Four studies were conducted to investigate the relationship between communication and predictive accuracy. Subjects, students enrolled in various college speech and communication classes, completed the Allport-Vernon-Lindzey Study of Values, first in terms of their own values and then in terms of how they believed a specified target would respond. They also responded to the Conversation Self Report Inventory, which measures communication responsiveness and allows for the classification of communication patterns along mastery, flexible, and neural lines. In each study, subjects were placed into dyads and given one class session to get to know each other before completing the measures. Results indicated that (1) a communication encounter had a significant impact on predictive accuracy, (2) no single pattern of communication guaranteed success or failure in prediction making, (3) the same patterns of communication had differential effects on the prediction of similarities and differences for female and male predictors, (4) neutral rather than more responsive members of dyads were better predictors in newly formed dyads, and (5) communication responsiveness was positively related to communication satisfaction but inversely related to predictive accuracy. (FL)
ABSTRACT

COMMUNICATION RESPONSIVENESS AND PREDICTIVE ACCURACY: CONFIRMATIONS, SURPRISES, AND SPECULATIONS

by

Jim D. Hughey

This paper summarizes the results from four studies focusing on communication and predictive accuracy in zero-history dyads. The studies demonstrate (1) that a communication encounter has a significant impact on predictive accuracy, (2) that no single pattern of communication guarantees success or failure in prediction making, (3) that the same patterns of communication have differential effects on the prediction of similarities and differences for female and male predictors, (4) that neutral rather than more responsive members of dyads are better predictors in zero-history dyads, and (5) that communication responsiveness is positively related to communication satisfaction but inversely related to predictive accuracy. Implications for the teacher of interpersonal communication are highlighted.

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COMMUNICATION RESPONSIVENESS AND PREDICTIVE ACCURACY: CONFIRMATIONS, SURPRISES, AND SPECULATIONS

Although the teacher of interpersonal communication is confronted with a bewildering array of definitions when the term "empathy" is used (Johnson, Powell & Reynolds, 1983), there is substantial agreement among textbook writers that "prediction making" is fundamental to interpersonal communication (Dance & Larson, 1976; DeVito, 1983; Keltner, 1970; Miller & Steinberg, 1975; Patton & Giffin, 1980; Smith & Williamson, 1981; Verderber & Verderber, 1983). When considered within the context of interpersonal competence, prediction making receives considerable attention (Bochner & Kelly, 1974; Cupach & Spitzburg, 1983; Gudykunst, 1983; Johnson, 1983; Sillars & Scott, 1983; Wiemann, 1977; Wiemann & Backlund, 1980). However, efforts to demonstrate a substantial link between communication and predictive accuracy have had limited success (Larson, 1965; Smith, 1967; Mix, 1972; Ross, 1973; Northouse, 1977; Hill & Courtright, 1981).

We began our own research program exploring the relationship between communication and predictive accuracy back in 1968 (Hughey, 1982). Similar to most researchers in person perception, we began our quest with questions about the kinds of people who are accurate or inaccurate and expanded our exploration to include questions about how, why, and in what circumstances people are accurate or inaccurate (for a comprehensive review of the accuracy research, see Schneider, Hastorf & Ellsworth, 1979). Our original goal was to develop a communication inventory that
differentiated between accurate and inaccurate predictors. The current version of the inventory, the Conversation Self Report Inventory, measures communicative responsiveness and allows for the classification of communication patterns along Mastery (assertive), Flexible (harmonizing), and Neutral (nonresponsive) lines (Hughey, 1983). Our current efforts focus on the circumstances that lead to accurate or inaccurate predictions.

Our exploration has confirmed some things that the interpersonal textbooks had led us to expect about communication and predictive accuracy. In 1975, we summarized our findings that pointed to an intimate connection between Flexible Responsiveness and predictive accuracy along with communication satisfaction (Hughey & Johnson, 1975). But since that time, some of our expectations have been violated by the patterns that emerged in subsequent research. This combination of confirmation and surprise fueled our furnaces of speculation and made us fervent to give advice.

This paper addresses four questions.

Q1 What role does a communication encounter play in achieving predictive accuracy?

Q2 In terms of accuracy, who profits the most from a communication encounter?
   A. Do more responsive or less responsive communicators profit most?
   B. Do male or female communicators profit most?

Q3 Does communicative responsiveness function the same way in the accurate predictions of similarities and differences?

Q4 Does communicative responsiveness function the same way in achieving accurate predictions and communication satisfaction?

After an examination of some of the literature that influenced the development of our research questions, this paper outlines our research
strategies and summarizes the results from four separate studies focusing on communication and predictive accuracy in zero history dyads. The paper concludes with a discussion of five propositions drawn from the studies and highlights the implications of these propositions for the teacher of interpersonal communication.

REVIEW OF THE LITERATURE AND RESEARCH QUESTIONS

This section considers each of the research questions in the light of the literature concerning interpersonal sensitivity.

Q1. What role does a communication encounter play in achieving predictive accuracy?

In theory, a communication encounter should play a large, significant role in enhancing predictive accuracy. Reviews of the literature drawn from the general psychology of prediction document this anticipation (Peterson & Beach, 1967; Goldberg, 1968; Slovic & Lichtenstein, 1971; Fischhoff, 1976).

Communication encounters occupy a central position in Smith’s model (1966) of interpersonal sensitivity. The predictor’s interactions with the predictee, along with the predictor’s judging habits and knowledge of the other person, form Smith’s paradigm (1966) of predictive accuracy. By the same token, prediction making plays a central role in our theories of interpersonal communication. Miller and Steinberg (1975) make the ability to predict at the psychological level the distinguishing characteristic of interpersonal communication. Berger and Calabrese (1975) conclude that a central function of communication during the early stages of interaction in zero-history dyads is uncertainty reduction.

However, we were unable to locate any empirical evidence that predictions made following a communication encounter were any more
accurate than predictions made without the benefit of an encounter. Owing to the low relationships between communication patterns and accuracy reported in the literature (Larson, 1965; Smith, 1967; Mix, 1972; Ross, 1973; Northouse, 1977; Hill & Courtright, 1981), we wondered if a communication encounter, itself, might account for a small amount of the variance in accuracy.

Q2 In terms of accuracy, who profits the most from a communication encounter?

We were particularly interested in examining the communicative responsiveness and gender of the predictors. When we began our exploration in 1968, we believed that the Flexible Responsive predictor would be the most accurate, but we were unsure about the gender of the accurate predictor.

The Question of Communicative Responsiveness

Bochner (1981) and Parks (1981) have recently reminded us of "the way we were" in the 1960's; it all seemed so simple then. The ideological commitment of the era led us to believe that interpersonal communication meant interpersonal understanding which in turn meant "happily ever after" (Kidd, 1975). Ushering in the 1960's, Chance and Meaders (1960) set our research expectations by concluding that the interpersonally sensitive is "a person who is active and outgoing in social relationships, who likes other people but is not markedly dependent upon them, who is ascendant but not hostile and competitive, and who is not given to intellectual reflection about his interpersonal relationships. The picture is one of an individual who finds significant satisfactions in social activities and carries on his daily life with a minimum of interpersonal or intrapersonal conflict" (pp. 204-205). The profile is
remarkably similar to that of the interpersonally competent communicator (Bochner & Kelly, 1974; Wiemann, 1977).

In the first study to use the Flexible Responsive scale from the Conversation Self Report Inventory (CSRI), Roberts (1969) found Flexible Responsive sorority members to be better predictors than less Flexible Responsive members ($p < .05$). However, her measure of predictive accuracy was based on a total count of the number of correct predictions made by a sorority member.

Researchers like Chance and Meaders (1960) and Roberts (1969) can be criticized for using predictive measures that confound predictor-predictee similarities with predictor accuracy (Gomberg, 1960; Hobart & Fahlbert, 1965). In a classic confrontation, Dymond's measurement methodology (1948, 1950) was taken to task by Hastorf and Bender (1952). They demonstrated that the forecast of Dymond's predictor was related more to the predictor's own response system than to the target's response system, which smacks more of projection than empathy.

In an effort to avoid the pitfalls encountered by the early sensitivity researchers, most communication researchers have used the Empathy Ratio Score (ERS) as the measure of interpersonal sensitivity. The work of Hobart and Fahlbert (1955) suggests it is the appropriate measure of predictive accuracy for people who have a significant history of interacting with each other. The ERS is defined as the number of correct predictions a person makes of his/her partner's dissimilar responses divided by the number of statements on which the predictor and his/her partner have dissimilar responses.

However, communication researchers using the ERS or differential indices like the ERS have not demonstrated a simple, straightforward relationship between communication and interpersonal sensitivity.
Ronald Smith (1967) found no consistent relationship between patterns of communication and predictive accuracy in an industrial setting. Larson (1965), Max (1972), Ross (1973), and Northouse (1977) found instances where both high-threat and high-trust patterns of communication enhance predictive accuracy when areas of difference are the target of prediction. Hill and Courtright (1981) reported a low-order relationship between trust and the ERS \( r = .15 \). At best, when a significant relationship has been reported, it has been a low one.

Schneider, Hastorf, and Ellsworth (1979) conclude their review of the accuracy literature by writing: "Initially it seemed that accuracy ought to be correlated with a variety of personality measures, but this proved to be a disappointing line of approach" (p. 222). By switching our attention from "which communicator is the best predictor" to "which communicator profits the most from a communication encounter," we were able to focus more on the circumstances surrounding the prediction rather than the personality of the predictor. We firmly believed that the interpersonally competent (Flexible Responsive) communicator would profit the most from a communication encounter.

The Question of Gender

The role of gender in making predictions has been studied extensively (Allport, 1924; Fernberger, 1928; Guilford, 1929; Jenness, 1932; Vinnacke, 1949; Levy, 1964; Feshback & Roe, 1968). However, no clear pattern of predictive superiority has emerged for either gender. And none of the studies examined post-communication accuracy in relation to a person's typical level of accuracy.

Some of the current research on linguistic differences between the genders in same-sex and mixed-sex dyads offer some intriguing clues as to
who might profit most from a communication encounter prior to making predictions (Lakoff, 1973; Haas, 1979; Martin & Craig, 1983). Martin and Craig (1983) found male dyads and mixed-sex dyads followed the expected pattern when getting acquainted—high reciprocity with equal input from each partner. However, female-female dyads departed from the expected pattern: one person always dominated the conversation which led to the low reciprocity that is usually associated with more intimate relationships. They suggest that women may "feel more comfortable in initial interactions with other women than with men" (p. 26). One might expect female predictors to profit more from a communication encounter with other females than from one with males.

Q3 Does communicative responsiveness function the same way in the accurate prediction of similarities and differences?

The work of Chance and Meaders (1960) and Fiedler (1951, 1961) led us to believe that the accurate prediction of similarities and differences would be linked with different modes of responsiveness. Consequently, we departed from the usual practice of employing the ERS as the sole measure of predictive accuracy. Other communication researchers (especially, Mix, 1972; Ross, 1973; Northouse, 1977) felt it was important to control for the amount of similarity between members of the on-going dyads they investigated. Because our studies deal with zero-history dyads, we concluded that we should also include an estimate of the accurate prediction of similarities. Hobart and Fahlberg (1965) propose the Compounded Ratio Score (CRS) as an appropriate measure of accurate similarities. The CRS is defined as the number of correct predictions a person makes of his/her partner's similar responses divided by the number of statements on which the predictor and his/her predictee have similar responses.
Does communication responsiveness function in the same way in achieving accurate predictions and communication satisfaction?

In 1975, we summarized our research findings up to that point and concluded that Flexible Responsiveness (i.e., the sensitive pattern of communication) is related positively to both predictive accuracy and communication satisfaction (Hughey & Johnson, 1975, pp. 382-383).

We had confidence that this conclusion would be substantiated in subsequent research.

By way of review, we entered the current phase of our research program expecting that a communication encounter would have a significant impact on the prediction of similarities and differences. We expected Flexible Responsive communicators to get the most out of an encounter in terms of predictive accuracy but were unsure about the question of gender. We expected that various modes of responsiveness would have different impacts on the prediction of similarities as opposed to the prediction of differences; but overall, we expected Flexible Responsives to have the edge in achieving accurate predictions and communication satisfaction.

RESEARCH STRATEGIES

Because similar procedures were employed in all four studies, this section will describe the commonalities in the measurement of interpersonal sensitivity and the measurement of communication responsiveness.

Measuring Predictive Accuracy

Both the ERS and CRS were used as dependent variables in our studies. Hobart and Fahlberg (1965) addressed the issue of the validity of the two indices by correlating them with a variety of other methods of measuring
accuracy. They report correlations of .74 for the ERS and the measurement used by Hastorf and Bender (1952) and .58 for the CRS and the measurement used by Dymond (1948, 1950). They argue that the reduction in error for the ERS and CRS accounts for the moderate degrees of relationship. We have studied the reliability of the indices with a 15-item version of the prediction instrument, the Study of Values, used in our studies (Allport, Vernon & Lindzey, 1960a). With n = 504, alpha was .71 for the ERS and .79 for the CRS.

In all four studies respondents were asked to respond to items from the Allport-Vernon-Lindzey Study of Values (1960a). They responded first in terms of their own value preferences and then in terms of how they believed the target(s) would respond. Numerous studies have established the validity and reliability of the Study of Values (Allport, Vernon & Lindzey, 1960b). This widely-used paper and pencil instrument measures the relative strength of six motives in the human personality system: the aesthetic, theoretical, political, religious, economic, and social motives. The ERS and CRS were calculated for each respondent and his/her predictees.

Measuring Communicative Responsiveness

The CSRI is a paper and pencil instrument developed by Hughey (Hughey & Johnson, 1975) to catalog various communication patterns. In a nutshell, work with the CSRI has suggested that individual patterns of communication can be differentiated in terms of six major aspects: (1) the way the person views the purpose of communication, (2) the communicative climate he/she creates, (3) the way he/she transmits information, (4) the way he/she sequences messages, and (5) the way he/she copes with communication barriers. Early work with the CSRI focused on a Flexible Responsive
pattern of communication, referred to as the sensitive pattern. The current form of the CSRl taps three modes of responsiveness: the Mastery mode, the Flexible mode, and the Neutral mode.

With the Mastery Responsive (MR) mode, a person chooses to "impose" his/her will on the conversation. For the Flexible Responsive (IR) mode, a person chooses to respond by adapting or harmonizing him/herself with the conversation. With the Neutral Responsive (NR) mode, a person chooses to detach him/herself from the conversation.

The Mastery and Flexible modes of responsiveness are related to ideas expounded by Rogers and Roethlisberger (1952) several years ago. They asserted that two common patterns of communication have quite different aims. What we call the "Mastery" pattern is oriented toward producing commitment in communicative encounters. Communicators with this orientation believe communication "has failed when B does not accept what A has to say as being fact, true, or valid; and the goal of communication is to get B to agree to A's opinions, ideas, facts, or information" (pp. 46-52). What we call the "Flexible" pattern is oriented toward producing satisfaction in communicative encounters. Communicators with this orientation believe "Communication has failed when B does not feel free to express his feelings to A because B fears they will not be accepted by A. Communication is facilitated when on the part of A or B or both there is a willingness to express and accept differences" (pp. 46-52).

Although Rogers and Roethlisberger did not discuss the "Neutral" pattern, our communication literature points to the third mode of responding with great frequency (McCroskey, 1977; McCroskey & Richmond, 1983; Kelly, 1982). What we call the "Neutral" pattern is oriented toward the avoidance of problems in communication. Communicators with this orientation tend to be quiet and uncommunicative, want to avoid
unpleasantness, and become somewhat anxious, tense, and uncomfortable in conversational situations.

Neal and Hughey (1979) summarize the early validation studies of the CSRI. The inventory correlates (in the .38 to .46 range, n = 89) with the expected dimensions tapped by the California Psychological Inventory (Gough, 1957) and Gordon's Survey of Interpersonal Values (1963). Leesavan (1977) summarizes other validation studies where scales on the CSRI were related significantly to communication satisfaction, management style, decisionmaking effectiveness, and violence proneness. Recent studies have related the CSRI to teaching effectiveness and found the scales to successfully differentiate among teaching styles and course outcomes (Hughey & Harper, 1983). Reliability coefficients for the various versions are typically in the .70 to .85 range. For the current version of the CSRI (n = 2,305), alpha is .86 for the Mastery Responsive scale, .75 for the Flexible Responsive scale, and .88 for the Neutral Responsive scale.

Each item in CSRI presents a Mastery Responsive, Flexible Responsive, and Neutral Responsive alternative to a total of 60 conversational situations. Ten conversational situations are organized around each of the six requirements of a conversation (purpose, climate, etc.). Each respondent has a MR, FR, and NR score for each of the six conversational requirements. Alphas for each of the composite subscales (n = 2,305) are: purpose, .67; climate, .58; transmission, .67; reception, .53; coherence, .57; problem-management, .65.

Subsequent to conducting the fourth study we refactored the MR, FR, and NR scales for our norming sample (n = 2,305). Using the varimax option, we found that the modest reliability of some of the subscales could be improved by eliminating some items and by breaking some subscales
into "factor" scales. In particular, the coherence subscale was composed of two separate factors: one relating to the propensity "to be confusing" in a conversation and one relating to the propensity "to be confused" in a conversation. In the fourth study, the "to be confusing" factor (alpha = .69) was used. The factor scale was scored in such a way that "to be organized" received a positive weight. Table 1 presents a descriptive summary of the factor scale.

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Insert Table 1 About Here
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In all four studies, students from either the basic interpersonal course or basic speech communication course responded to the CSRI before engaging in a prediction exercise. Dyads were formed in such a way that the individuals did not know each other prior to the exercise. Each dyad was given one in-class session to get to know each other as well as possible. No restrictions were placed on continued out-of-class transactions.

STUDY #1

This study was undertaken to shed some light on the first two questions:

Q1 What role does a communication encounter play in achieving predictive accuracy?

Q2 In terms of accuracy, who profits the most from a communication encounter?

A. Do more responsive or less responsive communicators profit most?

B. Do male or female communicators profit most?
In order to estimate the impact of communication on predictive accuracy, two sets of predictions were made by each of the 118 respondents involved in the study. The first set was designated as condition one: the predictions were made following a communication encounter. The second set was designated as condition two: the predictions were made about other class members without the benefit of a communication encounter. Condition two represented an estimate of the respondent's general level of predictive accuracy.

In condition one, students who did not know each other well were paired together and asked to get to know each other as well as possible. The students were enrolled in the basic interpersonal communication course at Oklahoma State University. About halfway through the course, the students were asked to list the five people in the class they knew very well and the five people they knew least well. Dyads were formed from the least-known listings. Each member of each dyad had indicated that the other member was unknown to him/her. The composition of the dyads in terms of gender (22 male-male dyads, 28 male-female dyads, and 9 female-female dyads) was determined by a table of random numbers. One 75 minute class period was set aside for the get-acquainted session.

In condition two, the respondents were asked to list at least two other class members who they felt they knew well enough to make predictions about. In this case, the acquaintanceship requirement was not imposed.

Respondents were then asked to respond to the first thirty items of the Allport-Vernon-Lindsey Study of Values (1960a). The ERS and CRS were calculated for each respondent and his/her predictees. The ERS and CRS under condition one and the average of the ERS and CRS under condition two resulted in two ERS measures and two CRS measures for each of the
118 respondents.

A 3 x 2 x 2 x 2 MANOVA design (with repeated measures) was employed. Three levels of communicative responsiveness constituted the first independent variable: respondents with a first-choice preference for the Neutral, Flexible, or Mastery mode constituted the levels. The next two variables were sex-linked variables: the first designating the sex of the predictor and the second indicating if the predcictee was same-sex or opposite-sex. The last factor, the repeated measure, represented the communication-encounter (condition one) and the general level of accuracy (condition two) conditions. The two dependent variables were the ERS and CRS measures that were described earlier. The SPSS MANOVA (Repeated Measures) program was used in the analysis of the data (Hull & Nie, 1981). The results are depicted in Figure 1.

It was found that having a communication encounter prior to making predictions enhances predictive accuracy (F = 11.73, p = .000). This was true for the ERS (F = 11.80, p = .001) and the CRS (F = 10.60, p = .003). In this study, only 18% of the variance was explained by the conditions factor.

Overall, the communicative responsiveness of the predictor had more of an impact on the accurate prediction of differences than on the prediction of similarities. More specifically, the Neutral Responsive communicator did better on the ERS after the communication encounter than either the Flexible or Mastery Responsive communicators (t = 2.78, p = .006). And both Neutral and Mastery Responsive communicators gained
more in terms of the CRS than the Flexible Responsive communicator
(t = 2.13, p = .036).

No simple, main effects were noted for the gender variables (gender
of the predictor and gender combination formed for the communication
encounter). However, significant interaction effects were noted for
the prediction of similarity (F = 5.87, p = .017). When predicting for
areas of similarity (CRS), males register the greatest gains in accuracy
in mixed-sex dyads, and females register the greatest gains in same-sex
dyads.

STUDY #2

The primary goal of Study #2 was to answer the third question:
Q3 Does communication responsiveness function the same way
in the accurate prediction of similarities and differences?
This investigation examined 107 same-sex, zero-history dyads (80 male-
male dyads and 27 female-female dyads) using discriminant analysis and
multiple regression to study how item clusters in the CSRI related to
the ERS and CRS.

In this case students from the basic speech communication course
participated in the prediction exercise during the first four weeks of
the course. Procedures were essentially the same as those described for
condition one in Study #1. The results are presented in Table 2.

Insert Table 2 About Here

We found that the same patterns of communication have differential
effects on the prediction of differences and similarities, that no single
pattern of communication guarantees success or failure in the discovery of differences and similarities, and that the connection between communication and interpersonal sensitivity is influenced significantly by the gender make-up of the dyads. Multiple regression models generated in the study indicated that Neutral and Flexible modes of responding are positively related to the CRS ($R^2$ ranged from .08 to .36, $p < .01$) and that supportive and non-judgmental patterns are inversely related to the ERS ($R^2$ ranged from .08 to .40, $p < .01$). No single pattern of communication accounted for more than 36% of the variance. We found the issue of trust to be very salient to female dyads in the prediction of both similarities ($r^2 = .36$) and differences ($r^2 = .20$). For male dyads, the issue of trust seems to be less critical in the prediction of similarities; and a non-trusting stance is associated, positively, but nonsignificantly, with the ERS ($r^2 = .02$). We believe that Northouse's finding (1977) that low-trusters in an industrial setting score higher on the ERS ($r^2 = .16$) may be, in part, a function of the gender make-up of the dyads he investigated. We also believe that the low-order correlation between trust and the ERS ($r^2 = .02$) reported by Hill and Courtright (1981) may be attributed to the mixed-gender sample they used.

STUDY #3

Study #3 dealt with the fourth question:

Q4 Does communication responsiveness function the same way in achieving accurate predictions and communication satisfaction?

This study examined 53 dyads using multiple regression to study how communication responsiveness is related to predictive accuracy and communication satisfaction. Hecht's Com-Sat inventory (1978) was used as the satisfaction measure. In this study the dyad rather than the
individual was used as the unit of analysis. Procedures for the prediction exercise paralleled those described in Study #2. However, each student responded to the Com-Sat inventory in addition to items from the Study of Values. An index of perceived similarity was calculated for each respondent along with the accuracy indices. Our previous work led us to believe that both communicative responsiveness and perceived similarity would be related to interpersonal satisfaction. Since the dyad was used as the unit of analysis in this study, composite scores for all variables were produced by summing individual scores.

With dyadic satisfaction set as the dependent variable, both the perceived similarity variable and communication responsiveness entered the regression model (stepwise procedure; p < .05 for entry). Specifically, perceived similarity and communicator supportiveness (i.e., the climate subscale of the CSRI) were positively related to dyadic satisfaction ($R^2 = .19, p = .005$).

With dyadic accuracy (i.e., the accurate prediction of similarities) set as the dependent variable, both perceived similarity and communicative responsiveness entered the regression equation. But both were negatively related to dyadic accuracy ($R^2 = .22; p = .002$). In this case the salient subscale from the CSRI was the problem management subscale; problem-avoidance rather than problem-prevention or problem-handling was associated with predictive accuracy.

In sum it was found that communication responsiveness along with the propensity to assume similarities facilitates satisfaction but inhibits predictive accuracy.
STUDY #4

Study #4 was a replication study designed to deal with the first three questions posited at the outset of this report. This investigation examined 416 zero-history dyads (88 male-male dyads, 190 mixed-sex dyads, and 38 female-female dyads) using a correlational analysis to study how communicative coherence related to the ERS and CRS.

Students from the basic speech course participated in the prediction exercise during the first four weeks of the course. Procedures were essentially the same as those described for Study #1. However, students made predictions of the values of their instructors along with the peer predictions.

It was found that conversational coherence (being organized) is a liability for female predictors ($r^2 = .01; p = .03$) and an asset for male predictors ($r^2 = .01; p = .03$). However, the target of prediction and the type of prediction affect the generalizability of the finding. "Rambling" females do a better job of predicting following a communication encounter with a peer. This is especially true if her partner is male and the type of prediction task requires the forecasting of similarities ($r^2 = .06; p < .000$). On the other hand "organized" males do a better job of making accurate predictions about their instructors without the benefit of a communication encounter.

CONCLUSIONS AND IMPLICATIONS

We feel that these studies support five propositions: (1) that a communication encounter has a significant impact on predictive accuracy; (2) that no single pattern of communication guarantees success or failure in prediction making; (3) that the same patterns of communication have
differential effects on the prediction of similarities and differences for female and male predictors; (4) that neutral rather than more responsive members of dyads are better predictors in zero-history dyads; and (5) that communication responsiveness is positively related to communication satisfaction but inversely related to predictive accuracy. After considering each of the five propositions, we present the implications of these propositions for the teacher of interpersonal communication.

Proposition One

When compared with an estimate of a person's general level of accuracy, accuracy improves significantly following communication; however, the amount of variance attributable to a communication encounter is not great. In our first study, the communication encounter accounted for 18% of the variance in the accuracy measures. Coupling this finding with the low-order relationships reported by other investigators (Larson, 1965; Smith, 1967; Roberts, 1969; Mix, 1972; Ross, 1973; Northouse, 1977; Hill & Courtright, 1981), we have confidence in our conviction that improving the methodological approach to the study of predictive accuracy may improve the magnitude of the correlations, but not by very much.

Proposition Two

All four investigations support the contention that no single pattern of communication guarantees success or failure in prediction making. We found no single pattern explaining more than 36% of the variance and some combinations explaining as little as 8% of the variance. Again, the explained variance detected in our studies is comparable to, and in some instances greater than, the explained variance reported by other

Proposition Three

The second and fourth studies bolster the notion that different modes of responding are more salient when predicting differences than when predicting similarities for males and females. Multiple regression models generated in the second study suggested that Neutral and Flexible modes of responding are positively related to the CRS whereas patterns associated with the Flexible mode (e.g., being supportive and being nonjudgmental) are inversely related to the ERS. However, modal salience is influenced by the gender make-up of the dyad. The fourth study linked a Neutral Responsive orientation (being a rambler) with female predictors forecasting similarities. The association was the strongest in dyads where females made predictions about males. On the other hand, being organized proved to be salient when males made predictions.

Moreover, the first study underscores the significant role that gender plays in interpersonal sensitivity. We found that neither males nor females exceed the other in predictive accuracy. But when the gender combination of the dyad is considered, females make more accurate predictions in same-sex dyads and males make more accurate predictions in mixed-sex dyads. The phenomenon is most clearly demonstrated in the prediction of similarities.

In discussing same-sex dyads, Rawlins (1983) uses the term "sociability" to typify male-male relationships and "intimacy" to typify female-female relationships. In essence males tend to disclose less intimate information to other males and tend to project an image of strength to other
males (Jourard, 1971; Komarovsky, 1974; Pleck, 1975). On the other hand, Hirschman (1974) suggests that females may be able to converse more easily with other females than with males. Martin and Craig (1983) found "that women are less guarded, more relaxed when speaking to other women they don't know than men are with other women or men they don't know" (p. 26). Other research has suggested female-female relationships involve high interaction (Rands & Levinger, 1979) and more personalized communication (Knapp, Ellis & Williams, 1980). We believe that our findings are in line with these more recent studies. Given that females are more comfortable with other females in communication encounters and share more personal information, we would expect enhanced accuracy in the female-female dyad. To the extent that males withhold personal information in encounters with other males, we would expect males to do less well in same-sex dyads than mixed-sex dyads.

**Proposition Four**

Our four studies document the contention that neutral rather than more responsive members of zero-history dyads are better predictors. Indeed, we did not expect this to be the case. Because of the consistency of the finding from study to study, we were unable to dismiss it as an aberration. The finding forced us to return to the research literature and to rethink our position.

As far back as 1933, Vernon (1933) found that good raters of strangers were not very social. By definition, members of zero-history dyads are strangers, and Neutral Responsives are most certainly not very social. Wedeck (1947) and Trumbo (1955) found that anxious students achieve higher predictive accuracy than less anxious students. The
Neutral Responsiveness scale correlates with measures of communication apprehension in the .60 -.70 range (Steele, 1983). And recently Honeycutt, Knapp, and Powers (1983) found that an insensitivity to nonverbal cues may be an asset to predictive accuracy with newly acquainted dyads; Neutral Responsives report a lack of concern for nonverbal cues.

We believe that the significant gains by the Neutral Responsive communicator in Study #1 is supported by a task/maintenance explanation (Bales, 1950). In condition one, the communicators were given the task of getting to know each other as well as possible. As tasks go, we would assert that the task of getting to know another person involves a complex set of skills requiring a considerable investment of energy. We would assert that it is the Neutral Responsive communicator that has the most energy available to devote to the task.

More responsive communicators are concerned about the maintenance of an appropriate climate in the encounter. They produce more satisfaction in a conversation. This claim is documented by the results from Study #3; responsiveness is positively related to communication satisfaction.

The Neutral Responsive communicators are certainly not overly concerned with maintenance operations. They do not give encouragement to the other person, avoid problematic situations by becoming quiet and uncommunicative, and find it difficult to disagree with others. They are also filled with nervous energy and tense. Certainly the Neutral Responsive communicators are not what we normally associate with interpersonal competence. But we would submit that it is their lack of preoccupation with the maintenance of the interpersonal relationship that allows them to devote full energy to the task at hand.
Proposition Five

Our third study supports the proposition that communication responsiveness is positively related to communication satisfaction but inversely related to predictive accuracy in zero-history dyads. The connection between responsiveness and satisfaction reconfirmed our findings from previous studies (Hughey & Johnson, 1975). However, the inverse relationship with predictive accuracy was unexpected and appeared to be at odds with Robert's finding (1969) that responsiveness is positively related to the predictive accuracy of sorority members.

A line of thought that helps in interpreting the results has to do with the profile of the sensitive person that emerged from the early research that confounded similarities with accuracy (Chance & Meaders, 1960). The profile is remarkably similar to that of the Flexible Responsive. We believe that the positive maintenance orientation of the Flexible Responsives may work to obscure differences that exist between themselves and their predictees in zero-history dyads. Their propensity "to find the expectations of the other and point to areas of common agreement" may create in their minds an overestimate of the amount of commonality that actually exists between them and their predictees. In zero-history dyads this presumption of similarity may work against predictive accuracy, as was demonstrated in Study #3. Both assumed similarity and responsiveness were negatively related to accuracy. But in on-going relationships among sorority members the presumption of similarity may accurately reflect the actual similarity among sorority sisters. In this case, a likeness bias on the part of more responsive communicators would actually enhance accuracy.
Implications for Teachers of Interpersonal Communication

We offer two bits of advice to the teacher of interpersonal communication: (1) don't oversell the connection between communication and empathy, and (2) don't oversell any single mode of communicative responsiveness. Like the sinner who has seen the error of his ways, we are fervent to give the advice, but it remains to be seen if we can follow our own advice.

First, we believe that our four investigations confirm that communication is an important, significant factor in achieving predictive accuracy but maybe not as much of a factor as many of our interpersonal texts would lead us to believe. Johnson, Powell, and Reynolds (1983) have recently reminded us that we have a long way to go in clarifying our understanding of empathy at the conceptual level. To take the stance, advanced by Miller and Steinberg (1975), that making predictions at the psychological level is the pivotal feature of interpersonal communication is to imply a rather straightforward relationship between prediction making and communication. To give as much attention as we do to empathy and the like is to presume the kind of bond that has not been demonstrated empirically. In short, we should not oversell our students on the idea that interpersonal communication leads to interpersonal understanding.

Second, we should not oversell any single mode of communication to our students. Our findings suggest to us that the notion of "communicative competence" (Wiemann, 1977) must take into account the kind of performance expected of the communicator, the gender of the communicator, and the circumstances surrounding the task. Cupach and Spitzburg (1983) make a similar point when contrasting communicative competence as a trait with communicative competence as a state.
Our studies suggest that achieving predictive accuracy and communication satisfaction are two kinds of performance that call for different modes of responsiveness in zero-history dyads. Less responsive communicators do a better job of predicting; more responsive communicators do a better job of producing communication satisfaction. We have come to believe that patterns of communication appropriate to cognitive tasks may be less effective in the affective domain. It is one thing to predict accurately; it is another thing to create a satisfying climate. This hooks up with some of our findings in teaching effectiveness (Hughey & Harper, 1983). We are finding that our TA's teaching a hybrid interpersonal-public speaking course get better course ratings when they exhibit more responsive patterns of communication. But there are indications that students make better scores on cognitive exams when their teachers are less responsive. In addition, Andersen, Norton, and Nussbaum (1981) have found that the very teaching patterns that create the most satisfaction with students produce negative, albeit low negative (but significant), correlations with tests of cognitive learning. When we give our students prescriptions about what to do to achieve empathy and satisfaction in an encounter, we must be aware that two different sets of advice may be called for.

Our studies suggest that performance calling for the prediction of similarities as opposed to differences is facilitated by different modes of responding for males and females. Adapting to the other person proves to be beneficial to males in the prediction of similarities of other males, and trust-gaining is an asset for females predicting for other females. However, supportiveness plays a nonsalient role in the prediction of similarities and a negative role in the prediction of
differences for males. Indeed, the prescriptions for communicative competence would be different for females predicting similarities and males predicting differences in zero-history dyads.

Finally, we believe that the circumstances surrounding the prediction task make a big difference. We believe that prediction making in zero-history dyads demands less responsiveness on the part of the predictor than prediction making in on-going relationships. Returning once again to the profile of the sensitive person constructed by Chance and Meaders (1960), we find that some of the characteristics are not inconsistent with those of the good predictor in zero-history dyads. It could be argued that the less responsive communicator is not dependent on people, not hostile and competitive, not given to reflection about his/her interpersonal relationships, and carries on his/her daily life with a minimum of interpersonal or intrapersonal conflict (Chance & Meaders, 1960). Perhaps, these are the salient dimensions for prediction making in initiating a relationship. On the other hand, prediction making in an on-going, social relationship (e.g., sorority sisters) may demand more responsiveness—being active and outgoing in social relationships, liking people, being ascendant, and finding satisfaction in social activities (Chance & Meaders, 1960).

In sum, we believe each mode of responding has its own strengths and weaknesses. Although our field seems eager to isolate and eliminate the effects of "undesirable patterns" like shyness and reticence, it may be that these Neutral patterns can actually teach us a thing or two about the acquaintance process. We must pursue the possibility with a great deal more vigor than we have in the past. As a field, we need to catalog the assets and liabilities of various styles as we go about prescribing
the characteristics of the competent communicator. We need to have a much clearer understanding of the rewards and risks of various styles under different circumstances.
REFERENCES


Kelly, L. A rose by any other name is still a rose: A comparative analysis of reticence, communication apprehension, unwillingness to communicate, and shyness. Human Communication Research, 1982, 2, 99-113.


Slovic, P. & Lichtenstein, S. Comparison of Bayesian and regression approaches to the study of human information processing in judgment. Organizational Behavior and Human Performance, 1971, 6, 649-744.


Table 1. Descriptive summary of the coherence scale.

| SCALE: | The conversational ORGANIZER responds to a confusing conversation by being organized rather than being a RAMBLER. |
| FACTOR | LOADING | ITEM CONTENT |
|  |  | [positively scored items] |
|  | .67 | is more organized than most in confusing conversations |
|  | .60 | is organized, not vacillating, in confusing conversations |
|  | .55 | wants to get things organized in confusing conversations |
|  | .53 | takes charge and makes sure things are organized in confusing conversations |
|  | .40 | straightens things out by giving structure in confusing conversations |
|  |  | [reverse scored items] |
|  | .64 | is [NOT] more rambling than most in conversations |
|  | .62 | is [NOT] confusing |
|  | .46 | [DOES NOT] fail to explain his/her views in a coherent way |
|  | .36 | is [NOT] too aimless in conversations |
Figure 1. MANOVA results from study #1: Accuracy (expressed in percent of correct predictions) on the CRS and ERS related to the conditions factor, responsiveness factor, and dyad gender-combination by gender and conditions interaction.

<table>
<thead>
<tr>
<th>Conditions Factor</th>
<th>CRS-PREDICTION OF SIMILARITIES</th>
<th>ERS-PREDICTION OF DIFFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Response</td>
<td>Interaction</td>
</tr>
<tr>
<td>85</td>
<td></td>
<td>xMC1</td>
</tr>
<tr>
<td>80</td>
<td>Neutral</td>
<td>xMC2</td>
</tr>
<tr>
<td></td>
<td>Flexible</td>
<td>xMC2</td>
</tr>
<tr>
<td></td>
<td>Mastery</td>
<td>xMC1</td>
</tr>
<tr>
<td>xC1</td>
<td>xC2</td>
<td>xMC1</td>
</tr>
<tr>
<td>xC2</td>
<td></td>
<td>xMC2</td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conditions Factor

- Condition 1: Communication-Encounter Accuracy
- Condition 2: General Level Accuracy

Responsiveness Factor

- Neutral
- Flexible
- Mastery

Interaction

- Same Sex Dyads
- Mixed Sex Dyads

Legend:
- FC1 = Female, Condition 1
- FC2 = Female, Condition 2
- MC1 = Male, Condition 1
- MC2 = Male, Condition 2
Table 2. Study 2: Correlation matrix and multiple regression models for Male-Male (MM) and Female-Female (FF) Dyads.

<table>
<thead>
<tr>
<th>Communication Pattern</th>
<th>Correlations with CRS: Predicting Similarity</th>
<th>Correlations with ERS: Predicting Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MM (n=160)</td>
<td>FF (n=54)</td>
</tr>
<tr>
<td>NT3 NEUTRAL Nontalking</td>
<td>+.21*</td>
<td>+.09</td>
</tr>
<tr>
<td>FT1 FLEXIBLE Supporting</td>
<td>+.03</td>
<td>-.21</td>
</tr>
<tr>
<td>FT2 FLEXIBLE Nonjudging</td>
<td>+.18*</td>
<td>-.07</td>
</tr>
<tr>
<td>FT3 FLEXIBLE Trust-Gaining</td>
<td>+.10</td>
<td>+.60**</td>
</tr>
<tr>
<td>FT4 FLEXIBLE Adapting</td>
<td>+.22*</td>
<td>-.04</td>
</tr>
<tr>
<td>MT3 MASTERY Succeeding</td>
<td>-.09</td>
<td>+.03</td>
</tr>
<tr>
<td>MT4 MASTERY Noncrediting</td>
<td>-.07</td>
<td>+.12</td>
</tr>
<tr>
<td>MT6 MASTERY Over-Revealing</td>
<td>-.07</td>
<td>+.14</td>
</tr>
<tr>
<td>MT7 MASTERY Nontrusting</td>
<td>-.07</td>
<td>-.09</td>
</tr>
</tbody>
</table>

Multiple R  .29**  .60**  .29**  .63**
R²  .08  .36  .08  .40

*p < .05

**p < .01

1,2,3,4 Indicates the order in which the pattern entered the Multiple Regression models.