

**Interpersonal Complementarity and Rigidity in Close Relationships:
A Test of Predictions From Interpersonal Theory**

Lauren Mount ©

Master's Thesis

Department of Psychology

Lakehead University

**A Thesis Presented in Partial Fulfillment of the Requirements For the Degree of
Master of Arts in Clinical Psychology**

January 2000

ProQuest Number: 10611450

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10611450

Published by ProQuest LLC (2017). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Table of Contents

	<u>Page</u>
Abstract.....	i
Acknowledgments.....	ii
Introduction.....	1
Interpersonal Circle.....	3
Interpersonal Complementarity.....	4
Evidence for Existence of Complementarity.....	6
Correlates of Complementarity.....	12
Interpersonal Rigidity.....	15
Interpersonal Behaviour and Symptoms of Psychopathology.....	18
Present Study.....	20
Methods.....	23
Participants.....	23
Measures: IAS-R.....	23
Measures: PAI-Short Form.....	24
Measures: Positive Regard.....	25
Procedure.....	25
Statistical Methods.....	26
Circle Placements.....	25
Deviations From Perfect Complementarity.....	26
Indices of Behaviour Change.....	27
Interpersonal Rigidity.....	28
Conditions for Dyadic Interdependence.....	29
Results.....	30

Discussion.....	36
Interpersonal Rigidity and Psychological Disturbance.....	36
Interpersonal Rigidity and Complementary Responding.....	38
Interpersonal Rigidity and Positive Regard.....	43
Limitations and Recommendations for Future Research.....	45
Conclusions.....	47
References.....	49
Table 1: Descriptions of Variables.....	54
Table 2: Correlations Between PAI Scales and Interpersonal Rigidity for Individuals in Each Octant for Behaviour in General.....	55
Table 3: Correlation Between PAI Scales and Interpersonal Rigidity for Individuals in Each Octant for Behaviour with Specific Other.....	56
Table 4: Correlations Between Interpersonal Rigidity and Study Variables....	57
Appendix A: Questionnaire.....	58
Appendix B: Introductory Statement.....	67
Appendix C: Consent Form.....	68
Figure 1: Interpersonal Circle and Forms of Complementarity.....	69

Abstract

Interpersonal theory states that in our interactions with others, we seek information that validates our self-concepts. Thus, we emit behaviors which elicit complementary responses from others. Individuals with psychopathology are believed to manifest greater interpersonal rigidity, which is characterized by an inflexible interpersonal style. As a result, they are hypothesized to exert a stronger pull for complementary responses from others. In the present study, participants and a significant other of their choosing each completed three versions of the Revised Interpersonal Adjective Scales (IAS-R; Wiggins, Trapnell, & Phillips, 1988), for Self- in-General, for Self-with-Other, and Other-with-Self. They also completed the short form of the Personality Assessment Inventory and a measure of positive regard for self and other. The following hypotheses were examined: (1) psychological disturbance will be associated with interpersonal rigidity, (2) the partners of individuals with rigid interpersonal styles will experience a greater pull for complementary responding, and (3) greater rigidity will be related to lower positive regard for self and other. Some forms of psychological disturbance were related to rigidity in specific behavior types and there was partial support for the relation between rigidity and lower positive regard. However, the results for complementary responding were inconsistent.

Acknowledgments

I wish to express my appreciation to Dr. Brian O'Connor for his helpful comments, guidance, and support throughout this study. I would like to thank Susan Holm, Leah Fraser, Honor Wallace, and my family for their help and support. I also wish to express my appreciation to Dr. Dwight Mazmanian for his helpful suggestions.

Interpersonal Complementarity and Rigidity in Close Relationships: A Test of Predictions From Interpersonal Theory

Humans are social animals. From the very first day of our lives, we spend the majority of our waking hours in interactions with others. Furthermore, Carson (1969) states, "the mere physical absence of others does not preclude their having an influence on the actor" (p. 10). In other words, we internalize other persons and interact with them symbolically so that even impersonal situations have interpersonal components (Kiesler, 1982). It follows then, that these interactions with others, either social or symbolic, are an integral component of the development and continuous functioning of our sense of self and our personality. Thus, interpersonal theorists attempt to understand personality through the analysis of individuals' interpersonal behaviors.

Sullivan, considered to be a progenitor of interpersonal theory, defined personality as "the relatively enduring pattern of recurrent interpersonal situations which characterize human life" (Sullivan, 1953, p.111). Sullivan believed that personality could only be conceived in the context of interpersonal behavior and that the construct of self does not exist apart from an individual's relations with others. According to Sullivan (1953), it is through our interactions with others that our self-system develops and the symbolic contents of our self-system consist of experiences with important or significant others. Thus, the interpersonal self-system is an aggregate of attributes about "I" or "me" that result from "reflected appraisals" from important or significant others in one's life (Kiesler, 1982).

Sullivan (1953) and subsequent interpersonal theorists (Anchin & Kiesler, 1982; Carson, 1969; Leary, 1957) suggest that anxiety plays an important role in the development and maintenance of personality. Once the self-system is developed, we seek interactions and new reflected appraisals that are consistent

with our self-system. Reflected appraisals or experiences that are inconsistent with our self-system are anxiety provoking and thus we tend to avoid or be selectively inattentive to these experiences in an unconscious effort to minimize anxiety (Kiesler, 1982).

A central feature of our transactions with others is self-presentation, which Kiesler (1991) defines as "the automatic, predominantly unaware, and recurrent manner in which we centrally view ourselves." Both Sullivan's (1953) "theorem of reciprocal emotions" and Leary's (1957) "principle of reciprocal interpersonal relations" assert that any interpersonal act is designed to elicit from a respondent reactions that confirm, reinforce, or validate a person's self-presentation and subsequently cause that person to repeat similar interpersonal acts (Kiesler, 1988). In our interactions with others we communicate messages, both verbal and nonverbal, about our emotional states and the reciprocal responses we want from others. These messages pull or evoke from others responses that are most comfortable, or least threatening, in terms of our conceptions of who we are (Kiesler, 1982).

The focus of interpersonal theory, however, is not on the behavior of the individual in situations, be they social or impersonal. Rather, the focus is on the behavior of individuals relating to and interacting in a system with other individuals (Kiesler, 1982). In the case of a dyad, one individual's needs and acts alone cannot determine the outcome of the transaction. Rather, the outcome is conjointly determined (Kiesler, 1988). The interactants function as a system to seek conjoint expression and resolution of their interpersonal needs. Thus, the emphasis is on bi-directional causality.

In sum, in our interactions with others we behave, either covertly or overtly, in such a way that we communicate evoking or impact messages. These messages elicit or pull from others reactions which in turn confirm, reinforce or

validate our conceptions of who we are. Thus, it is through the examination of the evoking messages that individuals use in their interactions with others and the interpersonal consequences or reactions elicited from others that we begin to glimpse private self-concepts (Kiesler, 1982). It is from these glimpses into self-concepts that we begin to understand personalities.

Interpersonal Circle

A major assumption of interpersonal theory is that a person's recurring pattern of interpersonal situations (the covert and overt behaviors or impact messages of one person and the covert and overt reactions of the other) represents different combinations or blends of two basic dimensions of interpersonal behavior: control and affiliation (Kiesler, 1991). Wiggins (1979) defined interpersonal events as "dyadic interactions that have relatively clear-cut social (status) and emotional (love) consequences for both participants (self and other)" (p. 398). Furthermore, interpersonal theorists have traditionally viewed interpersonal behavior from a circumplex perspective (Wiggins, 1982).

In an effort to translate the two primary dimensions of control and affiliation into a tangible model, Leary (1957) developed the first interpersonal circle (or circumplex). Leary's Interpersonal Circle (1957) was constructed around bisecting axes of dominance-submission (vertical) and love-hate (horizontal). Arrayed around the periphery of the circle are eight octants or sixteen interpersonal behaviors. Subsequent modifications to the circle (Kiesler, 1983; Wiggins, 1982) reflect an emphasis on interpersonal traits rather than behavior types, with trait adjectives that describe interpersonal behavior replacing the original descriptors of interpersonal behavior used by Leary (1957). In addition, both Wiggins (1979) and Kiesler (1983) suggested that the circumplex should reflect bipolarity, with the different poles of the vectors representing opposite traits. Several studies have

demonstrated the validity of viewing interpersonal behavior as a set of traits arranged in a circular pattern (Wiggins, 1979, 1982; Wiggins, Phillips, & Trapnell, 1989).

Although there are variations of the circle, with authors providing slightly different labels for the poles or segments, there is general agreement about the nature of the two primary dimensions, love-warmth-affiliation and dominance-status-control, represented by the axes. The poles of the two axes are commonly labeled dominance-submission and hostility-friendliness. Combinations of these two dimensions divide the circle into quadrants which produce four other types of interpersonal behaviors. These are commonly labeled friendly-dominance, friendly-submissiveness, hostile-dominance, and hostile-submissiveness (see Figure 1).

The Revised Interpersonal Adjective Scales (IAS-R; Wiggins, Trapnell, & Phillips, 1988) are the most psychometrically and geometrically sound empirical markers of circumplex traits. The IAS-R provide scores for eight scales that correspond to the octant segments of the circumplex and geometric formulas can be used to locate an individual's exact position within the circle (Wiggins, Phillips, & Trapnell, 1989). This positioning can be accomplished by computing and plotting coordinate values on the two primary axes. An individual's position can also be determined from computations of angular location (which is an individual's counter-clockwise distance from the positive horizontal axis, friendliness) and vector length (an individual's distance from the center of the circle).

Interpersonal Complementarity

The assumption that each person's behavior constrains or elicits subsequent behavior from others is a central component of the interpersonal theory of personality (Carson, 1969). Interpersonal theory states that in our interactions with

others, we emit overt and covert behaviors that carry information about how others are to respond. Complementarity refers to the extent to which the behaviors of interactants fit with each other in a prescribed way (Tracey, 1994). Interpersonal theorists (Carson, 1969; Kiesler, 1983; Leary, 1957) have proposed that the interpersonal circle carries information about how the behaviors of interacting individuals fit with each other. Sullivan theorized (1953) that complementary transactions are those which affect satisfaction and security because they confirm self-concepts. In interpreting Sullivan's theory, Leary (1957) stated that each behavior should constrain subsequent behavior. However, he never clearly specified which behaviors would elicit other behaviors. Using Leary's interpersonal circumplex, Carson (1969) explicitly outlined forms of complementarity between interpersonal behaviors. Specifically, he defined complementarity as similarity or correspondence along the affiliation dimension and reciprocity along the power-control dimension. In other words, friendliness and hostility pull for friendliness and hostility respectively, whereas dominance pulls for submission and vice versa.

Complementarity is also hypothesized to facilitate interactions (Estroff & Nowicki, 1992; Nowicki & Manheim, 1991) and to be central to the harmony and continuance of relationships (Carson, 1969; Kiesler, 1983; Tracey & Ray, 1984). If, in our interactions with others, we seek information that is congruent with and confirms our sense of self and thus decreases the potential for anxiety, then interactions and relationships where the behaviors of the interacting individuals are complementary could be viewed as beneficial. Examples of complementary dyads would be the pairing of a friendly-dominant individual with a friendly-submissive individual, or the pairing of a hostile-dominant individual with a hostile-submissive individual.

Evidence for the Existence of Complementarity

Complementarity is said to exist when the behavior of A in acting out a specific need (X) is gratifying to B's need (Y) and the behavior of B in acting out need Y is gratifying to A's need X (Winch, 1958). Thus, complementarity may be interpreted as a mutual gratification of needs between interacting individuals. There is some debate in the literature, however, regarding the actual existence of complementarity. Early research on mate selection has generally indicated that similarity is more common and beneficial than complementarity (Buss, 1985; Campbell, 1980; Fishbein & Thelen, 1980; White & Hatcher, 1984). For example, Blazer (1963) examined the pattern of needs between 50 married couples. Needs assessment was completed using the Edwards Personal Preference Schedule (EPPS). He concluded that there was limited support for complementarity in specific need patterns but overall, the support tended towards homogamy. Likewise, Buss (1985) reported that when couples were asked to rate their own as well as their spouses' personality variables a low positive correlation was consistently found.

However, a few cautionary comments are necessary in interpreting these findings. First, similarity and complementarity are not diametrically opposing constructs. In fact, as previously stated, similarity along the affiliation dimension is considered to be "complementary" in interpersonal theory. It is interesting to note that Blazer (1963) found significant positive correlations on nurturance, aggression, and exhibition in his study. Similarity on these variables is considered complementary in interpersonal theory. Buss (1985) also reported that strong correlations were found between spouses for extroversion, quarrelsomeness, and ingenuousness. Second, much of the research on interpersonal attraction and mate selection measured personality traits and needs very generally and did not examine need-related behavior or take into account the interactive function of the individual

and the context in which the behaviors occur. Campbell (1980) points out that the studies which yielded positive evidence for the existence of complementarity measured needs specific to the interactional context and/or used measures which tapped the behavioral manifestations of the needs. It can then be concluded that, while personality similarity is common and often beneficial, it does not necessarily apply to all traits (or needs) without exception. In addition, it should be emphasized that the findings supporting similarity do not negate the existence of complementarity as defined in interpersonal theory but rather offer partial support for its existence.

Research on interpersonal behaviors has also yielded conflicting results. Orford (1986) reviewed 18 studies on interpersonal interactions and concluded that there was support for complementarity, but only along the friendly side of the circumplex. MacKenzie (1968; as cited in Orford, 1986) examined interactions of family dyads and found for complementarity between friendly-dominant and friendly-submissive behaviors. However, he also noted that friendly-dominance is not an uncommon response to friendly-dominant or hostile-submissive antecedent behavior. Shannon and Guerney (1973; as cited in Orford, 1986) examined the behaviors of female students interacting in group discussions. They found that interactants were likely to respond to antecedent behavior in a complementary direction along the affiliation dimension (friendly-hostile) but not along the control dimension (dominant-submissive). Interactants were more likely to respond to hostile and submissive behavior with further hostile and submissive behavior. Bluhm, Widiger, and Miele (1990) concluded that complementarity occurred only along the affiliation dimension but that behavior along the control dimension was due largely to individual differences in interpersonal style.

Crowder (1972; as cited in Orford, 1986) compared the interactional styles of therapist-client pairs with successful and unsuccessful therapeutic outcomes.

Overall, complementarity was supported in the therapeutic dyads with successful outcomes. Friendly-dominant antecedent behavior elicited friendly-submissive behavior, and friendly-submissive behavior elicited friendly-dominant behavior. Marcus and Holahan (1994) analyzed the behaviors of interactants in group therapy and found that, in general, complementarity was supported. Dominant behavior correlated negatively with submissive behavior. Thus, an individual who behaves in a dominant manner is unlikely to exhibit submissive behavior. Similarly, hostile behavior correlated negatively with friendly behavior. Thus, an individual who behaves in a hostile manner is unlikely to display friendly behavior. At the dyadic level, Marcus and Holahan (1994) found that dominance elicits submissiveness and hostility elicits hostility, supporting the complementarity hypothesis. However, reciprocity for friendliness received no support. Furthermore, significant correlations inconsistent with the circumplex model were found. When the interactants' perceptions of one another were examined a negative correlation was found between submissiveness and friendliness. Thus, an individual who was perceived as submissive was unlikely to be perceived as friendly. There was also a correlation at the dyadic level between submissiveness and hostility. The authors suggest that in the context of group therapy, submissiveness may be perceived as unfriendly, and if A sees B as submissive, B may reciprocate by seeing A as hostile.

Tracey, Sherry, and Albright (1999) examined the pattern of complementarity within individual cognitive-behavioral therapy and its relation to outcome. They proposed a U-shaped pattern of complementarity over the course of therapy with an initial high level of complementarity, decreased levels in the middle phase, and increased levels at the end of therapy. Tracey and associates found that therapist-client dyads with successful treatment outcomes demonstrated the proposed pattern of complementarity while less successful dyads did not.

Strong and colleagues (Strong, Hills, Kilmartin, DeVries, Lanier, Nelson, Strickland, & Meyer, 1988) found partial support for complementarity and anticomplementarity in interpersonal interactions. The principle of anticomplementarity asserts that behaviors on the same side of the control dimension and opposite one another on the affiliation dimension discourage one another (Kiesler, 1983; Strong, 1987). Strong and colleagues suggested that, although it is clear that how one person behaves toward another profoundly influences how the other behaves towards that person, a specific interpersonal behavior does not elicit a specific response from the other. Instead, they suggested that the person's behavior biases the other's responses in a particular direction, one that is evident in the other's overall pattern of responses but not necessarily in specific responses.

Orford (1986) suggested that the effect of several intervening variables on the ability of the behavior of one participant to constrain the subsequent behavior of the other participant may account for the lack of support for the complementarity hypothesis across all dimensions of the circumplex. He concluded that interpersonal responses are not automatic reflexes. Rather, they are mediated by emotional and cognitive processes which render the sequence of events susceptible to the influence of several variables including setting, role expectations and status differences, and time in relationship. For example, in a naturalistic study of hyper-aggressive boys interacting with staff in residential treatment, Raush (1965; as cited in Orford, 1986) demonstrated that hostile behavior was more likely to follow a friendly act during games than during meal times. MacKenzie (1968; as cited in Orford, 1986) found that sons were more likely to respond to hostile-dominant behavior from either parent with hostile-submissive behavior. On the other hand, she also found that mothers were more likely to respond to their husbands' hostile-dominant behavior with further hostile-dominant behavior. Raush (1965; as cited

in Orford, 1986) found that hyper-aggressive boys were more likely to exhibit complementary responses to the antecedent behavior of staff as time in treatment progressed.

In more recent research, Tracey (1994) addressed the differences in positive (along the affiliation dimension) and negative (along the control dimension) complementarity found in past research (Orford, 1986). He suggested that social expectations may play a role in the expression of different behaviors. Specifically, he suggested that there is greater social expectation to engage in friendly behaviors, at least in the early stages of a relationship, and thus it is perhaps inaccurate to assume that hostile behaviors would elicit complementarity to the same extent as friendly behaviors. In support of this hypothesis, Tracey demonstrated that when base rates of the different behaviors were controlled, evidence of negative complementarity began to emerge. In reanalyzing the data from the study done by Strong et al. (1988), he found that participants were likely to exhibit friendly behaviors regardless of antecedent behavior. Thus, respondents did not clearly match hostile behavior with hostile behaviors. When presented with hostile behavior, respondents still displayed friendly behavior. However, there was an increase in hostility when presented with preceding hostile behaviors. In interpreting these results, Tracey concluded that complementarity is probabilistic rather than deterministic. An individual who is friendly 90% of the time (base rate) and interacts with a hostile individual will not completely adopt complementary responding by acting hostile. Instead, the individual may increase the frequency of hostile behaviors and decrease the probability of friendly behaviors to 50%. Tracey's conclusions are consistent with interpersonal theory. Kiesler (1983) defined complementarity as interpersonal behavior of one participant constraining the behavior of the other participant at "a probability significantly greater than chance..." (p. 200).

Kiesler (1991) suggested that social and gender roles may be moderating variables that affect the presence or emergence of complementarity. Moskowitz (1994) found a high level of generality for the interpersonal traits of dominance, submissiveness, agreeableness, and quarrelsomeness across communal situations (those involving acquaintances and friends). In other words, across various communal situations individuals exhibit the same interpersonal pattern of behaviors that represent their personality and what they are like in general. In contrast, only a low or moderate level of generality for these traits was found across agentic situations in which individuals varied in power and status (supervisor and co-workers). Thus, in situations where the demands of status and power were more evident, individuals' were more likely to adjust their general pattern of interpersonal behaviors to fit the expectations of the situation. She concluded that behavior in agentic situations may be substantially influenced by role expectations (Moskowitz, Suh, & Desaulniers, 1994), whereas in situations that are communal in nature, individuals may have greater freedom to act in accordance with their individual behavioral tendencies.

In summary, research in the area of mate selection has tended to indicate that similarity is more beneficial than complementarity. However, in interpersonal theory, similarity is not considered diametrically opposite to the construct of complementarity. In fact, similarity along the affiliation dimension is considered to be complementary in interpersonal theory. On closer inspection of the research on mate selection it becomes evident that there is at least partial support for the construct of interpersonal complementarity. Research in the area of interpersonal behavior has also yielded conflicting results on the existence of complementarity with some researchers concluding that there is support only for the existence of complementarity along the affiliation dimension. However, when base rates of the different interpersonal behaviors were controlled, evidence of complementarity

along the control dimension began to emerge (Tracey, 1994). In addition, when the moderating variables of status and role were taken into account, evidence for the existence of complementarity also began to emerge (Moskowitz, 1994). These findings support Kiesler's (1983) definition of complementarity as the ability of one participant's interpersonal behavior to constrain the behavior of the other participant at "a probability significantly greater than chance..." (p. 200). Thus, although the research appears to be somewhat conflictual, when it is analyzed at a deeper level there is a tendency towards support for the existence of interpersonal complementarity.

Correlates of Complementarity

While there are a number of studies that have addressed the existence of complementarity, there is a growing body of research on the consequences of complementarity. Complementarity is hypothesized to facilitate interactions (Estroff & Nowicki, 1992; Nowicki & Manheim, 1991) and to be central to the harmony and continuance of relationships (Carson, 1969; Kiesler, 1983; Tracey & Ray, 1984). Early studies examined the relationship between personality variables and marital satisfaction. Again, the results were conflicting with the findings tending to indicate that similarity is more beneficial than complementarity in marital satisfaction (Fishbein & Thelen, 1980). Blazer (1963) compared couples' complementary scores on the EPPS with their scores on the Locke-Wallace Marital Adjustment Scale and found the resulting correlations to be negative. In contrast, Hobart and Lindholm (1963) measured marital adjustment in a college sample using the Locke-Wallace and found a significant positive correlation between complementarity and marital adjustment. Pascal (1974) compared models of similarity and complementarity in discriminating between well-adjusted and poorly-adjusted couples. Similarity was defined as being mutually high in dependent needs and

mutually low in independent needs. Complementarity was defined by Winch's model (1958). The results of the study indicated that the similarity model was successful in assigning couples to one of three classifications (i.e., well adjusted, marital problems, divorced) whereas the complementarity model did not successfully assign couples to the three groups beyond the level of chance.

While these early studies appear to indicate that similarity is more beneficial than complementarity to marital adjustment, the same cautionary statements that were addressed to research in the area of interpersonal attraction and mate selection apply. In interpersonal theory similarity and complementarity are not diametrically opposite constructs. As defined by interpersonal theory, similarity on specific personality traits and interpersonal needs are considered complementary.

There is evidence that the complementarity effect takes time to emerge (Nowicki & Manheim, 1991). This may account for the partial lack of support found in earlier research. Similarly, studies in which the effect of complementarity was found tended to measure more than one interaction among participants (Kerckhoff & Davies, 1962), supporting Kiesler's (1991) hypothesis that time in relationship is a moderating variable in the emergence of complementarity. In addition, it has been argued that much of the research in interpersonal behavior ignores the assumption that interpersonal behavior includes both verbal and nonverbal components (Nowicki & Manheim, 1991). When observational methods of measurement are used in addition to standard self-report measures, research has shown that, compared to anti-complimentary dyads, complimentary dyads engage in a greater number of verbal exchanges and prefer less interpersonal distance (Nowicki & Manheim, 1991).

While recent research has offered support for both negative and positive complementarity (Tracey, 1994), other research has demonstrated that both types of complementarity facilitate dyadic interactions on tasks which require cooperation

(Estroff & Nowicki, 1992). However, there is evidence that gender may be associated with complementarity on the hostile dimension. Dyads consisting of hostile-dominant men paired with hostile-submissive women performed consistently below the other complementary dyads on the task.

A great deal of research on complementarity has been conducted in the domain of psychotherapy (Andrews, 1990; Friedlander, 1993; Henry, Schacht, & Strupp, 1986; Tracey, 1993). Research in the area of individual psychotherapy indicates that a balance of complementarity and anticomplementarity is most effective in producing positive therapeutic outcome (Andrews, 1990; Henry, Schacht, & Strupp, 1986; Tracey, 1993). It is theorized that while early complementarity is essential in establishing rapport in the initial stages of psychotherapy, sustained complementarity, in which the client's typical interpersonal style is not challenged, can hinder therapeutic progress. A review of the literature (Friedlander, 1993) found some support for this hypothesis.

While a plethora of research supports the hypothesis that complementarity is an essential component of interpersonal interactions, it is important to distinguish between trait and situational complementarity. It is presumed that individuals automatically or inadvertently seek complementary responses from others because they provide familiar and consistent feedback about oneself. The result is confirmation of the individual's self-concept. Thus, complementary relationships are hypothesized to be mutually satisfying, rewarding, and comfortable because they provide individuals with validation of their self-concepts (Andrews, 1990; Kiesler, 1983, Sullivan, 1953; Tracey, 1993). However, research has also shown that individuals will moderately adjust their interpersonal styles to better fit the behaviours of the other that they are interacting with. Thus, although people inadvertently seek complementary relationships with others, the fit is never exact. As a result, individuals make minor adaptations in their interpersonal style to

maximize complementarity across interpersonal situations. Because interactions are bi-directional, each participant will normally make minor adjustments in their interpersonal style to better fit the interpersonal style of the other. However, some individuals are not able to make the minor adaptations necessary to create a comfortable fit and, as a result, exert a stronger pull on others to fit their interpersonal styles to the individuals'.

Interpersonal Rigidity

Leary (1957) theorized that while everyone develops a preferred interpersonal style to avoid or minimize anxiety, adaptive or psychologically healthy individuals are able to call upon other styles to meet the momentary demands of an interpersonal situation. In contrast, maladaptive individuals rely on a very rigid and intensely expressed interpersonal repertoire. Kiesler (1988) describes individual interpersonal style in the context of self-presentation and interactions with others. He explains that the maladjusted individual consistently broadcasts a rigid and extreme self-presentation and, as a consequence, simultaneously pulls for a rigid and constricted relationship with others. The more rigid and extreme the individual the greater the pull the individual exerts on others and, as a result, the greater the ability of that individual to shape his or her relationships with others (Leary, 1957). The adjusted individual has a broader interpersonal repertoire which reflects a more flexible definition of self and others (Carson, 1969). This individual is able to attune her actions and responses to the interactant. Thus, in each situation, she "negotiates a mutually agreed upon definition of self and other, responding to the unique aspects of the particular interpersonal situation" (Kiesler, 1988, p. 17). The maladjusted individual, in contrast, is unable to modify a definition of self and other to correspond with the demands of the interpersonal situation. In addition, the more rigid and extreme the interpersonal style of an individual the less likely that

individual is to exhibit the predicted complementary response to the interpersonal actions of others.

Most interpersonal theorists (Carson, 1969; Kiesler, 1983; Leary, 1957) maintain that interpersonal behaviours fall on a continuum of intensity ranging from moderate and generally adaptive to the extreme and often maladaptive (Wiggins, Phillips, & Trapnell, 1989). It is assumed that the intensity of expression is related to interpersonal flexibility in that dysfunctional individuals rely rigidly on a narrow band of extreme actions and reactions to the exclusion of other, more adaptive, modes of response. Wiggins et al. (1989) suggest that the combination of the concepts of intensity and flexibility indicate a patterning of behavior that translates into a profile of interpersonal dispositions. Thus, adaptive interpersonal functioning may be construed as the moderate, flexible, and adaptive expression of a characteristic pattern of interpersonal behaviours. In contrast, maladaptive interpersonal functioning may be distinguished by an exaggerated, inflexible, and dysfunctional expression of a characteristic pattern of interpersonal behaviours. The functional and dysfunctional individuals who are members of the same prototypical type (i.e., assured-dominant) will share the same characteristic pattern associated with that type. However, their profile variance will differ in the expression of their behaviours. For example, an adaptive individual who is an assured-dominant type will often behave in a confident or assertive way and will seldom behave in an unassured or submissive way. The dysfunctional individual, in contrast, will almost always behave in an overassured and autocratic way. Thus, the maladaptive individual can be distinguished from the adaptive individual by the rigid and extreme expression of the characteristic pattern of interpersonal behaviours.

Interpersonal theorists claim that the inflexible and extreme pattern of behaviours characteristic of a maladaptive individual exerts a strong pull on others

to display complementary responses (Carson, 1969; Kiesler, 1988; Leary, 1957; Wiggins, Phillips, & Trapnell, 1989). Thus, the overassured-autocratic individual will exert a strong pull on others to respond in an unassured-submissive fashion. Because maladaptive individuals are unlikely to adjust their responses in a complementary direction, their behaviours exert a strong pull on others to adjust their responses. As a consequence, maladaptive individuals are not only incapable of adjusting their pattern of interpersonal behaviours to fit different situations or interpersonal demands, but by the nature of their extreme and inflexible functioning they pull others to respond in a complementary fashion.

It is important to note that interpersonal rigidity was never examined in the earlier research on the existence of complementarity. This omission may account for the limited and weak support found in this area. The existence of complementarity may not be evidenced between traits or even specific behaviours. Rather, evidence for the existence of complementarity may be found in the degree to which differences between general personality and behavior with a specific other are in a direction that complements the personality and interpersonal behaviours of the other.

In regard to the interpersonal circumplex, an individual's rigidity is equivalent to vector length. In other words, the distance between the individual's location within the circumplex and the middle of the circle. As the individual's placement in the circle moves further from the center the individual is more likely to exhibit a narrower band of extreme responses. Vector length is roughly equivalent to the standard deviation of an individual's IAS-R octant scores and is most accurately measured using the Pythagorean theorem (Wiggins et al., 1989):

$$\text{Vector Length} = \sqrt{(\text{Dom} * \text{Dom}) + (\text{Lov} * \text{Lov})}$$

Higher vector scores indicate greater rigidity and inflexibility in behaviours towards others whereas lower scores indicate a more moderate, flexible, and generally adaptive interpersonal style (Wiggins et al., 1989).

Interpersonal Behavior and Symptoms of Psychopathology

According to Kiesler (1988), "maladjusted behavior, or problems in living, reside in a person's recurrent transactions with others, especially significant others. Defined as disordered, inappropriate, inadequate, and self-defeating interpersonal actions, maladjusted behavior results originally and cumulatively from an individual's failure to attend to and correct the self-defeating, interpersonally unsuccessful aspects of his or her interpersonal acts" (p. 17). The maladjusted individual has a very rigid and extreme definition of self and other. In his interactions with others, this individual presents himself with a restricted range of interpersonal behaviours which exert a strong pull on others to display complementary responses. The same rigid and extreme interpersonal behavior is enacted with virtually all significant others regardless of the interpersonal situation (Kiesler, 1988). The consequence is a vicious and self-defeating circle in which the maladjusted individual continuously and unconsciously pushes others to respond in ways that confirm his concept of self and maintain the maladaptive predicament.

An equally important consequence is the impact the constricted interpersonal style has on significant others and their relationship with the maladjusted individual. As the relationship continues, significant others will begin to increasingly experience the aversive impact that results from being manipulated by the maladjusted individual's rigid and extreme behavior. While significant others will continue to confirm the maladjusted individual's expectancies through complementary responses, significant others will begin to experience more hostile and rejecting impact messages and will attempt to escape or avoid further

encounters. When significant others are not able to avoid interactions with the maladjusted individual, they will leak subtle messages of hostility and rejection that are picked up by the maladjusted individual. This triggers anxiety as the maladjusted individual perceives a threat to his or her self-system. The result is that the maladjusted individual intensifies the interpersonal behaviours that are the foundation of his or her maladaptive self-presentation. Thus, the significant others become trapped in the "Maladaptive Transaction Cycle" of the maladjusted individual (Kiesler, 1985, 1986).

It seems intuitive that certain patterns of interpersonal behavior would be associated with different types of psychopathology. It is surprising, therefore, that there is a dearth of research that addresses this question. Most of the research that exists has examined the relationship between personality disorders and patterns of interpersonal behavior (Kiesler, Denburg, Sikes-Nova, Larus, & Goldston, 1990; Wiggins et al., 1989). Other research has examined how maladaptive patterns of interpersonal behavior relate to interpersonal problems (Alden, Wiggins, & Pincus, 1990; Wiggins et al., 1989). Shean and Uchenwa (1990) found that self-reports of agoraphobic-like anxiety among college students were correlated with patterns of interpersonal behavior that emphasized deferent, unassured, submissive, mistrusting, and inhibited interpersonal styles. They suggested that some individuals may develop agoraphobic symptoms as a result of an interaction between interpersonal style and relationship pattern.

The previously mentioned studies all suffer from the same limitation. Although they examine the different types of interpersonal patterns of behavior that may be associated with varying psychopathologies, they do not examine how these behaviours affect the individual's interactions with others. Interpersonal theory is an interactional model and one of the primary assumptions of interpersonal rigidity is that individuals who exhibit a more inflexible and maladaptive interpersonal style

will exert a stronger pull to elicit complementary responses from others. Yet, the majority of studies that have examined the relationship between psychopathology and interpersonal style have failed to examine interpersonal rigidity and the effects this has on the individual's interactions with others.

The notable exception is the interactional perspective on depression proposed by Coyne and colleagues (Coyne, Burchill, & Stiles, 1991). They suggest that depressed individuals are likely to exhibit patterns of interpersonal behavior that elicit responses from others which further confirm their feelings of insecurity and rejection. Thus, on one level, the interpersonal style of the depressed individual and its impact on interactions with others may be seen as perpetuating or maintaining the depression. Coyne and colleagues explain the process by which this can occur. The distress and dependency of the depressed individual engages others, making them feel responsible, and, as a result, shifts the interactional burden unto them. The distress of the depressed individual is aversive to others and is capable of inducing a negative mood in them. At the same time, the distress is also guilt inducing and inhibiting to others. As a result, the people around a depressed individual may attempt to control the aversiveness by seemingly providing what is asked while simultaneously communicating impatience, hostility, and rejection. Thus, "the subtle and overt hostility and rejection that depressed people receive validates their sense of insecurity and elicits further expression of distress, strengthening the pattern" (p. 329).

The Present Study

To summarize the above review of the literature, interpersonal theory states that individuals have a recurring pattern of interpersonal behaviours. Furthermore, an individual's pattern of interpersonal behavior can be located within the interpersonal circle. A primary assumption of interpersonal theory is that each

individual's behavior constrains subsequent behavior from others.

Complementarity is the degree to which the behaviours of interactants fit together in a prescribed way. It is hypothesized that in our interactions with others, we seek information that confirms or validates our self-concept. Thus, we emit behaviours which elicit complementary responses from others. Psychologically unhealthy individuals are believed to exhibit greater interpersonal rigidity which is characterized by an inflexible, maladaptive interpersonal style. Individuals with a rigid interpersonal style are hypothesized to exert a stronger pull on others to display complementary responses.

Previous research has focused on the interpersonal styles associated with different types of psychopathology. The research did not address the question of interpersonal rigidity in individuals with psychopathology and the effect this has on their interpersonal relationships. Research in the area of interpersonal style and psychopathology needs to examine the impact of the individuals interpersonal style on their interactions with others. Thus, a comprehensive study would not only identify the interpersonal styles of individuals with psychopathology, but would also measure their interpersonal rigidity and examine the strength of the pull they exert on the responses of others in their interpersonal interactions.

A related area of study is the relationship between interpersonal rigidity and positive regard. If individuals' interpersonal styles are a reflection of their self-concepts, then it would follow that individuals with rigid, inflexible interpersonal styles possess a very narrowly defined concept of self. The way in which they perceive themselves across all social interactions is as rigid as the repertoire of behaviours from which they draw on. Thus, their self-concepts are continuously vulnerable to information that is incongruent with how they perceive themselves. As a result, it would be expected that they would experience less positive regard for themselves and for others. Similarly, individuals who are consistently pulled to

change their behavior in response to another's interpersonal rigidity will likely experience diminished positive regard for self and the other.

The present study attempted to address the following issues:

(1) Interpersonal rigidity in the interpersonal styles of individuals who exhibit psychological disturbance.

(2) The degree to which interpersonal rigidity exerts a pull on the behaviours of others.

(3) The relationship between interpersonal rigidity and the degree of positive regard that individuals and their partners experience in their relationships.

In the present study, the IAS-R was used to measure the patterns of interpersonal behavior of individuals and a selected partner (either significant other or close friend). All participants completed three sets of IAS-R ratings, one for self in general, one for self in interactions with the identified other, and one describing their significant other. Participants also completed the short form of the Personality Assessment Inventory (PAI; Psychological Assessment Resources, Inc., 1991) and a brief measure of positive regard. The following predictions were tested:

(1) Individuals who evidence psychological disturbance will also evidence greater interpersonal rigidity.

(2) Individuals with higher rigidity scores will exert a greater pull for complementary behaviours from their partners, as evidenced in greater discrepancies between partners' general personality and their behavior with the individual.

(3) Individuals who evidence interpersonal rigidity will endorse lower positive regard for self and their partner.

(4) The partners of individuals with rigid interpersonal styles will also endorse lower positive regard for self and other.

Method

Participants

Participants were undergraduate students at Lakehead University enrolled in an Introductory Psychology course and their selected partners. The selected partners were not necessarily students themselves. There were 544 participants for a total of 272 dyads. Participants ranged in age from 18 years to 54 years.

Measures

IAS-R. The Revised Interpersonal Adjective Scales (IAS-R; Wiggins et al., 1988) is a 64 item questionnaire consisting of eight single adjectives (i.e., assertive, sympathetic) for each of the 8 poles on the interpersonal circumplex. In the present study, adjectives from only four of the subscales were used; Dominant, Hostile-Dominant, Friendly-Dominant, and Friendly. The rationale for using items from only four of the octants was outlined by O'Connor and Dyce in their 1997 paper. First, opposite poles on the interpersonal circumplex are supposed to be strongly negatively correlated. Theoretically, the correlations between opposite poles should be -1.00. Thus, in theory, the circumplex should be more properly sampled by measuring only non-opposite poles. Second, many of the items for the four remaining octants are redundant with the items from the four poles that are measured. Wiggins et al. (1989) simply added the prefix "un-" to the adjectives to complete their measure. As a result, participants tend to give corresponding ratings to those given to the original word (i.e., on the other side of the rating scale). In their study, O'Connor and Dyce (1997) demonstrated that the Dominance and Love dimensions are adequately sampled using only four of the eight subscales of the IAS-R.

In the present study, participants were asked to rate the descriptive accuracy of each of the items on an 8-point Likert scale ranging from "extremely inaccurate" to "extremely accurate" (see Appendix A). The individual ratings for the eight traits comprising each of the four subscales are summed and averaged to provide mean scores for four of the octants on the interpersonal circumplex. Mean scores for the remaining octants (Friendly-Submissive, Submissive, Hostile-Submissive, Hostile) are derived by subtracting the mean of the octant's counterpart from 8, the range of possible ratings (i.e., Submissive = 8 - mean Dominant score). Participants were asked to provide three separate IAS-R ratings; behavior of (1) Self-in-General, (2) Self-with-Other, and (3) Other-with-Self.

PAI-Short Form. The short form of the PAI (PAR, Inc., 1991) provides a measure of psychological disturbance. It consists of 174 statements that allude to different aspects of an individual's emotional, psychological, and interpersonal experience. On the original form of the PAI, individuals rate the accuracy of each statement in describing themselves on a four-point scale. In the present study, participants were asked to rate the accuracy of each statement in describing themselves using an 8-point Likert scale consistent with the one used for the IAS-R.

Specific items on the PAI are designed to tap into possible disturbance in an individual's emotional, psychological, and interpersonal functioning. Individual items are aggregated into subgroups which represent symptomatic patterns for specific emotional, psychological, and personality disturbances as specified in the PAI manual (Anxiety, Antisocial Personality, Borderline Personality, Depression, Mania, Obsessive-Compulsive, Paranoid, Phobia, Posttraumatic Stress, Somatization, and Schizophrenia). Scores are obtained for each of the scales by averaging the summed scores of the items within the subgroups.

Positive Regard. The measure for positive regard was the one used by O'Connor and Dyce (1997). The measure consists of eight statements pertaining to positive regard: four statements address individuals' perceptions of a specific other's positive sentiments towards them (Person A likes me, Person A respects me, Person A trusts me, and Person A likes to be with me) and four statements endorse positive sentiments towards the specific other (I like Person A, I respect Person A, I trust Person A, and I like to be with Person A). Participants were asked to rate the accuracy of these eight statements on an 8- point Likert scale, ranging from "1 = extremely inaccurate" to "8 = extremely accurate." Participants' ratings on the two sets of four statements were summed and then averaged to provide measures of positive regard for self and other respectively.

Procedure

Participants were approached in their psychology classes and given a brief description of the present study. Those who expressed interest in participating in the study were given a protocol package that included an introductory statement (see Appendix B), two consent forms (see Appendix C), two copies of the questionnaire, and two pre-addressed, postage-paid envelopes. They were instructed to complete one of the questionnaires themselves and to give the second questionnaire to a significant other of their choosing (i.e., friend or romantic partner) for completion. Subjects were instructed to complete the questionnaires separately and to return the individual questionnaires anonymously in the provided envelopes. Each questionnaire had been previously coded with numbers to match individuals with their partners.

Statistical Methods

Circle Placements. The formulas provided by Wiggins et al. (1989) were used to compute Dominance and Love factor scores for each of the three ratings provided on the IAS-R. The formulas provide an estimation of coordinate values by applying sine and cosine weights to the octants based on their direction and angular location within the interpersonal circle. By using the Dominance and Love axes as directional references, the two coordinate values provide a precise location of an individual within two-dimensional space. Angular location is an index of interpersonal behavior type, and distance from the origin of the circle is an index of rigidity in interpersonal behavioral style.

Deviations From Perfect Complementarity. Deviation from perfect complementarity (DFPC) is the degree to which the projected circle location of an individual's perfectly complementary other deviates from the other person's actual location. Two indices of DFPC were computed; one for the perfectly complementary other of Self-in-General (DFPC-SIG/OWS) and one for the perfectly complementary other of Self-with-Other (DFPC-SWO/OWS).

A complementary score is the Euclidean Distance between (1) the circle location of a perfectly complementary other person for a given individual, and (2) the circle location of the individual's significant other. The DFPC score is based on separate DFPC indices for the Dominance and Love dimensions. An example of the formula for the Love dimension is:

$$\text{DFPC-Love/SIG-OWS} = \text{abs}(\text{Love/SIG} - \text{Love/OWS})$$

For the Dominance dimension, the DFPC formula is:

$$\text{DFPC-Dom/SIG-OWS} = \text{abs}((0\text{-Dom/SIG}) - \text{Dom/OWS})$$

Refer to O'Connor and Dyce (1997) for a more detailed description of the computational procedures used to derive DFPC indices. Once the DFPC indices for the Dominance and Love dimensions are computed, then the formula for overall deviation from perfect complementarity on the two indices is:

$$\text{DFPC-SIG/OWS} = \text{sqrt}((\text{DFPC-Dom/SIG-OWS}^{**2}) + (\text{DFPC-Love/SIG-OWS}^{**2}))$$

$$\text{DFPC-SWO/OWS} = \text{sqrt}((\text{DFPC-Dom/SWO-OWS}^{**2}) + (\text{DFPC-Love/SWO-OWS}^{**2}))$$

Indices of Behavior Change. The two measures of participants' interpersonal behavior, one for Self-in-General and one for Self-with-Other, provide the basis for separate indices of behavior type. The potential difference between these two indices of behavior type was examined to assess the degree to which individuals were pulled to behave differently from their general personality when in the presence of specific others. When the behavior types for Self-in-General and Self-with-Other are represented by precise locations within two-dimensional space, then the distance between the two locations can be interpreted as the degree of change in behavior. The length of a straight line from the position of Person A's general interpersonal style to the position of Person A's interpersonal behavior with Person B is a precise Euclidean distance index of deviation from general personality. The absolute value of the difference between behavior in general for Person A and the behavior of Person A with a specific other, Person B, was computed on both the Dominance and Love coordinates. Euclidean distance

was then computed by applying the Pythagorean Theorem to the absolute difference scores for Dominance and Love:

$$\text{Euclidean Distance} = \sqrt{(\text{abs-dif-Dom}^2) + (\text{abs-dif-Lov}^2)}$$

A third index of deviation from complementarity was used to determine whether any change in interpersonal behavior towards Person B from the general personality of Person A was in a complementary direction. The direction of the difference was evaluated by subtracting DFPC-SWO/OWS from DFPC-SIG/OWS. Higher scores indicated more complementary-type change.

$$\text{DFPC/Direction} = (\text{DFPC-SIG/OWS}) - (\text{DFPC-SWO/OWS})$$

Interpersonal Rigidity. Interpersonal rigidity refers to the degree of flexibility individuals demonstrate in their interpersonal styles. The greater the rigidity the more inflexible individuals are in their ability to adapt their behavior to different interactional environments. The degree of interpersonal rigidity was determined by measuring the length of the straight line between participants' precise locations within the two-dimensional circular space and the center of the circle. The greater the vector length, the greater the interpersonal rigidity. Vector length was computed using the following formula:

$$\text{Vector Length} = \sqrt{(\text{Dom}^2) + (\text{Lov}^2)}$$

Rigidity scores were computed for: (1) Self-in-General, (2) Self-with-Other, (3) the perceived behavior of Other-with-Self, (4) Other-in-General and, (5) the actual behavior of Other-with-Self. The correlation between rigidity scores for

the perceived behavior of Other-with-Self and the actual rating of the behavior of Other-with-Self was significant, $r(541) = .54$, $p < .001$.

Corrections for Dyadic Interdependence. There has been some discussion among researchers as to the accuracy of using individual-level data in the analysis of data from dyads. Griffin and Gonzalez (1995) proposed that observed "overall" correlations in studies that examine interdependent dyads may reflect relations between variables at the individual level, the dyadic level, or a combination of both. They suggest that the degree of interdependence between dyadic partners must be taken into account in data analyses. Griffin and Gonzalez provide a formula that allows the observed correlations to be broken down into separate individual-level and dyad-level components. In the present study, the observed intraclass correlations were not significant on all of the variables with the exception of positive regard for other. The nonsignificance of the correlations indicate that any observed relation between variables was not the result of similarity among subjects. In general, the individual-level correlations were similar to the overall correlations. Consequently, it was decided to report only the corrected individual-level correlations and not the total correlations in the present study.

Results

Is Psychological Disturbance Associated With Interpersonal Rigidity?

Consistent with the research design used by Wiggins et al. (1989), participants were categorized into the IAS-R octants of interpersonal behavior. Correlations were then computed between rigidity scores within the octants and scores on the 11 PAI scales for psychological disturbance. Correlations were computed for both rigidity in general personality (SIG) and for behavior towards a specific other (SWO). It was expected that rigidity would be associated with symptoms of specific psychological disturbances as reflected in higher scores within the PAI scale. There was some support for this prediction (see Tables 2 and 3). Higher scores on some PAI scales were significantly associated with rigid expressions of interpersonal behavior. For example, individuals who endorsed a high level of anxiety exhibited a rigid hostile-submissive behavioral style in their general personality. Higher scores on the schizophrenia scale were positively correlated with rigidity in both hostile and hostile-dominant behavior styles and negatively correlated with rigidity in friendly and friendly-submissive behavior styles.

In addition, higher scores within the PAI scales were associated with expressed rigidity in different behavior types depending on whether subjects were rating behavior in general or towards a specific other. Higher scores on the mania scale were positively correlated with rigidity in dominant and hostile-dominant behavior types in Self-in-General ratings. However, in ratings for Self-with-Other, higher scores on the mania scale were positively correlated with rigidity in friendly-dominant behavior type. Higher scores on the depression scale were not significantly related to rigidity among any behavior types for Self-in-General. In contrast, higher scores on the depression scale correlated positively with rigidity in

the dominant behavior type and negatively with rigidity in the submissive behavior type for ratings of Self-with-Other.

Is Behavior With Specific Others Different From Individuals' General Personality?

A one sample t -test was computed on the Euclidean Distance index of deviation from general personality to evaluate the statistical significance of the difference between individuals' personality in general and behavior with specific others.

There was a significant difference between general personality and interpersonal behavior with a specific other, $t(542) = 40.87$, $p < .001$ (two-tailed).

Correlations between interpersonal rigidity scores and the Euclidean Distance measure of behavior change were computed to evaluate the relation between rigidity in interpersonal behavior and the extent to which an individual is pulled to behave differently from general personality in interactions with a specific other. It was expected that individuals who evidence more rigidity in their interpersonal styles would exhibit less pull to behave differently with a specific other from their general personality. It was also predicted that individuals would experience a stronger pull to change their behavior with a specific other from their general personality when specific others evidenced greater rigidity in their interpersonal behavior.

Contrary to expectations, individuals who exhibited greater rigidity both in their general personality and in their interpersonal behavior towards a specific other evidenced greater discrepancies between their ratings of behavior for Self-in-General and Self-with-Other, $r(543) = .47$, $p < .001$ and $r(543) = .28$, $p < .001$ respectively. However, consistent with predictions, individuals evidenced greater discrepancies between in their Self-in-General ratings and their Self-with-Other ratings when they perceived their partners as being rigid in their behavior towards them, $r(541) = .17$, $p < .001$. Similarly, the more rigidity evidenced by specific

others in their general personality the greater the discrepancies between individuals' ratings of behavior for Self-in-General and Self-with-Other, $r(543) = .11$, $p < .01$.

When Individuals Behave Differently With Specific Others Relative to Their General Personality, are the Differences in the Directions That Complement the Other Person?

A one sample t -test was computed on the measure of the direction of change in behavior towards specific other from general personality to evaluate whether the difference was in a complementary direction. The change in behavior towards more complementary responding was marginally significant, $t(542) = 1.72$, $p < .086$ (two-tailed).

Correlations between interpersonal rigidity scores and the degree of complementary-type change in behavior towards a specific other were computed to evaluate the relation between rigidity in interpersonal behavior and individuals' tendencies to change their behavior towards a specific other in a direction that complements the other person. It was predicted that individuals who evidence greater rigidity in their interpersonal behaviours will evidence less complementary type change in their behavior towards a specific other. Conversely, it was predicted that individuals would evidence more complementary type change when specific others evidenced greater rigidity in their interpersonal behaviours.

Contrary to predictions, greater interpersonal rigidity in general personality correlated positively with more complementary-type change in behavior towards a specific other, $r(541) = .47$, $p < .001$. Similarly, individuals who perceived specific others as being more rigid in their behavior towards them reported less complementary-type change in their behavior towards their partner, $r(541) = -.23$, $p < .001$. However, consistent with predictions, greater interpersonal rigidity in

behavior towards a specific other correlated negatively with complementary-type change in behavior towards this person, $r(541) = -.50$, $p < .001$.

Are Individuals Pulled to Behave Differently More When There is Less Complementary Between Self and Specific Other?

Deviation from perfect complementarity scores for self in general (DFPC-SIG/OWS) were used as indices for the degree of complementarity between self and specific other. Higher scores indicate less complementarity between the behavior of self in general and the behavior of a specific other with self. Euclidean Distance was used as a measure of the discrepancy between ratings of behavior for Self-in-General and Self-with-Other. Higher scores indicated a greater difference in behavior for Self-in-General and Self-with-Other. A measure of the direction of any change in behavior evaluated whether the difference was towards more complementary responding. Higher scores indicated more complementary-type change.

Correlations were computed between the three variables to evaluate whether individuals experience a greater pull to behave differently towards specific others from general personality, and in a more complementary-type direction, when there is less complementarity between self and specific other. When there is less complementarity, there is a greater pull to behave differently with specific other from general personality, $r(541) = .33$, $p < .001$. Furthermore, the pull to behave differently is in a direction that supports a more complementary-type change in behavior, $r(541) = .32$, $p < .001$.

Complementarity Between Self and Specific Other and Interpersonal Rigidity

Correlations were computed between DFPC-SIG/OWS scores as an index of complementarity between self and specific other and rigidity scores for Self-in-

General, Self-with-Other, Other-in-General, and Other-with-Self. Lower DFPC-SIG/OWS scores indicate greater complementarity. Higher rigidity scores indicate greater interpersonal rigidity. Rigidity in general behavior and in behavior toward a specific other was significantly correlated with the degree of complementarity between self and other, $r(541) = .63, p < .001$ and $r(541) = .46, p < .001$ respectively. Similarly, there is less complementarity within the relationships where the specific others exhibit rigidity both in their general personality and with their partners, $r(541) = .10, p < .02$ and $r(541) = .13, p < .001$ respectively.

Interpersonal Rigidity, Complementarity, and Positive Regard for Self and Specific Other.

Correlations were computed between interpersonal rigidity scores for Self-in-General, Self-with-Other, and perceived behavior of Other-with-Self, and measures of positive regard for self and specific other (see Table 4). Rigidity in general personality was not significantly related to positive regard for self or other, $r(543) = -.03, p < .61$ and $r(540) = -.04, p < .48$ respectively. However, greater rigidity in behavior towards a specific other was related to lower positive regard both for self and the specific other, $r(543) = -.16, p < .01$ and $r(540) = -.14, p < .02$ respectively. Similarly, when the behavior of the specific other toward self was perceived as being rigid then individuals endorsed lower positive regard for self and specific other, $r(541) = -.16, p < .01$ and $r(540) = -.19, p < .01$ respectively. Actual rigidity in the specific other's behavior toward self was also significantly related to lower positive regard for both self and specific other, $r(542) = -.14, p < .001$ and $r(540) = -.15, p < .001$ respectively.

Correlations were computed between the DFPC-SIG/OWS index for complementarity and measures of positive regard for self and specific other to evaluate the relation between the degree of complementarity between individuals

and specific other and the level of positive regard individuals endorse for self and specific other. Lower scores on the DFPC-SIG/OWS index indicate greater complementarity between self and specific other. Complementarity between self and specific other was negatively correlated with greater positive regard for self and specific other, $r(543) = -.11$, $p < .07$ and $r(540) = -.16$, $p < .01$ respectively.

Correlations between positive regard for self and specific other and Euclidean Distance were computed to evaluate the relation between positive regard for self and for specific other and the extent to which an individual is pulled to behave differently from general personality in interactions with the specific other. Positive regard for self and for specific other was negatively correlated with the difference between behavior in general and with specific other, $r(543) = -.12$, $p < .06$ and $r(542) = -.06$, $p < .35$ respectively.

Discussion

Interpersonal theory states that individuals have a recurring pattern of interpersonal behaviours from which they draw on in their interactions with others. This pattern can be conceived as forming the basis of individuals' general personality; their interpersonal styles a reflection of their self-concepts. A primary assumption of interpersonal theory is that each person's behavior constrains subsequent behavior from others. Complementarity is the degree to which the behaviours of interactants fit together in a prescribed way. It is a bi-directional process with each interactant exerting a pull for complementary-type responses from the other. Thus, interactions can be conceived as dynamic interpersonal dances with each interactant inviting the other to modify his or her step to their own and creating a mutually satisfying rhythm. Continuing with the music metaphor, each individual may have a melody that is uniquely his or her own but the individual is able to adjust the cadence of his or her song to harmonize with the song of the other participant without losing the integrity of each participants' composition.

Interpersonal Rigidity and Psychological Disturbance

According to interpersonal theory, individuals adjust their interpersonal styles to fit the demands of interactional situations while maintaining the integrity of their self-concepts. Psychologically unhealthy individuals are believed to exhibit greater interpersonal rigidity, which is characterized by an extreme, inflexible, and maladaptive interpersonal style.

The present study examined the relation between interpersonal rigidity and emotional or psychological distress. Wiggins and associates (Wiggins, Phillips, & Trapnell, 1989) proposed that rigidity in specific interpersonal styles could be

conceived as an index for psychopathology. Most, if not all, emotional and psychological disturbances impact on an individual's perception of self, other, environment, and experience, often limiting the filter through which the individual interprets information. If individuals' interpersonal styles are a reflection of their self-concepts then the rigidity of their interactional patterns can be conceived as reflecting their constricted perception of self resulting from psychological disturbance.

Research has indicated some support that personality disorders are associated with specific interpersonal styles (Wiggins & Pincus, 1989) and that interpersonal problems are related to interpersonal behaviours (Wiggins, Phillip, & Trapnell, 1989). Furthermore, Wiggins et al. (1989) found support for their hypothesis that rigidity can be conceived as an index of psychopathology within certain IAS-R diagnostic groups. When they compared rigidity within the eight behavior types represented in the interpersonal circumplex with individuals' scores on Lanyon's Psychological Screening Inventory, they found rigidity in specific interpersonal styles to be significantly related to three of the scales; Social Nonconformity, Discomfort, and Expression.

Consistent with prior research, individuals in the present study who endorsed emotional or psychological disturbance also evidenced rigidity in their interpersonal styles. Moreover, there was some support that specific psychological disturbances were related to rigidity in specific behavior types. Generally, individuals expressed rigidity in interpersonal styles that would predictably be associated with the specific psychological disturbance. For example, individuals who scored high on anxiety evidenced rigidity within a hostile-submissive interpersonal style. This finding is consistent with previous research which found anxiety to be correlated with submissive, mistrusting, and inhibited behavioral

styles (Shean & Uchenwa, 1990) and an aloof-introverted interpersonal style (Wiggins et al, 1989).

Higher scores on the PAI scale for mania were associated with rigidity within the hostile-dominant interpersonal style for Self-in-General ratings of behavior. Mania was also significantly correlated with rigidity within the friendly-dominant interpersonal style for ratings of behavior for Self-with-Other. In a previous study (Wiggins et al., 1989), the Expression scale of the PSI, which measures the dimension of undercontrol, impulsivity, or extraversion, correlated significantly with both hostile-dominant and friendly-dominant interpersonal styles.

It is interesting to note that rigidity in different interpersonal styles was related to different expressions of psychological disturbance depending on whether behavior was being rated for Self-in-General or with a specific other. This difference suggests that the association between specific types of psychological disturbance and rigidity in the expression of certain interpersonal styles is dependent on the interactional demands of the situation or relationship. For example, persons who express a high level of mania may interact with their general environment from a dominant or hostile-dominant interpersonal perspective. However, in their interactions with specific others in their lives, they may adjust their interpersonal style to one of friendly-dominance in an attempt to receive greater benefits from the relationship and to better fit the demands of the interaction.

Interpersonal Rigidity and Complementary Responding

Our interactions with others are analogous to interpersonal dances with each participant exerting a pull for complementary responding from the other. In these dances we each adjust our steps to fit with the step of our partner. The individuals in the present study indicated that they modified the behavior of their general interpersonal styles in their interactions with a specific partner. Furthermore,

although not significant, the direction of this change was towards more complementary-type behavior.

Tracey (1993) offers a possible explanation for the inability of various studies to find significant support for complementary responding. He proposed that complementary responding should be conceived as probabilistic behavior rather than deterministic behavior. He also suggested that not all behaviours have equal eliciting power. For example, because there is a social expectation to engage in friendly behavior it would not be expected that hostile behavior would have the same power to elicit complementary responses as friendly behavior. When Tracey controlled for base-rates of both antecedent and subsequent behaviors he found support for both positive (friendly) complementarity and negative (hostile) complementarity. His results also indicated that individuals adjusted their behavior to complement their partner probabilistically. In other words, they altered the proportion of their behaviours towards the complement. Thus, the observed trend of individuals in the present study to change their behavior towards the complement may have achieved significance if negative and positive complementarity were examined separately and base-rates for both antecedent and subsequent behaviours were factored into the analysis.

Individuals with rigid interpersonal styles are hypothesized to exert a stronger pull on others to display complementary responses while exhibiting an inability to adjust their own behavior to fit the demands of the interactional situation. Such individuals are like the dancer who only knows one step. Regardless of variations in the music, the dancer moves with the same step and forces the partner to follow his or her lead.

Consistent with expectations, the individuals in this study did report more change in their behavior towards a specific other from their general personality when their partners demonstrated greater rigidity in their interpersonal styles. This

result was even stronger when individuals perceived their partners as being specifically rigid in their behavior towards them. This suggests that how individuals perceive and interpret another's behavior towards them may have a greater impact on how they respond with subsequent behavior than the actual antecedent behavior. It also lends support to Carson's (1969) speculation that individual differences in cognitive and emotional processes may affect the ability of the behavior of one individual to constrain the subsequent behavior of another individual.

Contrary to expectations, individuals who exhibited rigidity in their interpersonal styles also reported a difference in their behaviours towards a specific other from their general personality. It should be emphasized that the difference in behavior was based on subjective rather than objective ratings of behavior. Thus, although individuals with rigid interpersonal styles may have perceived that they changed their behavior with a specific other, their behavior may not have, in fact, been significantly different from their general interpersonal styles. It should also be noted that, although these individuals reported changing their behavior towards a specific other from their general personality, they endorsed a high level of interpersonal rigidity both in their behavior in general and towards the specific other. Thus, although they may change their pattern of interpersonal behavior across interactional situations they appear to demonstrate a consistency in the limited and inflexible range of behaviours expressed either in general or with a specific partner.

Analysis of the relationship between interpersonal rigidity and the degree of complementary-type change in behavior towards specific other from general personality yielded conflicting results. Interpersonal theory would predict that individuals who exhibit rigidity in their interpersonal styles will not demonstrate complementary-type change in their behaviours towards specific others. Likewise,

when individuals perceive their partners as being rigid in their behavior towards them it would be expected that they would experience a greater pull to change their behavior in a complementary direction. Neither prediction was supported in this study. Individuals who perceived their partners as being rigid in their behavior towards them did not engage in more complementary responding. In addition, individuals who exhibited greater interpersonal rigidity in their general interpersonal styles demonstrated more complementary-type change in their behaviours towards their partners. However, consistent with interpersonal theory, individuals who exhibited rigidity in their behaviours towards their partners did not change their behavior in a complementary direction.

The contradictory findings between interpersonal rigidity and complementary-type change in behavior may be partially explained by the degree of complementarity already present in the relationship between individuals and their partners. Complementarity is defined as the degree to which the behaviours of interactants fit together in a prescribed way. Interpersonal theory states that in every interaction each participant is exerting a pull on the other to elicit subsequent behaviours which confirm or validate the individual's self-concept. The greater the complementarity between individuals and their partners the greater their behaviours fit in a prescribed way. If there is already a high degree of complementarity present between the interactants, then it would be expected that there would be less pull to change either behavior in a complementary-type direction. This hypothesis was inversely supported in the present study. When there is less complementarity between individuals and their partners, individuals experience a greater pull to change their behavior towards their partners from their general interpersonal styles and the change is in a more complementary-type direction.

The apparent inconsistency in the contradictory results regarding rigidity in interpersonal styles, in behavior towards a specific partner, and in complementary

responding may suggest that the experience and effect of rigidity on behavioral expression are not the same across interpersonal interactions and dynamics.

Although individuals who evidence rigidity in their general personality are likely to exhibit rigidity in their interactions with specific partners, the way in which they express the rigidity in their behavior may be influenced by the type and nature of that specific relationship. Thus, although rigidity may generalize across interpersonal interactions, the dynamics of the specific relationship may influence the experience and expression of rigidity in that relationship. For example, an individual who is rigid in his general interpersonal style will likely evidence rigidity in his behaviours towards acquaintances, friends, and in a romantic relationship. However, he may be more inclined to change the limited range of behaviours from which he draws on depending on the perceived "pay off" and on how he perceives and defines his role within the relationship.

The influence of interpersonal rigidity on individual's propensity to change their behaviours may be subject to moderating variables similar to those proposed to effect the ability of one individual's behavior to constrain the subsequent behavior of another individual. In interpersonal theory the intensity of behavior has traditionally been assumed to be related to its eliciting power. However, Tracey (1994) argued that not all behaviours have equal eliciting power. Consequently, rigid or extreme antecedent behavior will not always elicit an equal complementary response. Tracey suggested that the social expectations placed on the desirability of different behaviours will have a moderating effect on the ability of the behavior to constrain the subsequent behavior of others. Carson (1969) and Kiesler (1991) proposed that status and roles should also be considered as potential moderating variables on complementary responding. How the individual and society define specific roles and the behavioral expectations implicit in the definition of these roles

may constrict the way in which the individual would respond in interactions. Status would have a similar effect on behavioral response.

The length of time in a relationship is generally agreed to have an impact on the expression of complementary responding (Carson, 1969; Kiesler, 1991; Nowicki & Manheim, 1991; Tracey, 1993). Duke and Nowicki (1982) proposed that there are four distinct stages of the relationship sequence; choice, beginning, deepening, and termination. Furthermore, they speculated that each of the four relationship phases demands "different requirements from interpersonal styles" (p. 86). The probability of complementary responding may be contingent on the demands of the particular stage of the relationship. In a study examining the time required for complementarity to make its impression on a relationship, Nowicki and Manheim (1991) demonstrated that the positive effects of complementary interactions were reflected in longer as opposed to shorter term relationships. Similarly, Tracey (1993) argued that behavior in the early stages of a relationship, when there is less familiarity, will be influenced more by social norms and thus complementarity (negative complementarity in particular) may not be as evident. It may be necessary to factor the variable of time into any analysis of complementarity in order to determine a significant effect.

Interpersonal Rigidity and Positive Regard

It was hypothesized that individuals who exhibit rigid, inflexible interpersonal styles likely possess a narrowly defined concept of self. In the same way that they cannot adjust their behavior to fit the demands of the interaction they are unable to modify their self-concepts across different interpersonal situations and relationships. As such, they are continuously vulnerable to information that is incongruent with their rigid self-concepts. It was posited that this vulnerability would be expressed in diminished positive regard both for self and for others.

Contrary to expectations, rigidity in general interpersonal styles was not related to positive regard either for self or other. However, interpersonal rigidity specifically in behavior towards a partner was significantly related to lower positive regard both for self and the partner. Thus, the way in which individuals behaved with a specific partner had more effect on their perception of themselves and the partner than how they related to others in general. Perhaps the threat to the brittle self-concept is only experienced in direct relationships with others.

Rigidity in general personality does not appear to impact on positive regard for self or other. Conversely, rigidity in behavior toward a specific other is related to lower positive regard both for self and other. The difference in these findings offers some interesting interpretations for the conflicting results concerning interpersonal rigidity and complementary responding. If rigidity in general personality does not significantly diminish the positive regard with which individuals perceive their partners then they may be more inclined to change their behavior in a more complementary direction in their interactions with the partner. Similarly, although individuals who display rigidity in their behaviours towards a specific partner will behave differently from their general personality in their interactions with the partner, their lower positive regard for the partner may inhibit their tendency to change their behavior in a complementary direction.

Our interpersonal styles are a reflection of our self-concepts. In our interactions with others we draw on a set pattern of behaviours congruent with our self-concepts and designed to elicit subsequent behavior from others which further validate these perceptions. Consistent with this premise individuals endorsed more positive regard for self and their partners when there was a higher level of complementarity between them. Thus, when the interpersonal styles of both interactants fit in a way that mutually supported their self-concepts they experienced greater positive regard for both self and other. Also as expected, the greater the

difference between behavior towards the partner from general personality, the less positive regard endorsed by individuals both for self and partner. In other words, individuals felt less positive towards themselves and their partners when they changed their behavior with their partner from their general interpersonal style. It could be interpreted that this decrease in positive regard results from an incongruence between their behavior with their partner and their self-concept.

Limitations and Recommendations for Future Research

The failure to find consistent support for complementary responding in the present study may be understood within the context of Tracey's (1993) assertion that complementary responding is probabilistic rather than deterministic. He also argued that friendly behavior will have significantly more constraining power on consequent behavior than hostile behavior due to the social expectations. Tracey demonstrated support for both positive (friendly) and negative (hostile) complementarity when base-rates were controlled for both behaviours.

In the present study, only the overall behavior was examined. As there is some indication in previous research that the eliciting power of behaviours on either pole of the Dominance and Love dimensions may vary, a more vigorous study of the existence of complementary responding would examine behaviours within the Dominance and Love dimensions independently. Although complementary responding may not be observed in overall ratings of behavior, support for complementary responding may be observed when behaviours along the two dimensions are examined separately.

The apparent inconsistency in the findings regarding rigidity and complementary responding may indicate an interaction with the type of relationship or the perceived demands of the relationship with a specific partner. Interpersonal theory would predict that individuals who evidence rigidity in their general

personality will not change their behavior in their interactions with a specific other. However, consistent support for this prediction was not demonstrated. These findings would suggest that the dynamics of interpersonal interactions are more complex than simple behavior-response and are subject to a number of moderating variables including setting, status differences, roles, individual differences in cognitive and emotional processes, and time in relationship. A more comprehensive analysis of the relation between interpersonal rigidity and complementarity in relationships would incorporate the potential effect of these moderating variables. The inconsistent findings in the present study would suggest that roles and time in relationship may have the greatest impact on behavior patterns with specific others, how rigidity is expressed, and the degree of complementary responding in interactions with the partner.

In our interactions with others, we behave in such a way that we communicate evoking or impact messages. These messages elicit or pull from others reactions or responses which in turn confirm, reinforce, or validate our conceptions of who we are. Our self-concepts are based in part on our perceptions of the roles we attribute to ourselves and others in our lives. If our perceptions of these roles are narrowly defined, then we will likely demonstrate a limited range of behaviours for each role. The limited range of behaviors for each role may be expressed as rigidity in that particular pattern of behavior. However, we may still be able to adjust our behavior to fit the perceived demands of that specific role. The effects of individuals' perceptions of their roles would be accounted for by examining behavior within specific types of relationships, "i.e.," friendship, romantic relationship, or co-worker.

Previous research has indicated that time in relationship has an impact on the positive effects of complementarity. The positive effects of complementary interactions are reflected in longer as opposed to shorter term relationships

(Nowicki & Manheim, 1991). In addition, the different stages within the course of relationships may demand different requirements from interpersonal styles (Duke and Nowicki, 1982). Thus, a more comprehensive study on interpersonal behavior, rigidity, and complementarity within significant relationships would also examine the length of time in the relationship.

Conclusions

In summary, the present study offered some support for the hypothesis that psychological disturbance is related to rigidity in interpersonal styles. Certain types of psychological disturbance appear to be related to specific behavior patterns. Furthermore, the type of behavior in which the rigidity is expressed seems to be dependent on whether the person is describing behavior in general or towards a specific partner.

The present study also supported the assumption of interpersonal theory that the behavior of one individual constrains the subsequent behavior of another individual. However, results on the relation between interpersonal rigidity and complementary responding appeared to be conflictual. Although individuals changed their behavior in response to partners interpersonal rigidity, rigidity in individuals interpersonal styles did not restrict their ability to change their behavior with their partners as predicted. When individuals changed their behavior with their partners from their general personality they tended to do so in a complementary direction. However, there was not consistent support for the predicted complementary response.

The apparent inconsistency of support for rigidity and complementary-type change in behavior was partially explained in an examination of the degree of complementarity already present in the relationship between individual and partner. The inter-relation of rigidity and positive regard for self and other was also posited

to influence the effect of rigidity on complementary responding. In addition, previous research has indicated that not all behaviours have the same eliciting power. Thus, regardless of the intensity of the antecedent behavior, an individual may not respond with the predicted complement behavior. When complementary responding is measured as probabilistic rather than deterministic then the support for complementarity becomes significant. Finally, it was posited that moderating variables including status, role, and time in relationship may effect the influence of rigidity on complementary responding.

References

- Alden, L. E., Wiggins, J. S., & Pincus, A. L. (1990). Construction of circumplex scales for the inventory of personal problems. Journal of Personality Assessment, *53*, 521-536.
- Anchin, J. C. & Kiesler, D. J. (1982). Handbook of interpersonal psychotherapy. Elmsford, NY: Pergamon Press.
- Andrews, J. D. W. (1990). Interpersonal self-confirmation and challenge in psychotherapy. Psychotherapy, *27*, 485-504.
- Blazer, J. A. (1963). Complementary needs and marital happiness. Marriage and Family Living, *25*, 89-95.
- Bluhm, C., Widiger, T. A., & Miele, G. M. (1990). Interpersonal complementarity and individual differences. Journal of Personality and Social Psychology, *58*, 464-471.
- Buss, D. M. (1985). Human mate selection. American Scientist, *73*, 47-51.
- Campbell, J. (1980). Complementarity and attraction: A reconceptualization in terms of dyadic behavior. Representative Research in Social Psychology, *11*, 74-95.
- Carson, R. C. (1969). Interaction concepts of personality. Chicago: Aldine.
- Coyne, J. C., Burchill, S. A. L., & Stiles, W. B. (1991). An interactional perspective on depression. In C. R. Snyder & D. R. Forsyth (Eds.), Handbook of social and clinical psychology (pp. 327-349). Elmsford, NY: Pergamon Press.
- Fishbein, M. D. & Thelen, M. H. (1981). Psychological factors in mate selection and marital satisfaction: A review. Catalog of Selected Documents in Psychology, *11*, 84.

Friedlander, M. L. (1993). Does complementarity promote or hinder client change in brief therapy? A review of the evidence from two theoretical perspectives. The Counseling Psychologist, *21*, 457-486.

Henry, W. P., Schacht, T. E., & Strupp, H. H. (1986). Structural analysis of social behavior: Application to a study of interpersonal process in differential psychotherapeutic outcome. Journal of Consulting and Clinical Psychology, *54*, 27-31.

Hobart, C. W. & Lindholm, L. (1963). The theory of complementary needs: A reexamination. Pacific Sociological Review, *6*, 73-79.

Kerckhoff, A. C. & Davies, K. E. (1962). Value consensus and need complementarity in mate selection. American Sociological Review, *27*, 295-304.

Kiesler, D. J. (1982). Interpersonal theory for personality and psychotherapy. In J. C. Anchin & D. J. Kiesler (Eds.), Handbook of interpersonal psychotherapy. Elmsford, NY: Pergamon Press.

Kiesler, D. J. (1983). The 1982 Interpersonal Circle: A taxonomy for complementarity in human transactions. Psychological Review, *90*, 185-214.

Kiesler, D. J. (1985). The Maladaptive Transaction Cycle. Unpublished figure. Richmond: Virginia Commonwealth University.

Kiesler, D. J. (1986). Interpersonal methods of diagnosis and treatment. In J. O. Cavenoar (Ed.), Psychiatry. Philadelphia: Lippincott.

Kiesler, D. J. (1988). Therapeutic metacommunication: Therapist impact disclosure as feedback in psychotherapy. Palo Alto, California: Consulting Psychologists Press, Inc.

Kiesler, D. J. (1991). Interpersonal methods of assessment and diagnosis. In C. R. Snyder & D. R. Forsyth (Eds.), Handbook of social and clinical psychology (pp. 438-468). Elmsford, NY: Pergamon Press.

Kiesler, D. J., Van Denburg, T. F., Sikes-Nova, V. E., Larus, J. P., & Goldston, C. S. (1990). Interpersonal behavior profiles of eight cases of DSM-III Personality Disorder. Journal of Clinical Psychology, *46*, 440-453.

Leary, T. (1957). Interpersonal diagnosis of personality. New York: Ronald.

Marcus, D. K. & Holahan, W. (1994). Interpersonal perception in group therapy: A social relations analysis. Journal of Consulting and Clinical Psychology, *62*, 776-782.

Moskowitz, D. S. (1994). Cross-situational generality and the interpersonal circumplex. Journal of Personality and Social Psychology, *66*, 921-933.

Moskowitz, D. S., Suh, E. J., & Desaulniers, J. (1994). Situational influences on gender differences in agency and communion. Journal of Personality and Social Psychology, *66*, 753-761.

Nowicki, S. & Manheim, S. (1991). Interpersonal complementarity and time of interaction in female relationships. Journal of Research in Personality, *25*, 322-333.

O'Connor, B. P. & Dyce, J. (1997). Interpersonal rigidity, hostility, and complementarity in musical bands. Journal of Personality and Social Psychology, *72*, 362-372.

Orford, J. (1986). The rules of interpersonal complementarity: Does hostility beget hostility and dominance, submission? Psychological Review, *93*, 365-377.

Pascal, H. J. (1974). Need interaction as a factor in marital adjustment. Unpublished manuscript. University of Miami.

Psychological Assessment Resources, Inc. (1991). Personality Assessment Inventory.

Shean, G. & Uchenwa, U. (1990). Interpersonal style and anxiety. The Journal of Psychology, 124, 403-408.

Strong, S. R. (1987b). Interpersonal influence theory and therapeutic interactions. In F. R. Dorn (Ed.), Social influence processes in counseling and psychotherapy (pp. 17-30). Springfield, IL: Charles C. Thomas.

Strong, S. R., Hills, H. I., Kilmartin, C. T., DeVries, H., Lanier, K., Nelson, B. N., Strickland, D., & Meyer III, C. W. (1988). The dynamic relations among interpersonal behaviors: A test of complementarity and anticomplementarity. Journal of Personality and Social Psychology, 54, 798-810.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.

Tracey, T. J. (1993). An interpersonal stage model of the therapeutic process. Journal of Counseling Psychology, 40, 396-409.

Tracey, T. J. (1994). An examination of the complementarity of interpersonal behavior. Journal of Personality and Social Psychology, 67, 864-878.

Tracey, T. J. & Ray, P. B. (1984). The stages of successful time-limited counseling: An interactional examination. Journal of Counseling Psychology, 31, 13-27.

Tracey, T.J., Sherry, P. & Albright, J. M. (1999). The interpersonal process of cognitive-behavioral therapy: An examination of complementarity over the course of treatment. Journal of Counseling Psychology, 46, 80-91.

White, S. G. & Hatcher, C. (1984). Couple complementarity and similarity: A review of the literature. American Journal of Family Therapy, 12, 15-25.

Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. Journal of Personality and Social Psychology, 37, 395-412.

Wiggins, J. S. (1982). Circumplex models of interpersonal behavior in clinical psychology. In P. C. Kendall & J. N. Butcher (Eds.), Handbook of research methods in clinical psychology (pp. 183-221). New York: Wiley.

Wiggins, J. S., Phillips, N., & Trapnell, P. (1989). Circular reasoning about interpersonal behavior: Evidence concerning some untested assumptions underlying diagnostic classification. Journal of Personality and Social Psychology, 56, 296-305.

Wiggins, J. S., Trapnell, P., & Phillips N. (1988). Psychometric and geometric characteristics of the Revised Interpersonal Adjective Scales (IAS-R). Multivariate Behavioral Research, 23, 517-530.

Winch, R. F. (1958). Mate selection: A study of complementary needs. New York: Harper & Brothers.

Table 1

Description of Variables

Variable Name	Description
Euclidean Distance	The difference between two points on the circle (i.e., behavior in general and behavior with a specific other).
DFPC/Direction	The direction of change in behavior towards complementary responding when an individual behaves differently from general behavior with a specific other.
Rigidity/Vector Length	Extreme and inflexible behavioral style.
DFPC-SIG/OWS	A deviation index of complementarity between individuals' general interpersonal styles and the behavior of a specific other towards them. An index of the level of complementarity within the relationship.

Table 2

Correlations Between PAI Scales and Interpersonal Rigidity for the
Individuals in Each Octant for Behavior in General

PAI scales	<u>Behavior Styles</u>							
	Dominant (N=78)	Hostile- Dominant (N=72)	Hostile (N=57)	Hostile- Submissive (N=44)	Submissive (N=70)	Friendly- Submissive (N=93)	Friendly (N=64)	Friendly- Dominant (N=65)
Anxiety	-.03	-.22	.02	.37*	.04	-.07	-.10	-.01
Anti- Social	.02	.09	.36*	-.08	-.05	-.06	-.11	-.13
Borderline	.16	.10	.25	.09	-.12	-.22*	-.18	.06
Depression	.14	.04	.07	.27	-.09	-.15	.26	.02
Mania	.35*	.23*	-.10	-.04	-.41*	.04	.11	.04
Paranoia	.07	.05	.25	.06	.02	-.10	-.06	-.07
Phobia	-.08	-.05	-.02	.26	.00	-.04	-.20	-.08
PTSD	.22*	-.05	-.01	.14	.01	-.16	.15	-.11
Obsessive- Compulsive	.12	.10	.15	.20	.09	-.10	-.20	.01
Somatization	.10	-.20	-.07	-.06	.05	-.05	-.21	.11
Schizophrenia	.06	.32*	.31*	.28	-.04	-.26*	-.27*	-.16

Note. *p. < .05, decimals omitted.

Table 3

Correlations Between PAI Scales and Interpersonal Rigidity for the
Individuals in Each Octant for Behavior With Specific Other

PAI Scales	<u>Behavior Styles</u>							
	Dominant (N=100)	Hostile- Dominant (N=41)	Hostile (N=36)	Hostile- Submissive (N=98)	Submissive (N=94)	Friendly- Submissive (N=46)	Friendly (N=42)	Friendly- Dominant (N=85)
Anxiety	17	-14	-40*	04	-01	-14	16	16
Anti- Social	13	01	-21	-03	-28*	03	00	10
Borderline	18	-07	-15	06	07	-10	19	17
Depression	22*	-19	-21	14	-25*	-08	-07	14
Mania	05	-14	29	-22*	-20*	03	-11	28*
Paranoia	25*	-01	-33*	00	-15	-20	03	07
Phobia	18	-23	-30	07	-07	-25	17	11
PTSD	15	-03	03	06	00	09	05	19
Obsessive- Compulsive	11	-27	-31	14	-12	-28*	13	14
Somatization	19	00	-34*	-03	-15	-20	10	13
Schizophrenia	17	-18	-22	01	-11	-14	18	20

Note. *p. < .05, decimals omitted.

Table 4

Correlations Between Interpersonal Rigidity and Other Variables

Variables	<u>Rigidity</u>				
	SIG	SWO	Perceived OWS	OIG	OWS
Euclidean Distance	.47*	.28*	.17*	.11*	---
Direction of Change	.47*	-.50*	-.23*	---	---
DFPC-SIG/OWS	.63*	.46*	---	.10*	.13*
Positive Regard/Self	-.03	-.16*	-.16*	-.14*	---
Positive Regard/Other	-.04	-.14*	-.19*	-.15*	---

Note: *p. < .05; SIG = Self-in-General, SWO = Self-with-Other, Perceived OWS = Perceived Other-with-Self, OIG = Other-in-General, OWS = Other-with-Self.

Euclidian Distance = difference in behavior with specific other from general personality

Direction of Change = in behavior with specific other towards complementary-type responding

DFPC-SIG/OWS = an index of the level of complementarity within the relationship

Appendix A
Questionnaire

Sex: Male Female

Birth Date: month _____ day _____ year

Height: _____

Eye Color: _____

Birth Order (i.e., 1st born, 2nd born, etc.) I was my mother's _____ child.

My mother had a total of _____ children.

There are no right or wrong, good or bad, answers to any of the questions below. Please just give the most accurate, truthful response for you. Your responses will be scored by computer and will remain anonymous and confidential. If you find any of the questions too personal you do not have to respond, although it would be most helpful to us if you answered every question. There is no time limit for completing the questions, but it is best to work as rapidly as is comfortable for you. Your first impression of each item is probably correct. Using the 1-8 scale below, please rate the accuracy of each of the following items by placing the appropriate number on the dash beside each item.

1	2	3	4	5	6	7	8
extremely	very	quite	slightly	slightly	quite	very	extremely
inaccurate	inaccurate	inaccurate	inaccurate	accurate	accurate	accurate	accurate

Please indicate how accurately the following adjectives describe you in general.

___ forceful	___ calculating	___ tender	___ self-assured	___ irritable
___ wily	___ assertive	___ extroverted	___ crafty	___ afraid
___ softhearted	___ tenderhearted	___ domineering	___ persistent	
___ neighbourly	___ cocky	___ jovial	___ tricky	
___ cunning	___ cheerful	___ boastful	___ kind	
___ friendly	___ charitable	___ sly	___ perky	
___ outgoing	___ accommodating	___ gentlehearted	___ enthusiastic	
___ firm	___ sympathetic	___ self-confident	___ dominant	
___ enthusiastic	___ interested	___ excited	___ alert	
___ attentive	___ upset	___ distressed	___ nervous	

Now please rate the accuracy of the following statements.

- | | |
|---|---|
| <input type="text"/> In most ways my life is close to ideal. | <input type="text"/> The conditions of my life are excellent. |
| <input type="text"/> So far I have gotten the important things I want in life. | <input type="text"/> If I could live my life over, I would change almost nothing. |
| <input type="text"/> I am satisfied with my life. | <input type="text"/> On the whole, I am satisfied with myself. |
| <input type="text"/> I feel I do not have much to be proud of. | <input type="text"/> At times I think I am no good at all. |
| <input type="text"/> I am able to do things as well as most other people. | <input type="text"/> All in all, I'm inclined to feel that I am a failure. |
| <input type="text"/> I take a positive attitude toward myself. | <input type="text"/> I certainly feel useless at times. |
| <input type="text"/> I wish I could have more respect for myself. | <input type="text"/> I feel that I have a number of good qualities. |
| <input type="text"/> I feel that I'm a person of worth, at least on an equal plane with others. | |

The next questions are concerned with another person in your life (other than your parents), who will be referred to as "Person A." Hopefully, this individual will also have participate in the study with you. If Person A did not participate in the study, then please answer the questions below while thinking about a particular individual in your life.

- What is Person A's sex? Male Female
- What is Person A's birth date? month_____ day_____ year_____
- What is Person A's height?_____ What is Person A's eye color?_____
- Person A's birth order (i.e., 1st born, 2nd born, etc.)? Person A was his/her mother's _____ child.
- Person A's mother had _____ children.
- What is the nature of your relationship with your partner?
- | | | |
|---------------------------------------|---|---|
| <input type="checkbox"/> acquaintance | <input type="checkbox"/> friend | <input type="checkbox"/> sibling |
| <input type="checkbox"/> spouse | <input type="checkbox"/> romantic partner | <input type="checkbox"/> other (please specify) |
- How long have you known Person A? _____ years
- How well do you know Person A? (circle the appropriate number)
- | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|-----------|
| not very well | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very well |
|---------------|---|---|---|---|---|---|---|-----------|
- Did Person A also complete this questionnaire, describing you? yes no

Please indicate how accurately the following adjectives describe your behaviour towards Person A.

1	2	3	4	5	6	7	8
extremely	very	quite	slightly	slightly	quite	very	extremely
inaccurate	inaccurate	inaccurate	inaccurate	accurate	accurate	accurate	accurate

___ forceful	___ calculating	___ tender	___ self-assured	___ irritable
___ wily	___ assertive	___ extroverted	___ crafty	___ afraid
___ softhearted	___ tenderhearted	___ domineering	___ persistent	
___ neighbourly	___ cocky	___ jovial	___ tricky	
___ cunning	___ cheerful	___ boastful	___ kind	
___ friendly	___ charitable	___ sly	___ perky	
___ outgoing	___ accommodating	___ gentlehearted	___ enthusiastic	
___ firm	___ sympathetic	___ self-confident	___ dominant	
___ enthusiastic	___ interested	___ excited	___ alert	
___ attentive	___ upset	___ distressed	___ nervous	
_____ I like Person A		_____ I respect Person A		_____ I trust Person A
_____ I like to be with Person A				

Please indicate how accurately the following adjectives describe **Person A's behaviour towards you.**

1	2	3	4	5	6	7	8
extremely	very	quite	slightly	slightly	quite	very	extremely
inaccurate	inaccurate	inaccurate	inaccurate	accurate	accurate	accurate	accurate

___ forceful	___ calculating	___ tender	___ self-assured	___ irritable
___ wily	___ assertive	___ extroverted	___ crafty	___ afraid
___ softhearted	___ tenderhearted	___ domineering	___ persistent	
___ neighbourly	___ cocky	___ jovial	___ tricky	
___ cunning	___ cheerful	___ boastful	___ kind	
___ friendly	___ charitable	___ sly	___ perky	
___ outgoing	___ accommodating	___ gentlehearted	___ enthusiastic	
___ firm	___ sympathetic	___ self-confident	___ dominant	
___ enthusiastic	___ interested	___ excited	___ alert	
___ attentive	___ upset	___ distressed	___ nervous	
_____ Person A likes me		_____ Person A respects me		_____ Person A trusts me
_____ Person A likes to be with me				

1	2	3	4	5	6	7	8
extremely	very	quite	slightly	slightly	quite	very	extremely
inaccurate	inaccurate	inaccurate	inaccurate	accurate	accurate	accurate	accurate

Read each of the following statements carefully and indicate how well each statement describes you.

Give your own opinion of yourself. Be sure to answer every statement.

- ___ My friends are available if I need them.
- ___ I have some inner struggles that cause problems for me.
- ___ My health condition has restricted my activities.
- ___ I am so tense in some situations that I have great difficulty getting by.
- ___ I have to do some things a certain way or I get nervous.
- ___ Much of the time I'm sad for no real reason.
- ___ Often I think and talk so quickly that other people cannot follow my train of thought.
- ___ Most of the people I know can be trusted.
- ___ Sometimes I cannot remember who I am.
- ___ I have some ideas that others think are strange.
- ___ I was usually well-behaved at school.
- ___ I've seen a lot of doctors over the years.
- ___ I'm a very sociable person.
- ___ My mood can shift quite suddenly.
- ___ Sometimes I feel guilty about how much I drink.
- ___ I'm a "take charge" type of person.
- ___ My attitude about myself changes a lot.
- ___ People would be surprised if I yelled at them.
- ___ My relationships have been stormy.
- ___ At times I wish I were dead.
- ___ People are afraid of my temper.
- ___ Sometimes I use drugs to feel better.
- ___ I've tried just about every type of drug.
- ___ Sometimes I let little things bother me too much.
- ___ I often have trouble concentrating because I'm nervous.
- ___ I often fear I might slip up and say something wrong.
- ___ I feel that I've let everyone down.
- ___ I have many brilliant ideas.
- ___ Certain people go out of their way to bother me.

- ___ I just don't seem to relate to people very well.
- ___ I've borrowed money knowing I wouldn't pay it back.
- ___ Much of the time I don't feel well.
- ___ I often feel jittery.
- ___ I keep reliving something horrible that happened to me.
- ___ I hardly have any energy.
- ___ I can be very demanding when I want things done quickly.
- ___ People usually treat me pretty fairly.
- ___ My thinking has become confused.
- ___ I get a kick out of doing dangerous things.
- ___ My favorite poet is Raymond Kertezc.
- ___ I like being around my family.
- ___ I need to make some important changes in my life.
- ___ I've had illnesses that my doctors could not explain.
- ___ I can't do some things well because of nervousness.
- ___ I have impulses that I fight to keep under control.
- ___ I've forgotten what it's like to feel happy.
- ___ I take on so many commitments that I can't keep up.
- ___ I have been alert to the possibility that people will be unfaithful.
- ___ I have visions in which I see myself forced to commit crimes.
- ___ Other people sometimes put thoughts into my head.
- ___ I've deliberately damaged someone's property.
- ___ My health concerns are very complicated.
- ___ It's easy for me to make new friends.
- ___ My moods get quite intense.
- ___ I have trouble controlling my use of alcohol.
- ___ I'm a natural leader.
- ___ Sometimes I feel terribly empty inside.
- ___ I tell people off when they deserve it.
- ___ I want to let certain people know how much they've hurt me.
- ___ I've thought about ways to kill myself.
- ___ Sometimes my temper explodes and I completely lose control.
- ___ People have told me that I have a drug problem.
- ___ I never use drugs to help me cope with the world.
- ___ Sometimes I'll avoid someone I really don't like.
- ___ It's often hard for me to enjoy myself because I am worrying about things.

- I have exaggerated fears.
- Sometimes I think I'm worthless.
- I have some very special talents that few others have.
- Some people do things to make me look bad.
- I don't have much to say to anyone.
- I'll take advantage of others if they leave themselves open to it.
- I suffer from a lot of pain.
- I worry so much that at times I feel like I am going to faint.
- Thoughts about my past often bother me while I'm thinking about something else.
- I get quite irritated if people try to keep me from accomplishing my goals.
- I seem to have as much luck in life as others.
- My thoughts get scrambled sometimes.
- I do a lot of wild things just for the thrill of it.
- Sometimes I get ads in the mail that I don't really want.
- If I'm having problems, I have people I can talk to.
- I need to change some things about myself, even if it hurts.
- I've had numbness in parts of my body that I can't explain.
- Sometimes I am afraid for no reason.
- It bothers me when things are out of place.
- Everything seems like a big effort.
- Recently I've had much more energy than usual.
- Most people have good intentions.
- Since the day I was born, I was destined to be unhappy.
- Sometimes it seems that my thoughts are broadcast so that others can hear them.
- I've done some things that weren't exactly legal.
- It's a struggle for me to get things done with the medical problems I have.
- I like to meet new people.
- My mood is very steady.
- There have been times when I've had to cut down on my drinking.
- I would be good at a job where I tell others what to do.
- I worry a lot about other people leaving me.
- When I get mad at other drivers on the road, I let them know it.
- People once close to me have let me down.
- I've made plans about how to kill myself.
- Sometimes I'm very violent.
- My drug use has caused me financial strain.

- I've never had problems at work because of drugs.
- I sometimes complain too much.
- I'm often so worried and nervous that I can barely stand it.
- I get very nervous when I have to do something in front of others.
- I don't feel like trying anymore.
- My plans will make me famous someday.
- People around me are faithful to me.
- I'm a loner.
- I'll do most things if the price is right.
- I am in good health.
- Sometimes I feel dizzy when I've been under a lot of pressure.
- I've been troubled by memories of a bad experience for a long time.
- I rarely have trouble sleeping.
- Sometimes I get upset because others don't understand my plans.
- I've given a lot, but I haven't gotten much in return.
- Sometimes I have trouble keeping different thoughts separate.
- My behaviour is pretty wild at times.
- My favorite sports event on television is the high jump.
- I spend most of my time alone.
- I need some help to deal with important problems.
- I've had episodes of double vision or blurred vision.
- I'm not the kind of person who panics easily.
- I can relax even if my home is a mess.
- Nothing seems to give me much pleasure.
- At times my thoughts move very quickly.
- I usually assume people are telling the truth.
- I think I have three or four completely different personalities inside of me.
- Others can read my thoughts.
- I used to lie a lot to get out of tight situations.
- My medical problems always seem to be hard to treat.
- I am a warm person.
- I have little control over my anger.
- My drinking seems to cause problems in my relationships with others.
- I have trouble standing up for myself.
- I often wonder what I should do with my life.
- I'm not afraid to yell at someone to get my point across.

- ___ I rarely feel very lonely.
- ___ I've recently been thinking about suicide.
- ___ Sometimes I smash things when I'm upset.
- ___ I never use illegal drugs.
- ___ I sometimes do things so impulsively that I get into trouble.
- ___ Sometimes I'm too impatient.
- ___ My friends say I worry too much.
- ___ I'm not easily frightened.
- ___ I can't seem to concentrate very well.
- ___ I have accomplished some remarkable things.
- ___ Some people try to keep me from getting ahead.
- ___ I don't feel close to anyone.
- ___ I can talk my way out of just about anything.
- ___ I seldom have complaints about how I feel physically.
- ___ I can often feel my heart pounding.
- ___ I can't seem to get over something from my past.
- ___ I've been moving more slowly than usual.
- ___ I have great plans and it irritates me that people try to interfere.
- ___ People don't appreciate what I've done for them.
- ___ Sometimes it feels as if somebody is blocking my thoughts.
- ___ If I get tired of a place, I just pick up and leave.
- ___ Most people would rather win than lose.

Thank you for participating!

Appendix B

Cover Letter / Introductory Statement

I am a graduate student in psychology at Lakehead University and I am looking for people to participate in a study that I am conducting. The purpose of the study is to understand the relationship between judgments of general personality characteristics and judgments of interpersonal behaviour towards significant others in relationship pairs.

The study involves filling out a small package of questionnaires and should require about one hour of your time. We hope that you will be able to participate in this study with one other person who is significant to you, because there will be questions about yourself and this other person who is significant in your life. Your co-participant will be asked to fill out a similar package of questionnaires that should require the same amount of time to complete. When you are finished, please seal the questionnaires in the provided envelopes and return the envelopes to the researcher. Please do not show your responses to your co-participant.

Your responses will remain completely anonymous and confidential, and you will not be asked to sign your name on the questionnaire. There are no right or wrong, good or bad answers. Your participation in the study is completely voluntary and you may withdraw at any time. The data from all participants will be pooled and analyzed as a group, as the responses of any single individual are meaningful only in relation to the responses of others.

There are no risks and no direct benefits to you for participating in the study. The findings will merely help researchers understand relationships between personality and interpersonal behaviour. However, if you are interested, you may obtain a copy of the final results of the study by writing or calling me.

Lauren Mount
Department of Psychology
Lakehead University
Thunder Bay, Ontario, P7B 5E1
343-8441

Appendix C**Consent Form****Personality and Interpersonal Behaviour in Relationship Dyads**

I understand that the purpose of the study is to understand the relationship between judgments of general personality characteristics and judgments of interpersonal behaviour towards a significant other in my life.

I understand that participation in the study involves filling out a questionnaire and will require approximately one hour.

I understand that my responses will remain completely anonymous and confidential.

I understand that my participation in the study is voluntary and that I may withdraw at any time.

I understand that there are no direct benefits to me for participating in the study, and that there are no risks.

I understand that if I wish to obtain a copy of the final results, or if I have any questions concerning the study, I may contact Lauren Mount at Lakehead University (Dept. of Psychology, Thunder Bay, Ontario, P7B 5E1, 343-8441).

I have read this form carefully and I consent to participate in the above study.

Signature: _____

Name (please print): _____

Date: _____

Figure 1: Interpersonal Circle and Forms of Complementarity

