted investigating a representative set of dyadic perceptions for each group member. The interpersonal group also had the advantage of presenting the subject with an actual, rather than hypothetical or artificial, interpersonal environment. The results of perceived interpersonal style and interpersonal choice in this setting lend themselves to greater generalization to nonexperimental settings. Restricting the group membership such that each was homogeneous in terms of sex and status had the advantage of extricating the effects that these two variables would have had on the results.

An additional strength relates to the use of individual's personal realities as the primary point of focus. The results of this study have clearly demonstrated that an investigation of a subject's phenomenal field is a worthwhile and fruitful endeavor which provides a rich source

of data. The importance of the personal construct, i.e., the way individuals construe the world affects the way they relate to it, and as this study has shown, the choices that they make.



# APPENDIX A

RESEARCH CONSENT FORM

#### APPENDIX A

#### RESEARCH CONSENT FORM

# MICHIGAN STATE UNIVERSITY Department of Psychology

#### DEPARTMENTAL RESEARCH CONSENT FORM

- 1. I have freely consented to take part in a scientific study being conducted by: <u>Sharai Freedman</u> under the supervision of: <u>Dr. John R. Hurley</u> Academic Title: <u>Professor - Department of Psychology</u>
- 2. The study has been explained to me and I understand the explanation that has been given and what my participation will involve.
- 3. I understand that I am free to discontinue my participation in the study at any time without penalty.
- 4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.
- 5. I understand that my participation in the study does not guarantee any beneficial results to me.
- 6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.
- 7. I understand that I will receive no extra credit for my participation in this study.

Signed:	 	
Date:		

#### APPENDIX B

# SERIES A, B, AND C OF BENJAMIN'S (1977a)

#### SOCIAL BEHAVIOR CHART

#### Series A

	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
1.	Constructively, sensibly, persuasively analyses situations.
2.	Has his/her own identity, internal standards.
3.	Enforces conformity to norms he/she prefers, insists I be "proper."
4.	Puts me down, humiliates me, acts superior.
5.	Takes in, tries, learns from what I suggest.
6.	Complies without much feeling, apathetically.
7.	Angrily rejects, dismisses, tells me to get the "H" out.
8.	Comfortably accepts help, caretaking when I offer it.
9.	Deliberately defies, does the opposite of what he/she thinks I want.
10.	Expresses his/her view, hears mine, and negotiates fairly.
11.	Enthusiastically shows, shares him/herself or "thing."

Never Not At All								Always Perfectly		
0	10	20	30	40	50	60	70	80	90	100

- 12. Murderously attacks, annilhilates me.
- 13. Does, says things unrelated to what I just said, did; goes on his/her "own trip."
- 14. Ecstatically, joyfully glows with loving for me.
- 15. Invites me to be with him/her, to stay in touch.
- 16. Follows, maintains friendly contact with me.
- 17. Freely comes and goes.
- 18. Tenderly, lovingly touches me sexually.
- 19. \_\_\_\_Constructively stimulates me, shows me how to under-stand, do.
- 20. Accuses, blames, "nails" me.
- 21. Makes me feel welcome, really wanted.
- 22. \_\_\_Clings, looks to me to take care of everything.
- 23. \_\_\_\_Cruelly punishes me, takes revenge.
- 24. \_\_\_Shows understanding of my view, has empathy for me.
- 25. \_\_\_Asks trustingly, counts on me to respond appropriately.
- 26. Willingly accepts, complies with reasonable suggestions, ideas.
- 27. Desperately protests that I'm destroying, killing him/her.
- 28. Gives "strokes," soothes, calms me.
- 29. Intrudes on me, blocks, restricts me.

Please place a number in the blank indicating how well the phrases describe the behavior of \_\_\_\_ in relation to you. A rating of 50 or above indicates "true"; a rating of less than 50 indicates "false." If the behavior is never present, please leave the question blank.

	1.0 . 0=	lways ectly
		0 100
30	Complies, goes along without understa	nding at all.
31	Follows my preferred rules, standards	, routines.
32	Rips me off, drains me, takes far too	much.
33	Defers, checks with me on every littl	e thing.
34	Is extremely wary, suspicious, fearfu	al of me.
35	Deludes, deceives, diverts, misleads	me.
36	Insists on doing things for me at his enormous expense, sacrifices greatly	•
37	Provides for, nurtures, takes care of	f me.
38	Offers fair exchanges addressing both	n our views.
39	Ignores me, pretends I'm not there.	
40	Uncaringly lets me go, do what I wan	t.
41	Refuses my offers to assist.	
42	Flees, runs away, withdraws vigorous	ly from me.
43	Benevolently monitors, reminds me of	what I should do.
44	Encourages me to develop my own separ	rate identity.
45	Forgets me, our agreements, plans.	
46	Acts put-upon, complies with resentment	ent, sulks.
47	Yields, submits, gives in.	
48	Approaches me menacingly, gathers dan	maging materials.
49	Manages, controls every aspect of my	existence.

	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
50.	Shows belief that I am competent to do things on my own.
51.	Expresses his/her thoughts and feelings in a clear and friendly manner.
52.	Feels, becomes what he/she thinks I want.
53.	Starves me, fails to give me my "due," cuts me out.
54.	Explores me with friendly interest, actively listens.
55.	Grieves, mourns, weeps about the aloneness, the emptiness without me.
56.	Pampers, gives me more than I need.
57.	Appeases, scurries to avoid displeasing me.
58.	Asserts, holds his/her own without needing external support.
59.	Walls him/herself off from me, doesn't hear, doesn't react.
60.	Confirms, appreciates me as I am; says I'm OK with him/her.
61.	Avoids me by being too busy with his/her "own thing."
62.	Relaxes, enjoys, flexibly flows, laughs with me.
63.	Specifies, tells me what is best for me to do, be, think.
64.	Whines, squirms, defends, justifies him/herself.
65.	Offers irrelevancies, illogical ideas, makes unwarranted assumptions.

Nev	er						Alw	ays		
Not	At A	.11						Pe	rfec	tly
0	10	20	30	40	50	60	70	80	90	100

- 66. Goes his/her own separate way.
- 67. Protects me, shields me, backs me up.
- 68. Openly discloses, reveals his/her inner self.
- 69. Joyfully approaches me ready to have wonderful fun.
- 70. Abandons me, leaves me "in the lurch."
- 71. Neglects me, my interests, my needs.
- 72. Says I am free to do and be whatever I want.

# APPENDIX B

SERIES A, B, AND C OF BENJAMIN'S (1977a)

SOCIAL BEHAVIOR CHART

# Series B

	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
1.	I constructively, sensibly, persuasively analyse situations.
2.	I have my own identity, internal standards.
3.	I enforce conformity to norms I prefer, insist he/ she be "proper."
4.	I put him/her down, humilitate him/her, act superior.
5.	I take in, try, learn from what he/she suggests.
6.	I comply without much feeling, apathetically.
7.	I angrily reject, dismiss, tell him/her to get the "H" out.
8.	<pre>I comfortably accept help, caretaking when he/she offers it.</pre>
9.	I deliberately defy, do the opposite of what I think he/she wants.
10.	<pre>I express my view, hear his/hers, and negotiate fairly.</pre>
11.	I enthusiastically show, share myself or "thing."
12.	I murderously attack, annihilate him/her.
13.	I do, say things unrelated to what he/she just said, did; I go on my "own trip."
14.	I ecstatically, joyfully glow with loving for him/her.
15.	I invite him/her to be with me, to stay in touch.
16.	I follow, maintain friendly contact with him/her.
17.	I freely come and go.

# Series B--Continued

	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
18	I tenderly, lovingly touch him/her sexually.
19	I constructively stimulate him/her, show him/her how to understand, do.
20	I accuse, blame, "nail" him/her.
21	I make him/her feel welcome, really wanted.
22	I cling, look to him/her to take care of everything.
23	I cruelly punish him/her, take revenge.
24	I show understanding of his/her view, have empathy for him/her.
25	I ask trustingly, count on him/her to respond appropriately.
26	I willingly accept, comply with his/her reasonable suggestions, ideas.
27	I desperately protest that he/she is destroying, killing me.
28	I give "strokes," soothe, calm him/her.
29	I intrude on him/her, block, restrict him/her.
30	I comply, go along without understanding at all.
31	I follow his/her preferred rules, standards, routines.
32	I rip him/her off, drain him/her, take far too much.
33	I defer, check with him/her on every little thing.
34	I am extremely wary, suspicious, fearful of him/her.
35	I delude, deceive, divert, mislead him/her.

_	
	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
36	I insist on doing things for him/her at my own enormous expense; I sacrifice greatly.
37	I provide for, nurture, take care of him/her.
38	I offer fair exchanges addressing both our views.
39	I ignore him/her, pretend he/she is not there.
40	I uncaringly let him/her go, do what he/she wants.
41	I refuse his/her offers to assist.
42	I flee, run away, withdraw vigorously from him/her.
43	I benevolently monitor, remind him/her of what he/she should do.
44	I encourage him/her to develop his/her own separate identity.
45	I forget him/her, our agreements, plans.
46	I act put-upon, comply with resentment, sulk.
47	I yield, submit, give in.
48	I approach him/her menacingly, gather damaging materials.
49	I manage, control every aspect of his/her existence.
50	I show belief that he/she is competent to do things on his/her own.
51	I express my thoughts and feelings to him/her in a clear and friendly manner.
52	I feel, become what I think he/she wants.

Please place a number in the blank indicating how well the phrases describe you in relation to \_\_\_\_. A rating of 50 or above indicates "true"; a rating of less than 50 indicates "false." If the behavior is never present, please leave the question blank.

ques	CION DIAMA
	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
53.	I starve him/her, fail to give him/her his/her "due," cut him/her out.
54.	I explore him/her with friendly interest, actively listen to him/her.
55.	I grieve, mourn, weep about the aloneness, the emptiness without him/her.
56.	I pamper, give him/her more than he/she needs.
57.	I appease, scurry to avoid displeasing him/her.
58.	I assert, hold my own without needing external support.
59.	<pre>I wall myself off from him/her; I don't listen, I don't react.</pre>
60.	I confirm, appreciate him/her as he/she is, say he/she is OK with me.
61.	I avoid him/her by being too busy with my "own thing."
62.	I relax, enjoy, flexibly flow, laugh with him/her.
63.	<pre>I specify, tell him/her what is best for him/her to do, be, think.</pre>
64.	I whine, squirm, defend, justify myself to him/her.
65.	I offer irrelevancies, illogical ideas, make un- warranted assumptions.
66.	I go my own separate way.
67.	I protect him/her, shield him/her, back him/her up.

68. I openly disclose, reveal my inner self to him/her.

	Neve Not	Always Perfectly									
	0	10	20	<b>3</b> 0	<b>4</b> 0	50	60	70	80	<b>9</b> 0	100
69	_I jo	oyful •	ly a	ppro	ach	him/	her,	rea	ıdy t	to ha	ve wonderful
70	I 6	aband	on h	im/h	er,	leav	e hi	m/he	er "i	in th	ne lurch."
71	I 1	negle	ct h	im/h	er,	his/	her	inte	erest	ts, h	nis/her needs.
72	I :	say h	e/sh	e is	fre	e to	do,	be	what	tever	he/she wants.

#### Series C

Please place a number in the blank indicating how well each of the following phrases describes your feelings about yourself. A rating of 50 or above indicates "true"; a rating of less than 50 indicates "false." If the behavior is never present, please leave the question blank.

	Never Always Not At All Perfectly
	0 10 20 30 40 50 60 70 80 90 100
1.	I neglect myself, don't try to develop my own potential skills, ways of being.
2.	<pre>I examine, analyse myself sensibly, carefully, realistically.</pre>
3.	I turn inward to imagine, daydream, live in fantasy.
4.	I let important choices, thoughts, issues, options slip by me unattended.
5.	Knowing both my faults and my strong points, I com- fortably accept myself as I am.
6.	I am pleased with, glad about myself.
7.	I blame myself, feel guilty, bad.
8.	I practice, work on developing worthwhile skills, ways of being.
9.	I love, cherish, adore myself.
10.	I nurture, care for, restore, heal myself as needed.
11.	I vehemently reject, dismiss myself as worthless.
12.	I have no idea who or what I am or what I want for myself.
13.	I entertain myself, enjoy being with myself.
14.	I restrain, hold back myself.
15.	I control, manage myself according to my carefully thought-out goals for myself.
16.	I torture, kill, annihilate myself.

17. I deprive, deplete, overburden myself for others.

Neve Not	r At A	.11						Pe	Alw rfec	_
0	10	20	30	40	50	60	70	80	90	100

- 18. I stroke, soothe, tell myself nice things about myself.
- 19. \_\_\_I keep an eye on myself to be sure I'm doing what I think I should be doing.
- 20. \_\_\_\_I force myself to become like a certain specific ideal.
- 21. I explore, listen to, honor my inner self.
- 22. \_\_\_I ignore my own basic needs such as fatigue, hunger, sickness, pain.
- 23. \_\_\_I force myself to conform to standards, to be proper, to do it right.
- 24. \_\_\_\_I vengefully, viciously punish myself, "take it out on" myself.
- 25. I deceive, delude, divert, fool myself.
- 26. \_\_\_\_I'm happy-go-lucky, content with "here today, gone tomorrow."
- 27. \_\_\_I protect myself, take constructive steps on my own behalf.
- 28. \_\_\_I drift with the moment, have no particular internal direction, standards.
- 29. I indulge, pamper, fuss over myself.
- 30. \_\_\_I confidently let myself try to meet whatever interesting challenge comes along.
- 31. \_\_\_\_I feel solid, integrated, "together," acceptance of my own inner core.
- 32. \_\_\_I let my own potential reveal itself to me and then make the most of it.

	Nev Not	er At A	11						Pe	Alw rfec	ays tly		
	0	10	20	30	40	50	60	70	80	90	100		
33		am re tuati			care	eless	ly e	nd u	p in	sel	f-des	stru	ctive
34		seek, od fo	_		set	up s	itua	tion	s wh	ich	will	be	really
35	I	put m	ysel	f do	wn,	doub	ot, a	m ve	ry u	ınsur	e of	mys	elf.
36		am a saste		ce t	o my	self	, ta	ke e	xtre	me 1	risks	, co	urt

# APPENDIX C

INTRODUCTION AND DIRECTIONS TO BENJAMIN'S

(1977a) SOCIAL BEHAVIOR CHART

LEADERS' FORM

#### APPENDIX C

# INTRODUCTION AND DIRECTIONS TO BENJAMIN'S (1977a) SOCIAL BEHAVIOR CHART LEADERS' FORM

# Introduction

The purpose of this study is to develop a fuller understanding of interpersonal behavior. The questionnaire that you are being asked to complete is intended to yield a comprehensive picture of the way people relate. All of the completed questionnaires will be held in strict professional confidence. I would very much appreciate your help and hope that you will find this experience useful in developing your understanding of interpersonal behavior. If you wish you may schedule an interview with me to discuss your results.

# Directions

The enclosed package of materials consists of questionnaires describing different ways of feeling about and relating to people. The questionnaires ask you to rate the way certain members in your group relate to one another. Your answers will be recorded on IBM scoring sheets so please be careful not to bend or fold them. A number two pencil will be provided to record your answers. It will ease your scoring if you check off each questionnaire when you have finished it in the spaces provided below. Thank you for your participation.

Rat	ting Of:	•			Check Here When Completed	Pages
1.		in	relation	to	 	1-3
2.		in	relation	to		4-6
3.		in	relation	to		7-9
4.		in	relation	to		10-12
5.		in	relation	to	 	13-15
6.		in	relation	to	 	16-18

# APPENDIX D

GROUP MEMBER RANKING FORM-A

#### APPENDIX D

#### GROUP MEMBER RANKING FORM-A

Suppose that during the next group session, the group were to break into dyads for the purpose of discussing personal feelings about your group experience. If the group were actually to do this, please indicate how you would rank order the members in your group from most to least preferred choice for this dyadic interaction. Your rankings will remain confidential and not be shared in any way with other members in your group.

Your name:	
First choice:	
Second choice:	
Third choice:	
Fourth coice:	
Fifth choice:	

# APPENDIX E

MEANS AND STANDARD DEVIATIONS OF WEIGHTED AFFILIATION AND AUTONOMY SCORES ( $\underline{N}$  = 36, EACH RATING 5 DYADS)

Table E-1.--Means and Standard Deviations of Weighted Affiliation and Autonomy Scores ( $\underline{N}$  = 36 persons each rating 5 dyads).

Mean	Standard Deviation
83.26 102.47	35.69 38.14
52.63 54.84	23.55 21.76
77.80 86.91	39.13 43.61
43.39 42.82	25.34 27.26
38.67	19.48
	83.26 102.47 52.63 54.84 77.80 86.91

# APPENDIX F

MEANS AND STANDARD DEVIATIONS OF Z SCORES BETWEEN THE NINE DEPENDENT VARIABLES AND GROUP MEMBER RANKING FORM-A AND B ( $\underline{N}$  = 36, EACH RATING 5 DYADS)

Table F-1.--Means and Standard Deviations for  $Z_{\underline{r}}$  Scores Between the Nine Dependent Variables and Group Member Ranking Form A and B ( $\underline{N}$  = 36, each rating 5 dyads).

		1	Mean	Standard	Deviation
Self	Ratings:	Rank A	A Rank B	Rank A	Rank B
Af	ffiliation:				
	Parentlike Childlike	.63	.88 1.03	1.31 1.72	1.22 1.43
Αu	itonomy:				
	Parentlike Childlike	.12	.37 04	1.08 1.01	1.01
Ratin	ngs of Others		······		······································
Af	filiation:				
	Parentlike Childlike	.40	.66 .98	1.01	1.27 1.43
Αu	itonomy:				
	Parentlike Childlike	.03	.31	.47 .97	1.01
Discr	repancy Score	.18	.27	1.0	1.05



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