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ABSTRACT

A study examined verbal and nonverbal behaviors that can detect an individual's deceptive communication, including variables such as familiarity with the individual, amount of interaction, skill at detecting deception with individuals and in general, and an individual's verbal and nonverbal immediacy behaviors. Subjects, 242 undergraduates enrolled in a basic communication course at a large eastern university, completed a series of measures, answering questions based on the last person with which subjects had a conversation. Measures consisted of: Booth-Butterfield's Deception Tactics Scale (measuring interpersonal deception); the Immediacy Behavior Scale (measuring interpersonal immediacy); and questions dealing with the subject's familiarity with the person's communicative behaviors, amount of interaction with the person, skill at detecting the person's deceptive communication behaviors, and skill at detecting other people's deceptive communication behaviors. Results indicated no substantial relationships between the independent variables (sex, familiarity, interaction, skill at detecting deception, total immediacy scores, and individual immediacy behaviors) and the total interpersonal deception score. However, significant correlations were revealed between familiarity, interaction, individual skill at detecting deception, and general skill of detecting anyone's deceptive communication. (Two tables of data are included, and 29 references are attached.) (MM)

Predicting Deception ir Interpersonal Relationships

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Abstract: This study examined verbal and nonverbal behaviors that can detect a person's deception. These include: familiarity with the individual, amount of interaction, skill at detecting deception, and from an individual's verbal and nonverbal immediacy behaviors. Although the overall model was not significant, findings indicated that there was a relationship among familiarity, interaction and skill to the detection of deception.

Predicting Deception in Interpersonal Relationships

Deception has been of viable interest for researchers throughout the past couple of decades (Brandt, Miller, and Hocking, 1980; Cody and O'Hair, 1983; DePaulo and Rosenthal, 1979). Interpersonal deception, defined as an act or state designed to conceal or distort the truth for the purpose of misleading others (Podlesny and Raskin, 1977), occurs commonly in our society. Wolk and Henley (1970), state that "Everyone lies. And the person who denies that he lies is the most egregious liar of all" (p. 1). Daily interpersonal relationships are filled with lies and deception, many benign and some even malicious. DePaulo stated in a 1985 **New York Times** article (Coleman, 1985) that "People tell about two lies a day, or at least that is how many they admit to" (p. 1).

Researchers have attempted to discover communication variables that can predict interpersonal deception (Podlesny and Raskin, 1977; Knapp, Hart and Dennis, 1974; Cody and O'Hair, 1983; DeTurck and Miller, 1985). Among the variables posited to detect an individual's use of deception are verbal and nonverbal communication acts (Cody and O'Hair, 1983; DeTurck and Miller, 1985; Dulaney, 1982; Knapp, Hart and Dennis, 1974), and behaviors which appear to elicit suspiciousness and/or moderate perceptions of veracity (Brandt, Miller and Hocking, 1980a; Miller, DeTurck and Kalbfleisch, 1983; Stiff and Miller, 1986).

Also, personality traits such as Machiavellianism and self-monitoring have been employed by investigators in attempts to detect interpersonal deception (Brandt, Miller and Hocking, 1980b; Kraut, 1980; O'Hair, Cody and McLaughlin, 1981; Zuckerman, DePaulo, and Rosenthal, 1981).

Many studies, however, have been inconclusive in supporting variables to detect deception. For example, Mehrabian (1971) found that communicators exhibited less frequent movements while they were being deceitful, assumed less immediate positions relative to their addressees, talked less, talked slower, had more speech errors, and smiled more. Ekman and Friesen (1974) agreed that facial and body movement are related to an individual's deceptive behaviors. Patterson (1974), however, believes that status and intent were important in detecting an individual's deception.

Since results are scattered and not clear, researchers need to examine variables that appear to be related to the deception construct. Past studies have indicated that familiarity with the individual (Brandt, Miller and Hocking, 1980; Baucher, Brandt and Miller, 1977), interaction with the individual, skill at detecting deception (Knapp, Hart and Dennis, 1974), and the person's immediacy behaviors (Mehrabian, 1971; Zuckerman, Amiden, Bishop and Pomerantz, 1981) are related to an individual's deceptive behavior. This study will examine the relationship

between perceptions of immediacy, amount of interaction, skill at detecting deception, and an individual's deceptive behaviors.

Deception:

Most of the recent literature has focused on one form of deceptive communication, the lie. Ekman (1985) identified two ways to lie -- concealing and falsifying. While concealing, the person does not actually lie, but decides to withhold some of the information. In comparison, falsifying is when a person elicits false information as if it were true. This person conceals information also, making him/her very deceptive in communication.

Ekman (1985) states that a person who is lying will usually choose concealing over falsifying when deceiving. Concealing has more advantages for the liar than falsifying. First, concealing is usually easier since no information needs to be made up. As a result, there is chance of getting caught without working out the story in advance. Also, concealment appears less harmful than falsifying. A person may feel less guilty about concealing than falsifying, though the target is equally harmed.

Deception can also occur when a deceiver is telling the truth. Watzlawick (1976) presents examples such as the con-artist, the counter-spy, and the philanderer, who may use the truth in a deceiving manner. Hopper and Bell (1984) illustrate the use of ambiguity and implication in deceptive

communication. Their examples include the Greeks who did more than lying in using the Trojan Horse; and Iago, who deceived Othello with enthymematic combinations of true statements and innuendo. Knapp and Comadena (1979) believe that for deception to occur, both the deceiver and the deceived negotiate the situation (p. 272). Through the disclosure of their needs and values, people frequently invite others into deceptive activities.

Deception can be both a verbal and nonverbal activity. Verbal deception takes many forms -- hedges, evasions, exaggerations, half-truths, and outright falsehoods. Mauriello (1986) states that social lies make life work more smoothly and prevent hurt feelings. As a result, social lies are tacitly ignored. Knapp and Comadena (1979) state that verbal deception includes white lies, cover-ups, bluffing, euphemisms, masks, pretenses, tall-tales, put-ons, hoaxes, and other forms of falsehoods, fabrications and simulations.

Although the easy assumption is to be believe that all lying is verbal, deception is also a nonverbal activity. Several past studies have related the use of nonverbal behavior in deceptive communication (Ekman and Friesen, 1969; Hopper and Bell, 1984; Mehrabian, 1971). For example, Mehrabian (1971) found that communicators who were deceitful exhibited less frequent movements, and smiled more. Hopper and Bell (1984) state that people deceive others on a daily basis through nonverbal

messages. In their example, Hopper and Bell (1954) posit that people may smile at others whom they do not like instead of following the norm and smiling at people they like.

Much of the emphasis on the deception construct has been on detecting deception. In the past, the need to detect another individual's deceptive behaviors has been the concern of the law enforcement professions. Machines such as the polygraph have been used to detect deceptive behaviors of potential criminals (Lykken and Raskins, 1974). However, since the polygraph appears to have little practical utility in detecting deception in interpersonal relationships, social scientists have begun to examine the communication behaviors of deceiving individuals (Hocking and Leathers, 1980).

This examination of deception detection has focused on verbal and nonverbal behaviors of individuals. For examples, Zuckerman, Koestner and Alton (1984) examined the ability of students to become better lie detectors. Ekman and Friesen (1969) investigated nonverbal channels that can be employed in detecting deception. In their study, Zuckerman, DePaulo, and Rosenthal (1981) summarized four other studies of face-body differences in deception detection.

In this study, we examined verbal and nonverbal behaviors that can detect an individual's deceptive communication. Behaviors that may detect deception include: familiarity with the

individual, amount of interaction, skill at detecting deception with individuals and in general, and from an individual's verbal and nonverbal immediacy behaviors.

Familiarity and Deception:

Few studies deal exclusively with the relationship between familiarity and deception -- they only hint at it. For instance, Brandt, Miller and Hocking (1980) conclude that if a communicator's behavior deviates from his or her normal style, the difference may be correctly attributed to lying. Research also connects familiarity, knowledge, and deception. There seems to be a suggestion of this relationship in a study by Bauchner, Brandt, and Miller (1977). This study focuses on the information utilization hypothesis which states that the amount and quality of verbal and nonverbal information available to an observer and therefore, so should accuracy in making attributions of truthfulness. Though these two studies fail to mention familiarity, these results appear to indicate that the more verbal and nonverbal information and familiarity available to an observer, will increase that person's ability to detect deception.

The connection between familiarity and deception can also be seen through the concept of information overload or the selectivity processes (McCroskey and Wheeless,1976). Information collected about individuals increase as people become more

familiar with one another. To deal with this continual increase, information is filtered. Although the information selectivity hypothesis states that receivers filter stimuli, this may not be the case with familiarity. The information collected about others over time may be internally categorized. This categorization process may improve capabilities of detecting deceptive behaviors.

Interaction and Deception:

If the concept of familiarity is related to deception, then the amount of interaction between two individuals should be related to deception. It appears that the more information a person has available, the better he/she may be at detecting the other person's deception. Since a high amount of interaction should produce a greater amount of verbal and nonverbal information, the amount of interaction and deception appears to be related.

Though familiarity and interaction appear to be similar in terms, the words should not be used interchangeably. Amount of interaction needs to be employed as a separate variable in detecting deception. Interaction with individuals, or exposure occurs when individuals view each other infrequently or in one type of situation. Familiarity comes from viewing people in a variety of situations and places during a long period of time. People therefore, may be exposed or interact with one another all

the time, but rarely do they become familiar with one another.

Research has indicated that interaction is related to deception (Brandt, Miller and Hocking, 1980). The selectivity theory states that receivers block out or filter important deception cues. This theory would appear to state that information selectivity can not predict deception. However, a closer examination of this theory indicates that a balance of information during exposure may lead to greater detection of deception. Looking again at the study conducted by Brandt et al (1980), a balance of exposure (interaction) did allow detectors to better predict deception.

Skill at Detecting Deception:

Several studies concerning the prediction of deception have focused on individuals' skills at detecting deception (Knapp, Hart, & Dennis, 1974; Zuckerman, Koestner, & Alton, 1984; Ekman and Friesen, 1969, 1974; Brandt, et al, 1980).

From a logical standpoint, the ability to detect an individual's deception should be related to that person's accuracy in detecting actual deception (Zuckerman, DePaulo, and Rosenthal, 1981), in a quantitative summary, discovered that the accuracy of detecting the average individual's deception from a

single channel or combination of channels was, with the exception of the face, significantly above chance.

Other studies have indicated that more training in detecting deception can results in more accurate predictions of deception (Ekman and Friesen, 1974; Brandt et al, 1980; Zuckerman, Koestner and Alton, 1984). Thus, individuals who are skilled or become skilled at detecting deception appear to have greater predictive power in detecting deception. Ekman and Friesen (1974) have discovered that the sample behaviors were truthful made more accurate judgments on subsequent trials than subjects who were not given information about the sample behavior. Zuckerman, Koestner and Alton (1984) suggest that with more extensive training, better accuracy at detecting deception can occur. Along with training, studies have demonstrated that practice produced substantial improvement in accuracy (Rosenthal, Hall, DeMatteo, Rogers, and Archer, 1979). In summary, a line of research has indicated that individuals who are skilled at detecting deception can accurately predict another individual's deception.

However, another line of research has stated that individuals think they are better detectors of lies than they really are. Zuckerman, DePaulo, and Rosenthal (1981), in a recent review of 35 relevant studies found that accuracy of lie detection typically falls in the 45 percent - 60 percent range, when 50 percent accuracy is expected by chance. Recent studies

have indicated that the best rate of accuracy for any group never exceeded 60 percent (Coleman, 1985).

These results have been found in professions where lie detection is at a premium. For example, Coleman (1985) reported in a study done at Cornell University, customs inspectors proved no better than college students at guessing which people were trying to smuggle contraband. Also, another study at Auburn University in Alabama discovered that police detectives were no more successful in judging people lying about mock crime than were students. A final study found that a group of seasoned federal law enforcement officers from the Secret Service and the Criminal Investigation Divisions of the armed forces were no more accurate in detecting deceit than were newly recruited officers who had just joined those agencies.

Since there is doubt as to the significance of detection skill and accuracy of predicting deception, the variable of skill detection needs to be examined.

Immediacy and Deception:

Immediacy is defined as communicative behaviors which "enhance closeness to and nonverbal interaction with another (Mehrabian, 1969, p 203). In other words, immediacy can occur when an individual employs verbal or nonverbal communicative behaviors to build closeness with another individual.

As was discussed earlier, familiarity and interaction can help an individual predict another individual's deceptive behaviors. Likewise, immediacy should be able to predict an individual's deceptive behaviors. If two individuals are immediate with each other, deception cues should be easier to recognize. As individuals become immediate with each other, they will communicate more. Each person would become familiar with each other's communication with continual immediacy. As a result, the individual should be able to predict when the other person is employing deceptive behaviors.

Previous research has also supported the positive association between immediacy and deception. Mehrabian (1971) found that communicators exhibited less frequent movements while they were being deceitful and assumed less immediate positions relative to their addressees. Other investigators have related verbal and nonverbal communication behaviors that are usually employed in immediacy with deception. For example, Ekman and Friesen (1969) and Hocking and Leathers (1980), posited than an increase in voice pitch and a decrease in the use of illustrators when subjects were, lying. These studies also reported that deceivers had more "speech errors" than did nondeceivers.

Nonverbally, Ekman and Friesen (1969) state that deceivers usually exercise control over their face and the least control over their outer extremities such as the legs and feet. All of these studies indicate that verbal and nonverbal behaviors that are used in immediacy are related to an individual's use of deception.

Research Questions:

The previous lines of discussion indicate relationships that need to be investigated. Indirect evidence has been discovered to link familiarity and amount of interaction to the prediction of deception (Brandt, Miller and Hocking, 1980; Bauchner, Brandt, and Miller, 1977). Also, skill at detecting deception (Zuckerman, DePaulo, and Rosenthal, 1981) and verbal and nonverbal immediacy (Mehrabian, 1969) have been related to deception. In order to predict an individual's use of deceptive behaviors, these four variables should be linked. Thus, this study hypothesized:

> H_1: A linear combination of perceptions of familiarity, amount of interaction, skill at detecting, and immediacy should predict a significant amount of variance in the individual's use of deceptive strategies.

With this linear combination, single variables may also be positively associated with deception. For example, familiarity

with another individual may allow for greater prediction of that person's deception, while just interaction alone may not. Also, relationships between variables, such as immediacy, interaction, and familiarity may provide more information as to how the variables relate to deception. Consequently, this study will ask:

R_1: What variables are the best predictors of an individual's deceptive strategies?

R_2: What are the relationships between and among perceptions of another individual's deception, familiarity, communicative interaction, skill at detecting deception, and immediacy behaviors?

Method:

Subjects

Subjects (n=242, 132 male, 110 female) were undergraduate college students enrolled in the basic communication course at a large eastern university. Approximately half in each study were female and half male. Both the students and the instructors in the courses came from diverse backgrounds and had diverse socioeconomic status.

Measurements

Deception:

Interpersonal deception was operationalized as the subject's scores on Booth-Butterfield and Booth-Butterfield's Deception Tactics Scale (1987). This scale consists of 20 tactics used to

measure interpersonal deception behaviors of individuals. Each tactic was accompanied by a communication example to better help subjects understand the deception strategy. An example of an item on the Deception Tactics Scale was: deny happening, (Example: "that never happened..."). Subjects would respond by circling a score of one to five on a five-point Likert-type scale, with one being "never used it and five being "frequently used it." Since the scale has revealed a different number of factors (Booth-Butterfield and Booth-Butterfield, 1987), several factor analyses looking at one to six factor solutions were run (principle components with unity in the diagonals and an oblique, Promax Rotation; items loading .50 and higher were retained for interpretation). As supported by the latest analysis of the Deception Tactics Scale (Booth-Butterfield, 1988), a unidimensional factor solution appeared to be the most suitable for investigation. Thus, a total deception score was calculated by summing frequency scores across all 20 items. The overall alpha reliability of the scale was .89, which is a little higher than those reported in previous studies (Booth-Butterfield & Booth-Butterfield, 1987).

Interpersonal Immediacy

Interpersonal immediacy was operationalized as subjects' scores on the Immediacy Behavior Scale (Gorham, 1988; Richmond, Gorham, and McCroskey, 1987). The instruments, used primarily for

measurement of teachers' immediacy behaviors (Gorham, 1988; Richmond, Gorham, and McCroskey, 1987) was reworded to investigate immediacy in interpersonal relationships. For example, one item which originally asked if this teacher "uses humor in class," was reworded to ask "uses humor while conversing."

This instrument contains 34, five-point, Likert-type items, asking subjects to indicate the frequency with which the last person the subject had a conversation with used each behavior presented. In classroom studies, Andersen (1978) reported the instrument as a valid method of measuring teacher immediacy. Since interpersonal relationships between teacher and students are similar to the interpersonal relationships examined in this study, the immediacy scale appears to be a valid instrument to employ outside the classroom. Frequency scores for the immediacy items ranged from 0 (never) to 4 (very often).

Of the 34 immediacy items, 20 were questions asking subjects to report the frequency of the individuals' verbal behaviors. The other 14 items asked subjects to report the frequency of the individuals nonverbal behaviors. In this study, three scores were obtained from the immediacy scale. First, a total verbal immediacy score was calculated by summing the frequency scores across all verbal items. Second, a total nonverbal immediacy score was similarly generated, reflecting items where necessary. Attempts to separate verbal and nonverbal immediacy scores have

been employed in previous immediacy literature (Gorham, 1988; Richmond, Gorham and McCroskey, 1987). Since Gorham (1987) stated that verbal and nonverbal behaviors function together to generate total immediacy, this study, calculated a total immediacy score by summing all the verbal and nonverbal items.

Alpha reliabilities for the total immediacy scale was .91. Alpha reliability for the verbal and nonverbal immediacy items were above .82, supporting past employment of the instrument (Gorham, 1988; Richmond, Gorham and McCroskey, 1987).

Other Measures

Subjects were asked to indicate their gender, how familiar they were with this person's communicative behaviors, how much interaction do they have with the person, how skilled are they at detecting this person's deceptive communication behaviors, and how skilled they are at detecting any person's deceptive communicative behaviors.

Familiarity, interaction, and skill at detecting were measured using a five-point, Likert-type scale, with "one" being not familiar, very little interaction, and unskilled in detecting deception, respectively. On the scale, "five" represented familiar, a great deal of interaction, and skilled at detecting deception. Since the instrument for each variable employs one item, no alpha reliability tests could be attempted.

Procedures:

Two-hundred and 42 questionnaires with all measures were completed by the students during regular class time. Subjects were told to answer questions based on the last person the subject had a conversation with. Subjects were told that their participation was voluntary and that they were permitted to decline to participate by simply turning in a blank questionnaire. Of those who decided to participate, subjects were told their responses were anonymous, identifiable only by a number assigned by the teacher of the course. After the questionnaires were completed, the students were thanked.

Data Analyses

Pearson Product Moment Correlations were computed for the total deception tactic score with the predictor variables (individual immediacy items, verbal and nonverbal immediacy scores, gender, familiarity, interaction, skill at detecting any person's deceptive behaviors).

Since the size of the sample produced very high power for the statistical analyses (Cohen, 1977), along with the high number of individual correlations conducted, the probability of finding meaningless but statistically significant relationships was high Thus, for the simple correlations, only relationships significant at .001 level were considered meaningful.

To determine the extent to which interpersonal deception

To determine the extent to which interpersonal deception can be predicted by interpersonal immediacy. familiarity, interaction, and skill at detecting deception, multiple regression analyses were conducted decomposed. The predictor variables were gender, familiarity, interaction, skill at detecting individual deception, skill at detecting general deception, and individual immediacy items and total immediacy scores. The criterion variable was the total deception score or the Deception Tactic Scale (Booth-Butterfield and Booth-Butterfield, 1987). Also, stepwise regressions were used to determine the order of the predictor variables based on greatest contribution of variance from each variable. Combined with the analysis of the simple correlations, the best predictive model of an individual's deceptive behaviors was determined.

Results:

In general, the results of this examination failed to indicate substantial relationships between the independent variables (sex, familiarity, interaction, skill at detecting deception, total immediacy scores, and individual immediacy behaviors) and the total interpersonal deception score. Simple correlations between the predictor variables and deception were low and nonsignificant.

TABLE ONE ABOUT HERE

However, significant correlations were discovered between familiarity, interaction, individual skill at detecting deception and general skill of detecting anyone's deceptive communication. The variables of total immediacy and sex failed to correlate significantly with any variables in the study. Therefore, these results will not be reported here in detail.

As would be expected after the simple correlational analysis noted above, the multiple regression analysis failed to yield significant results between deception and the predictor variables. Stepwise analysis yielded a seven-variable model ($F=14.25$; $df=7/241$; p .0001), which accounted for slightly under 30 percent of the shared variance. Variables included in the model were the individuals' skill at detecting deception ($F=8.85$; p .0003), uses words such as "your" ideas or what "we" are doing ($f=7.83$, p .005), criticizes or points out faults in your work, action or comments ($F=10.30$, p .001), uses monotone/dull voice when talking to you ($F=13.16$, p .0004), moves around while talking to you ($F=14.00$, p .0002), gestures while talking to you ($F=13.16$, p .0004) and laughs while talking to you ($F=4.22$, p .0412).

A general linear model regression also supported the five-variable model with regard to sequential (Type I SS) and unique variance (Type III SS).

TABLE 2 ABOUT HERE

However, the hypothesize model for predicting deception tactics from total immediacy scores, familiarity, interaction and the general detection of deception failed to be significant.

Discussion

The hypothesized model predicting an individual's deception from familiarity, interaction, skill at detecting individual or general deception, and immediacy failed to be confirmed in this study. This result appears to indicate that, as a whole, variables such as familiarity, interaction, skill of detection, and immediacy may have a low relationship when combined to predict an individual's deceptive strategies. Low in magnitude variables found to have an impact in predicting deceptive strategies were self-perceptions of skill at detecting deception and four factors of the individual's immediacy behaviors (behaviors such as "your" ideas or what "we" are doing, criticizes or points out faults in your work, action or comments, uses monotone/dull voice, moves around while talking to you, gestures while talking to you, and laughs while talking to you).

In the case of skill at detecting deception these results would seem to support previous research finding skill of deception detection and actual deception (Zuckerman, Hart, and Dennis, 1974; Zuckerman, Koester, and Alton, 1984). However, since the simple correlations failed to be high between skill of detecting and actual deception, this relationship may not be strong. As for immediacy, it appears that certain immediacy behaviors can help predict an individual's deception. For example, an individual who uses a monotone dull voice when talking may be using deceptive strategies. In another example, individuals who criticize or point out faults in another person's behaviors may be hiding their own behaviors through deceptive strategies. Though the total immediacy variable failed to be related to deception, individual immediacy behaviors may indicate when another individual employs deceptive strategies.

Another interesting finding was the significant correlations among familiarity, interaction, individual skill at detecting deception and general at detecting an individual's deception. These findings would indicate that perceptions of familiarity and interaction are similar when individuals are communicating. Obviously, if an individual perceives him or herself as having a great amount of interaction with the person the individual will probably perceive themselves as being "familiar" with that person. Since neither interaction or familiarity were highly

related to deception, the selectivity theory may not predict an individual's deception. That is, even if an individual is familiar and recognizes another individual's communication behaviors, deception cues may still be used without notice. Though a person interacts frequently with another, deception may effectively take place.

The positive relationship between skill at detecting individual deception, skill at detecting deception in general, and familiarity also provides some interesting conclusions. Individuals who perceive themselves as being good in detecting deception in general also perceive themselves as being good at detecting any individual's deception. An individual may not be able to differentiate, however, between general skill of detection and skill in detecting any single individual's deceptive strategies. As a result, this inability to differentiate may create an overconfident feeling with the detector. Consequently, the detecting individual may fail to recognize deceptive strategies used by others because the detector feels that all individuals employ similar deception strategies. This result was also ruled out with low correlations between skill at detecting (individual and general) deception and actual deceptive strategies.

Also, familiarity and skill of detecting an individual's deception were related. Logically, this result would appear to

indicate that individuals feel more comfortable in detecting another individual's deception once they are familiar. Once again, accurate perceptions of deception were not highly related to familiarity and low in relationship with skill of detecting deception. So, in a sense, it may be possible that being too familiar and overconfident in communication with others can result in failing to recognize deception.

Though the overall results of this study failed to confirm the linear combination of deception detecting variables, these results are important in further explaining the deception construct. Certain immediacy behaviors may be better predictors of deception than familiarity, interaction, or skill of detecting. So, if an individual believes that another person is employing deception, noticing certain immediacy behaviors may justify that feeling. Also, individuals should not feel too confident in detecting deception of others based on familiarity, amount of interaction, and self-perceptions of skill of detecting. Even if people are familiar with one another, one individual may still be able to use deception strategies more effectively. Looking at individual behaviors, such as immediacy, may allow a person to become a better detector of deception. As a result, the individual may feel more comfortable while communicating with others.

Future research should concentrate more on this relationship

between immediacy behaviors and deception. An interesting study might focus on actual observable immediacy behaviors and deception.

Self-perceptions are a legitimate way of measuring immediacy and deception (Booth-Butterfield, 1987; Richmond, Gorham and McCroskey, 1987), however, observing individuals using deceptive behaviors with immediacy might lead researchers to a greater insight into the relationship between these two variables. Also, this type of research would be able to examine verbal and nonverbal immediacy behaviors and their relationship in predicting an individual's deceptive behaviors.

REFERENCES

Andersen, J.F. (1978). The relationship between teacher immediacy and teacher effectiveness. Unpublished doctoral dissertation West Virginia University, Morgantown, WV.

Bauchner, J.E., Brandt, D.R. & Miller, G.R. (1977). The truth -deception attribution: Effects of varying levels of information availability. In B.R. Ruben (Ed.) Communication Yearbook I. New Brunswick, NJ: Transaction Books.

Booth-Butterfield, S. & Booth-Butterfield, M. (1987). Untangling the tangled web: Developing the deception construct. Paper presented at the annual convention of the International Communication Association (Montreal, Canada).

Brandt, D., Miller, G., & Hocking, J. (1980). Effects of self-monitoring and familiarity on deception detection. Communication Quarterly, 28, 3-10.

Cody, M. & O'Hair, H. (1983). Nonverbal communication and deception: Differences in deceptive cues due to gender and communication dominance. Communication Monographs, 50, 175-192.

Cohen, J. (1977). Statistical Power Analysis for the Behavioral Sciences. Academic Press: New York and London.

Coleman, D., "Researchers identify true clues to lying." The New York Times, February 12, 1985: C1, C8.

DePaulo, B. & Rosenthal, R. (1979). Telling lies. Journal of Personality and Social Psychology, 10, 1713-1722.

Dulaney, E.F. (1982). Changes in language behavior as a function of veracity. Human Communication Research, 9, 75-82.

Ekman, P. (1985). Telling Lies. New York: W.W. Norton and Co.

Ekman, P. & Friesen, W.V. (1974). Detecting deception from the body or face. Journal of Personality and Social Psychology, 29, 288-298.

Ekman, P. & Friesen, W. (1969). Nonverbal leakage and clues to deception. Psychiatry, 32, 88-106.

Hocking, J.E., & Leather, D.G. (June, 1980). Nonverbal indicators of deception: A new theoretical perspective. Communication Monographs, 47, 119.

Hopper, R., & Bell, R.A. (1984). Broadening the deception construct. Quarterly Journal of Speech, 70, 288-302.

Knapp, M.L. & Comadena, M.E. (1979). Telling it like it isn't: A review of theory and research on deceptive communication. Human Communication Research, 5, 271-281.

Knapp, M.L., Hart, R.P., & Dennis, H.S. (1974). An exploration of deception as a communication construct. Human Communication Research, (1), 15-20.

Kraut, R.E. (1980). Humans as lie detectors: Some second thoughts. Journal of Communication, 39, 209-216.

O'Hair, D., Cody, M.J., and McLaughlin, M.L. (1981). Prepared lies, spontaneous lies, machiavellianism, and nonverbal communication. Human Communication Behavior, 7, 325-339.

Lykken, D.T. & Raskins, D.C. (1974). Physiological measures and the detection of deception. American Psychologist, 29, 726.

McCroskey, J.C. & Wheeless, L.R. (1976). An Introduction to Human Communication. Boston: Allyn and Bacon.

Mehrabian, A. (1969). Some referents and measures of nonverbal behavior. Behavior Research Methods and Instrumentation, 1, 203-207.

Mehrabian, A. (1971). Nonverbal betrayal of feeling. Journal of Experimental Research in Personality, 5, 64-73.

Podlesny, J.A., & Raskin, D.C. (1977). Physiological measures and the detection of deception. Psychological Bulletin, 84, 782-799.

Richmond, V.P., Gorham, J. & McCroskey, J.C. (1987). The relationship between selected immediacy behaviors and cognitive learning. In M.L. McLuahlin's (Ed.)Communication Yearbook 10. Beverly Hills: Sage Publications.

Rosenthal, R., Hall, J.A. DiMatteo, M.R., Rogers, P.L. & Archer, D. (1979). Sensitivity to Nonverbal Communication: The Pons Test, Baltimore, MD.: Johns Hopkins University.

Watzlawick, P. (1976). How Real is Real? Confusion, Disinformation, Communication. (New York: Random House).

Zuckerman, M. & Amidon, M.D., Bishop, S.E., & Pomerantz, S.D. (1982). Face and tone of voice in the communication of deception. Journal of Personality and Social Psychology, 43, 347-357.

Zuckerman, M., DePaulo, B.M. & Rosenthal, R. (1981). The verbal

and nonverbal communication of deception. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, 14, 1-59. New York: Academic Press.

Zuckerman, M., Koestner, R., & Alton, A. (1984). Learning to detect deception. Journal of Personality and Social Psychology, 46, 519-528.

TABLE 1

CORRELATION COEFFICIENTS AMONG DECEPTION, FAMILIARITY, INTERACTION AND SKILL

	Inter.	Indsk.	Gensk.	Decept
Deception	.23	.31		
Interaction		.58		
Individual Skill			.50	
Familiarity	.64	.51	.27	.24
Immediacy		.38		

Significance, p > .05, n=242

Terms for Table 1:

Decept: Deception
Inter: Interaction
Indsk: Individual Skill
Gensk: General Skill

TABLE 2

VARIABLES THAT PREDICT DECEPTION

Source	DF	SS	Mean Square	F	Prob.	R^2
Regression	7	14044.07	2006.29	14.25	.0001	.298
Error	234	32944.40	140.78			
Total	241	46988.47				

Variables	B Value	Std Error	Type II SS	F	Prob.
Ind. Skill	4.20	.82	3658.49	25.99	.0001
Your/We	-2.78	.93	1260.69	8.95	.0031
Criticizes	-2.25	.80	1101.87	7.83	.0056
Monotone/Dull	-2.54	.79	1450.44	10.30	.0015
Gestures	2.82	.77	1852.86	13.16	.0004
Movement	-3.05	.81	1970.53	14.00	.0002
Laughs	-2.00	.97	593.51	4.22	.0412