

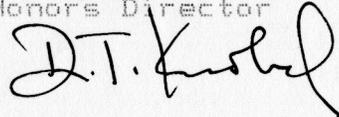
Accuracy in Interpersonal Perception
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ABSTRACT

The extent to which gender and self-monitoring correlated with the ability to detect deceit in interpersonal interactions was examined. 20 men and women were videotaped while describing someone they liked and someone they disliked, both honestly and deceptively. Sixty-one different subjects (26 males and 35 females) were then shown the videotapes and asked to make dichotomous judgments of the 40 senders' truth versus deception. Gender and self-monitoring were not significantly correlated with the ability to detect deception. However, the means of the judgments were in the expected direction. Methodological considerations and suggestions for future research are discussed.

In the past few years, a growing amount of research has been conducted in the area of deception. The study of deception is important, given that we engage in it much of the time. Whether we like it or not, we are all involved in deceptive interactions every day. We are all guilty of ingratiation, hiding our true feelings, or trying to present ourselves in the best light possible. In some cases, deception may even be the best policy. Consider the little white lie. "You look great!" or "No, really, you did just fine." We often tell these subtle lies to protect someone else or to be nice to them. However, they still involve deception.

Since we have all engaged in this type of deception in our everyday lives, we also have been the receivers (or targets) of deceit. If we look more closely, we see that deception is a recurring factor in our day to day interactions and relationships.

Parents, teachers, and managers all deal with deception in their interactions with their counterparts. Consider the mother who discovers a broken vase in the living room and three youngsters who "don't know" what she is talking about! There are also numerous instances in professional fields where deception may not only be used, but often is necessary. Ekman and Friesen (1974) capitalized on this in their study of deception by using nursing students as their subjects. They were able to stress the "importance" of this skill to

subjects by telling them that "skilled members of their profession were successful deceivers in this experiment (pg. 289)." Clearly, nurses must be skillful at deception in order to perform their job well.

Deception is also often a key issue in relationship and marital interactions and problems. In both friendships and romantic relationships, trust is usually considered an extremely important element in the relationship. Deception is a violation of that trust in many cases and therefore has many implications for affecting relationships. Consider the differing abilities to deceive and detect deceit and how that might affect the stability of the relationships a person forms. Someone good at deceiving may be able to actually form relatively stable relationships, due to their ability to effectively conceal violations of trust. Conversely, someone good at detecting deceit may have less stable relationships due to their ability to discern when their partners have violated trust in the relationship.

Hence, deception is not just an issue for juries to be concerned with or for con men to participate in. We are all involved in and affected by deception. Therefore, it is surprising that more research has not been done on the subject until recently.

The majority of research that has been conducted has focused on the "senders" in interactions (i.e., the person doing the deceiving) and the concept of "leakage."

The concept of "leakage" can be defined as the channels of communication which are most likely to reveal an individual's true feelings when deception is occurring. The idea of leakage was first proposed by Ekman and Friesen (1969). They differentiated between "deception clues" and "leakage" :

Deception clues tip him [the receiver] off that deception is in progress but do not reveal the concealed information; the betrayal of that withheld information we call leakage (pg. 89).

Leakage can be investigated by looking at channels or modalities of communication. This usually involves looking at deceptive and honest messages presented in one or more communication channels: audio-only (often subdivided into filtered versus non-filtered speech, where filtered speech retains only tone of voice, not its content); visual-only; audiovisual; and a verbal-only condition in which subjects are given a verbatim transcript of the message (DePaulo, Rosenthal, Eisenstat, Rogers, & Finkelstein, 1978; Ekman & Friesen, 1969, 1974; Ekman, Friesen, O'Sullivan, & Scherer, 1980; Feldman, 1976; Krauss, Apple, Morency, Wenzel, & Winton, 1981; Zuckerman, DeFrank, Hall, Larrance, & Rosenthal, 1979; Zuckerman, Larrance, Spiegel, & Klorman, 1981; Zuckerman, Amidon, Bishop, & Pomerantz, 1982).

For example, Zuckerman, et al. (1982) found that tone of voice was a better source of leakage during deception than face. Receivers in the audiovisual condition were better able to predict when senders were deceptive from judgments of tone of their voice; when senders were honest, their judgments of their face were better predictors.

Although studies on leakage cues are important, this trend has caused research on deception to be somewhat narrow. DePaulo and Rosenthal (1979) have suggested that:

The appeal of these studies probably derives in part from the suggestion that certain channels, such as the face, that under ordinary circumstances are extremely informative, can be especially misleading under conditions of deception. These studies demonstrate the kinds of information that can be gleaned from a particular channel when access is restricted to that channel... (pg. 1719-1720).

As DePaulo and Rosenthal point out, past research has focused on cues and/or skills involved in deception. However, research in the area of receivers' skills detecting deception has been lacking. A few exceptions do exist, but even these continued to have a heavy emphasis on modality and include a very limited view of the effects of individual differences in deceptive interactions (DePaulo & Rosenthal,

1979; Manstead, Wagner, & MacDonald, 1986).

DePaulo and Rosenthal (1979) have looked at the relations between the ability to lie and detect deceit and between underlying affect and skill at deceiving. They found that those whose deception attempts were more easily detected by others also had their underlying affects (emotions or feelings) read more easily. Consistent with the leakage studies, they also found that accuracy in detecting deception was much higher than accuracy in determining the true underlying affect. Moreover, skill at sending was not related to skill at receiving. However, there was still a bias toward the senders, with receivers only considered in relation to their sending ability. They also considered the individual difference measure of Machiavellianism but found no correlation between Machiavellianism and ability to detect deceit.

Manstead, Wagner, and MacDonald (1986) similarly considered the interaction between the ability to deceive and the ability to detect deceit. They, however, considered whether the order in which they participants served as senders or receivers affected the accuracy of their judgments. As expected, they found that subjects who participated as senders first were more accurate as receivers, suggesting a possible experience factor. They also considered two individual difference measures, gender and machiavellianism, and found that there was no

correlation between either of these measures and the ability to deceive and detect deception.

Relatively little research has been conducted on individual differences in the ability to deceive others. Even less has been done with regard to the ability to detect deception. As mentioned above, the only individual differences that appear to have been considered are gender and machiavellianism. Therefore, this study attempted to investigate an area of deception that has not been dealt with in any significant way before -- the role of the receiver in a deceptive interactions. More specifically, this study sought to determine whether specific individual difference measures might predict what kinds of individuals are most able to detect deceit in others. We hoped to find that certain common personality characteristics would be associated with accuracy in detecting deception.

The two individual difference measures we chose to examine were gender and self-monitoring. Specifically it was hypothesized that:

- 1) Females would be better at detecting deception than males
- and
- 2) High self-monitors would be better at detecting deception than low self-monitors.

It was predicted that females would be better at detecting deception than males for several reasons. Several very reliable and significant gender differences do exist with regard to nonverbal communication. In general, women, seem to be more attuned to cues in their interactions (Worchel, Cooper, & Goethals, pg. 183). They also appear to be more socially receptive.

Worchel, Cooper, and Goethals indicate that:

The difference between men and women in nonverbal expressiveness and sensitivity can be stated succinctly: women are superior both in accurately sending and in understanding nonverbal communication (pg. 183).

They go on to point out that:

Womens' superiority in understanding nonverbal communication is especially evident in their ability to identify negative feelings (pg. 184).

This ability to identify negative feelings may be due to women being in a less powerful position than men. they may become more sensitive to the leakage of negative feelings.

High self-monitors were predicted to be better at detecting deception than low self-monitors. The construct of self-monitoring was developed by Snyder (1974). Self-

monitoring refers to the extent to which an individual adjusts his/her behavior to situational norms and/or to the expectations of others. Snyder describes high self-monitors as individuals who are relatively situationally guided; are markedly sensitive and responsive to social and interpersonal cues to situational appropriateness; display marked situation to situation specificity in their behavior; and often show minimal congruence between their behavior and attitudes. Conversely, low self-monitors are much less responsive to situational or interpersonal expectations for appropriate behavior, and they are much more likely to base their behavior on their underlying attitudes and dispositions (Snyder & Gangestad, 1982). High self-monitors score high on the self-monitoring scale and low self-monitors score low on it.

High self-monitors have been shown to have certain common characteristics:

- 1) concern for the social appropriateness of their behavior;
- 2) attention to others in social interaction for cues as to appropriate behavior;
- 3) the ability to control and modify behavior, resulting in;
- 4) skill at presenting many different behaviors; and
- 5) the ability to apply this repertoire of behaviors

effectively cross-situationally (Gabrenya & Arkin, 1980; Worchel, Cooper, & Goethals, pg. 175).

Low self-monitors have been shown to be much more consistent in their behavior, due to the fact that they are primarily concerned with remaining true to their inner self image. They therefore tend to choose to enter situations, and even relationships, that allow them to remain true to their self image and attitudes (Snyder & Gangestad, 1982; Snyder & Simpson, 1984; Worchel, Cooper, & Goethals, 1988). Sample items on the self-monitoring scale (Snyder, 1974), are presented in Table 1.

Given their social nature, high self-monitors should be better at detecting deception in interpersonal contexts. Since high self-monitors are more concerned with identifying social cues and adjusting their behavior accordingly, they should be more likely to be in tune with deceptive as well as honest cues during social interactions.

This study was designed to assess the relation between the ability to detect deceit and certain specific individual difference measures (i.e., gender and self-monitoring). Receivers were asked to view videotapes of senders who either told the truth or lied about their feelings toward an acquaintance. They then made judgments about these messages and then responded to extensive personality information. Following this, we examined the relation between receivers' standing on the individual difference measures and their

ability to detect deceit.

METHOD

Phase I

Participants

For Phase I, Research participants were forty Introductory Psychology students (20 males, 20 females) who participated to fulfill course research requirements. Subjects were videotaped either telling the truth or lying about their feelings toward an acquaintance who they liked and disliked. Eleven subjects were dropped from the study. Two did not want their tapes to be used. The other nine subjects did not provide complete data and, thus, they could be used in the second phase of the study.

Procedure

As part of Phase I, Subjects were seated in a room with a videocamera mounted from the ceiling. Subjects were made aware of the camera and asked to look at it as they answered the questions the experimenter would ask them. The experimenter then left the room and the remainder of the communication during the videotaping process took place over an intercom system. Subjects were asked to make four descriptions of acquaintances. The descriptions included:

- A. Describe someone of the opposite sex they like
- B. Describe someone of the opposite sex they do not like and care for
- C. Describe the person they like (see A) as if they do not like and care for them
- D. Describe the person they do not like (see B) as if they do like and care for them

All descriptions were of opposite sex persons. Subjects were asked to refrain from describing relatives and they were asked to use first names only in their descriptions. This particular procedure has been used in previous research on deception (DePaulo & Rosenthal, 1979; Manstead, Wagner, & MacDonald, 1986; Zuckerman, et al., 1982). All subjects began with description A. The sequence of the remaining 3 descriptions was randomly counterbalanced across subjects. Subjects were encouraged to lie and to be as convincing as possible in descriptions C and D. Subjects were given approximately one minute to think about their descriptions before responding (DePaulo, et al., 1983) and one additional minute to make them. After the videotaping had been completed, subjects were asked to complete a battery of questionnaires containing several individual difference measures (these measures were not used for this study, but for future research, and will therefore not be considered).

Once subjects completed the questionnaires they were

thoroughly debriefed regarding the purpose of the videotaping and the future use of the tapes. They were also assured of confidentiality regarding the tapes and answers to the questionnaires. They were then given the option of having their tape erased immediately if they did not want it used for any reason (2 subjects chose to do so).

The videotapes from Phase I were then edited to form a master tape. Subjects who discussed relatives, or who did not have four good descriptions, were not included in the master tape. The final master tape consisted of 31 subjects with two good descriptions per subject. The tape contained two 20 second descriptions provided by each subject. The descriptions were randomly copied onto the tape, with the stipulation that both descriptions could not focus on the same acquaintance. The tape contained sixty-two descriptions and it was black and white VHS.

Phase II

Participants

In Phase II, subjects were sixty-one Introductory Psychology students (26 males and 35 females) who participated for required course experimental credit.

Procedure

As part of Phase II, subjects were brought into the

laboratory in same sex groups of approximately ten. Subjects were told about the four descriptions that the subjects on the tape had been asked to make. Subjects were asked to determine the truthfulness of each description. They were encouraged to rely on their initial impressions. Subjects made 62 judgments (one for each description). A disclaimer was made both at the beginning and end of the tape that nothing anyone said in the tape could be taken as evidence of true feelings or attitudes held by those subjects. Subjects then rated each description according to whether they thought the sender was telling the truth or lying (a dichotomous measure).

When the receivers had completed making their judgments, they were asked to complete a battery of questionnaires. Although several measures were taken only gender and self-monitoring are considered in the present study. Subjects were then thoroughly debriefed as to the nature of the study, assured that all of their data would remain confidential, and allowed to leave.

Videotapes were used as stimulus materials because previous research has indicated that exposure to all modalities facilitates the detection of deception (Ekman, et al., 1980; Krauss, et al., 1981). By using videotapes, receivers had access to both verbal and nonverbal cues. By using descriptions of other people we were able to more closely link these different verbal and non verbal cues with

a situation similar to interpersonal interactions.

RESULTS

To examine the relations between our four primary groups of receivers (males, females, high self-monitors, and low self-monitors) and the ability to detect deceit, a series of 2x2 contingency tables was constructed. The dependent measure (the receivers' judgments of the truth or falsity senders' descriptions) was dichotomous in nature. We aggregated receivers' judgments across all descriptions to obtain single summary scores for accuracy in detecting deception. As indicated in Tables 2-5, each cell represents the mean number of receivers making a judgement in that particular condition. If there is no relationship between the two variables, one would expect equal means in each of the four cells. If receivers can accurately detect deceit, we would expect the means to be higher in two cells: the cell in which the sender is telling the truth and the receiver perceives it as such (T/T), and the cell in which the sender is lying and the receiver perceives it as such (L/L).

Past research has shown gender and self-monitoring to be fairly uncorrelated. The correlation between sex and self-monitoring is generally found to be slightly positive, with men scoring higher at .1 to .15. Since they are relatively

independent we examined them as such.

To test the hypothesis that males would not be as good at detecting deceit, we conducted a chi square analysis where one dimension was sender status (Truth/Lie) and the other dimension was receivers' perception (Truth/Lie). This analysis was nonsignificant ($\chi^2(1) < 1$ ns). Thus, males could not detect deceit at a better than chance level. The means are reported in Table 2.

A similar contingency table was constructed to test the prediction that females would be better at detecting deceit. A chi square analysis was again conducted on the dimensions of sender status and receiver perception. This analysis also yielded nonsignificant results ($\chi^2(1) < 1$ ns). Therefore, females also could not detect deceit at better than chance levels. The means for females are reported in Table 3.

To test the hypothesis that low self-monitors would not be good at detecting deceit, we again conducted a chi square analysis on sender status and receiver perception. The results were nonsignificant, ($\chi^2(1) < 1$ ns). Low self-monitors could not detect deceit at a better than chance level. Their means are reported in Table 4.

Finally, to test the hypothesis that high self-monitors would be good at detecting deceit, a contingency table was constructed and a chi square analysis computed on sender status and receiver perception. The analysis again yielded nonsignificant results ($\chi^2(1) < 1$ ns). Thus, high self-

monitors could not detect deceit at better than chance levels. The means for high self-monitors are reported in Table 5. It should be noted that the data were analyzed within the sexes and within high and low self-monitors, not between them.

DISCUSSION

Contrary to what was expected, females and high self-monitors were not significantly better than males and low self-monitors at detecting deception. Although the means were in the expected directions, the effects were simply not strong enough to be statistically significant. This is especially consistent with the findings of Manstead, Wagner, and MacDonald (1986). They also found no evidence for sex or personality differences (although they considered machiavellianism instead of self-monitoring). Similarly, DePaulo & Rosenthal (1979) also failed to find an effect for personality differences. Therefore, these findings are consistent with the previous literature examining individual differences.

These results are also consistent with the previous research in showing that deceit is difficult to detect. Although studies have shown that people can be fairly accurate under certain circumstances people generally are not good at detecting deception. DePaulo, Lanier, & Davis (1983)

report that their findings in video-only conditions achieved barely chance levels of accurate judgments at best. Voice cues, however, showed more promise; tone of voice served as a much better predictor of accuracy.

Another reason for the difficulty in detecting deception may involve the gap between deception cues and leakage clues. DePaulo & Rosenthal (1979) point out that although subjects may be able to sense the occurrence of deception, they do not necessarily have the ability to detect cues that signify it. DePaulo & Rosenthal state:

The ability to detect deception appears to be a much more disparate set of skills than is the ability to perceive leaked affects. People who can tell that a lie is occurring when liking is being concealed cannot necessarily detect a lie when disliking is hidden. Further, observers who know when women are lying do not necessarily recognize dissimulation by men...Perhaps observers operate on the assumption that there is a single set of clues that tip people off to deception, when in fact women's deceit is revealed in ways different from mens (DePaulo & Rosenthal, 1979)."

This observation suggests that blanket statements about ability to detect deceit should be made with the strictest caution. Kraut (1978) has noted that although people can be consistently successful or unsuccessful as liars, they are

not uniformly consistent as detectors.

Ekman, et al. (1979) warn against making blanket statements about the general ability to detect deception as well. They have shown that detection can be very dependent on the situation and communication channels available to receivers. They point out that judging another's emotional state, attitudes, and personality involves very complex phenomena.

Krauss et al. (1981) also support this premise. Their research, however, did not support the many studies that claim nonverbal primacy in communication of affect. Their conclusions were similar to Ekman et al. (1979) in that detection of deception appears to be very situation specific.

One major shortcoming of the present study should be noted. The number of subjects in this study was relatively small compared to what would normally be considered an adequate sample for this type of research. Future research should have double the sample size. As mentioned previously, the effects were in the expected direction, but the sample size was too small to detect statistically significant findings.

Despite the rejection of the main hypotheses, this study provides much needed data on receivers. It was shown that individual difference measures -- most specifically gender and self-monitoring -- do not play a large role in the ability to detect deceit.

Future research in this area should focus on receivers as well as differences in cue availability and cue utilization. A program of research in which accurate receivers are first identified and the cues they rely on to make judgments are studied would probably be productive. If individual differences in personality play no crucial role in determining who is good at detecting deception, then something else must do so. Skill in cue utilization could be one determinant. Recent research has begun to identify which cues are relevant. Future research must examine the relations between relevant cues and their subsequent use in detecting deception. If a relevant cue is not used, then it is of little value in enhancing accuracy in interpersonal perception. Along these lines, DePaulo and Rosenthal (1979) suggest that researchers examine relations among (1) the cues that actually do differentiate between truth and deception; (2) the cues that people say they use to distinguish truth from deception; and (3) the cues people actually use in making their judgments. This line of research would have greater practical applications than previous research, and should therefore be taken advantage of since it deals with an issue so intricately woven into daily interpersonal interactions.

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TABLE 1

Sample Items Measuring Self-Monitoring

Answer the following items, True or False:

- | | | |
|---|---|---|
| 1. At parties and social gatherings, I do not attempt to do or say things that others will like. | T | F |
| 2. I would probably make a good actor. | T | F |
| 3. I find it hard to imitate the behavior of other people. | T | F |
| 4. I can make impromptu speeches even on topics about which I have almost no information. | T | F |
| 5. I would not change my opinions (or the way I do things) in order to please someone or win their favor. | T | F |
-

Source: Adapted from Snyder (1974)

TABLE 2

Mean Number of Accurate and Inaccurate Responses:

MALES

		SENDER	CUES
R E C E I V E R	LIE		TRUTH
	TRUTH	13.39	15.18
G U E S S	LIE	11.86	10.25
	TRUTH		

Note: n = 26
chi square = .06

TABLE 3

Mean Number of Accurate and Inaccurate Responses:

FEMALES

SENDER CUES

R E C E I V E R	LIE		TRUTH	
	TRUTH	18.07		22.11
G U E S S	LIE	16.46		11.79

Note: n = 35
chi square = .47

TABLE 4

Mean Number of Accurate and Inaccurate Responses:

LOW SELF-MONITORS

		SENDER CUES	
		LIE	TRUTH
R E C E I V E R	TRUTH	15.43	18.64
	LIE	14.79	11.36
G U E S S	TRUTH		
	LIE		

Note: n = 31
chi square = .28

TABLE 5

Mean Numbers of Accurate and Inaccurate Responses:

HIGH SELF-MONITORS

		SENDER CUES	
		LIE	TRUTH
R E C E I V E R	LIE	16.04	18.64
	TRUTH	13.54	10.68
		SENDER CUES	

Note: n = 30
chi square= .18