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THE EFFECT OF SOCIAL ATTRACTION
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THE EFFECT OF SOCIAL ATTRACTION AND SELF-INTEREST ON DECEPTION ATTRIBUTIONS

By

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ABSTRACT

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ON DECEPTION ATTRIBUTIONS

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Past deception research has tended to focus on the behavioral correlates of deception detection. Results have been mixed. In an effort to shift the focus of deception research, this study adopts a social cognition perspective to probe the consequences of deception. In particular, two attributional issues are addressed: (1) The link between dispositional and environmental judgments, which past work has assumed to be unidimensional, is explored; and (2) the impact of the social attraction of the liar and the degree of self-interest of her lie on these judgments is considered. Participants viewed a short interview in which a "student" described herself and then described two instances of her own lying behavior. Participants were then asked to determine whether the interviewee would lie in four hypothetical situations and then to determine why she would act in this way. It was hypothesized that these attributions about deception would contain both an environmental and dispositional component. Support was found for this hypothesis. Three additional hypotheses predicted an interaction between self-interest and social attraction on these subsequent attributions. Mixed support was found for these hypotheses. Overall, results show that socially attractive liars are judged less harshly than their less attractive counterparts, i.e., the environment is credited for their lying behavior. In addition, the finding that attributional judgments are not unidimensional suggests

that the actor-observer effect may not always hold. Implications for further research are discussed.

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CHAPTER ONE

INTRODUCTION

While the deception and deception detection literatures are burgeoning, the breadth of our conclusions (see Kalbfleisch, 1985; Kraut, 1980; Zuckerman, DePaulo, & Rosenthal, 1981; Zuckerman & Driver, 1985 for reviews of this literature) are largely limited to knowing that people are very confident about, but only marginally successful at detecting deception. Though most studies have focused on the behavioral correlates of deception, some recent work has begun to seek cognitively based explanations for cue preferences during detection (Stiff & Sleight, 1987) or during deception (Green, O'Hair, Cody, & Yen, 1985). This line of thinking uses a theoretical base for the deception detection process that yields new insight and potentially shifts the focus of research from the antecedents and toward the consequences of deceit.

From a social cognitive perspective, deception would not actually be detected, it would be attributed on the basis of observed behaviors that the observer finds salient. What is important in the environment, i.e., what is salient or vivid, has been hypothesized to provoke both causal (Fiske & Taylor, 1984; Taylor & Thompson, 1982) and noncausal (Taylor & Fiske, 1978) attributions. These attention-getting stimuli have also been hypothesized to contribute to the dispositional nature of attributions made when observing another's behavior (Fiske & Taylor, 1984; McArthur, 1981).

Unfortunately, both outside and inside the arena of deceptive behavior, studies looking for this salience/dispositional link have

yielded mixed results. In nondeceptive circumstances the hypothesized link between salient people and/or salient cues and dispositional attributions has not been generally supported. Salient people are not necessarily thought to be perpetrators or instigators because of their inherent dispositions. Instead, salient people are seen as being less affected by their environment rather than more affected by their dispositions. Taylor and Fiske (1975) found that salient persons were thought to be causal agents, but this decision did not include a dispositional judgment about them. McArthur and Post (1977) found only that the behavior of a salient actor (based on the figurativeness of his shirt pattern) was attributed less to the environment than the behavior of a non-salient actor. So while salient people are seen as causal agents, their actions are not necessarily attributed to personal motives.

In deceptive circumstances, studies have generally not asked for a dispositional versus environmental judgment outright. Instead, they have tested for the accuracy of judgments of deceptive behavior and found people wanting in this particular ability.

In addition to not investigating directly the dispositional/ environmental distinction suggested by the salience hypothesis, deception studies have also not investigated the impact of outside variables on attributions of deception once an observer is confident that another is lying or has lied. In this case the impact of deceptive behavior on subsequent relational interaction is brought more sharply into focus. Prior research has not probed the consequences of suspected or alleged (detected) deception even though these consequences have strong implications for relational harmony and

health. This research seeks to address two such attributional issues: (1) What is the link between dispositional and environmental alternatives when making judgments about detected deception; and (2) what is the impact of certain variables on this attributional choice?

The Dispositional/Environmental Link

Salience research

As a prelude to their work on the effect of salient cues on subsequent attributions, Jones and Nisbett (1972) suggested an attributional dichotomy based on differing perspectives. They hypothesized that observers would favor dispositional attributions, while actors would favor environmental inferences. In other words, Jones and Nisbett suggested that actors and observers vary in their susceptibility to making the fundamental attribution error, defined as "the tendency for attributers to underestimate the impact of situational factors and to overestimate the role of dispositional factors in controlling behavior" (Ross, 1977, p. 183). Salience research implies that such differences occur because of differences in attentional focus. Because they are nonparticipants, observers will find the behaviors of interactants particularly prominent and interest-provoking. Because they are participants and already are familiar (to some degree) with their own dispositions, actors will look to the environment for interesting cues to guide or explain behavior. Storms (1973) confirmed this actor-observer discrepancy by ingeniously manipulating interactants' perspectives with videotape. His treatment caused a shift in attributions that corresponded to a predicted shift in perspectives. When participants became observers, their attributions changed from environmental to dispositional. Thus,

observers will focus on other people more because they are more salient when compared to their background (Pryor & Kriss, 1977). This attentional preference should promote attributions about the now salient people rather than their (now) less salient environment.

A number of experiments (see the Fiske & Taylor review, 1984) demonstrate that salient cues do affect inferences, both causal and noncausal (Taylor & Fiske, 1978). Cues become salient because of their unexpectedness, figurativeness, non-normativeness, or because they seem out-of-role (Taylor & Fiske, 1978). Such cues direct attention to the source of that behavior, i.e., the person being observed. With regard to deception, one might expect a similar process to be operating, and the deception literature (see Kalbfleisch, 1985; Kraut, 1980; Zuckerman, DePaulo, & Rosenthal, 1981; Zuckerman & Driver, 1985 for reviews of this work) certainly attests to the power of salient cues to attract observer attention and to provoke judgments of deceit. Salient cues are not always diagnostic; only a limited range of cues has been found to actually signal deception (Kraut, 1978; Maier & Janzen, 1967; Riggio & Friedman, 1983; Stiff & Miller, 1986; Zuckerman et al., 1981). Nevertheless, observers clearly are confident that certain cues dependably signal deception although they may not know which cues they actually use (Zuckerman et al., 1981). One might expect, then, that such deception cues would elicit allegations about the deceptive nature of the other person.

However, results from salience research indicate that observers are loathe to make the expected dispositional attributions. Instead, observer attributions are <u>less</u> environmental rather than more dispositional. A secondary finding of this research might help to

explain the unexpected results. Taylor and Fiske (1975) found that the dispositional/environmental distinction is not unidimensional: observers do not rate the actions of others on a continuum from dispositional to environmental influence. Ross (1977) concurs, noting the inherent difficulty of disambiguating the influences of situation and disposition when making social inferences . Therefore, a response format that does not permit selection of both types of attribution could easily produce misleading findings.

The scale's lack of unidimensionality has particular import for deception attributions. To the extent that these dimensions are distinct but correlated, the act of alleging deception is implicitly concerned with making a moral judgment (Bok, 1978) about someone else's nature. People may resist such a judgment, and instead, may strive to find extenuating environmental circumstances to explain away the observed behavior/suspected deception. For instance, if an employer suspects that an employee isn't telling the truth about calling in sick, that employer may prefer to think that this particular employee deserves to take some liberties with the truth because work conditions have been particularly stressful and a "mental health" day is well deserved. This environmental attribution might be reinforced by the accompanying belief that this employee is a conscientious person who would only lie because of reasonably extenuating circumstances. Therefore, the employer does not have to change her or his overall belief about this employee's temperament, i.e., the call is deceptive, but the person is not necessarily a liar for having made it. Thus, attributions about suspected deceit are likely to contain both an environmental and a dispositional component. In this way, a judgment

about another can be tempered by situational variables. Conversely, a situational judgment is bound to contain some dispositional overtones.

It should be noted here that this hypothesized mix of attributions is also likely to affect a person's willingness to detect deception in the first place. A preference not to make judgments about another's character may cause much deception to go unsuspected and thus undetected. Such a preference may result from observance of politeness norms, desire to avoid the relational fallout that could occur after suspecting or accusing another of deceit, or fear of judgmental reciprocity. Whatever the reasons, it follows that observer attributions about deceptive behavior may frequently involve seeking an environmental rationale to supplement or replace a dispositional judgment.

H1: Attributions about detected deception will contain both a dispositional and an environmental component.

The net effect will be a levelling of the actor-observer effect because observers (as well as actors) will attribute behavior to the environment. In this way, bystanders (who are the focus of this research) will not make the expected dispositional attributions.

Situational influences

Situational influences can also be expected to affect attributional choices. Sleight (1987) presents a typology of seven different deceptive situations varying from innocuous "for fun" lies to more serious "to get what I want regardless of others" prevarications. These situations are evidently readily recognized by naive observers and may constitute a hierarchy of deceit. The nature of these

situations (i.e., the environment) can be expected to influence the attributional preferences of observers.

In situations such as dinner parties or planning a surprise for someone, where circumstances often prescribe lying or something less than a perfectly truthful response, observers (when asked) may readily recognize this "deceitful" behavior because it can be largely ascribed to the situation. (It is also possible that in some instances the prescription is so normative that observers may discount the behavior as being deceptive because it is so "obviously" called for by the environment. This inference process actually might result in a judgment of "truth" as a questionnaire response rather than an attribution of deception.) In such cases, the impact of this detected lie on subsequent interactions will probably be slight. As a matter of fact, failure to deceive in such situations might wreak more relational trouble than the deception.

Even in less prescriptive circumstances, such as explaining why one is returning an unwanted gift, (e.g., "I already have an electric garlic press"), the ready availability of an environmental "excuse" may not preclude a dispositional judgment as well. For instance, the donor of that esoteric kitchen appliance might think, "I know she's lying, but she's saying that to avoid hurting my feelings." Under these circumstances the behavior is situationally determined, but the subsequent attribution about the deceiver is less easily predictable. In this case, while the deceiver's behavior is environmentally determined, an attribution about his or her disposition is also likely to be made, e.g., "What a considerate person!"

Therefore, the nature of the situation can be expected to have an effect on the dispositional/environmental composition of observer attributions about deceivers. The nature of the effect is not easily predictable and a research question is in order.

R1: What effect will perceived situational variance have on attributions about detected deception?

The Impact of Other Variables

Self-interest

Sleight (1988) speculates that other variables might undergird the deception situation hierarchy. One such variable is the perceived intention of the lie, i.e., whether or not liars' goals are heavily grounded in their own self-interest. In the former case, the outcome would be to benefit or protect the self (i.e., high self, low other-interest); in the latter, to benefit or protect the other (i.e., low self, high other-interest).

Self-interest is a variable known to influence compliance-gaining attempts (Boster & Stiff, 1984; Clark, 1979; Hunter & Boster, 1979; Williams & Boster, 1981). Because deception can be viewed as a persuasive tactic (Miller, 1983), this variable should effect deception attempts as well. In addition, the attributions made about deceivers can be expected to be affected by the apparent level of self-interest of the lie. Observers will take not only the situational variance into consideration when trying to justify another's deceit, but also can be expected to note whether the lie was told for the liar's benefit or for the target's benefit.

Self-interest researchers have focused on message selection and production rather than message effects. Clark (1979) found that the degree of a source's self-interest in an outcome "clearly influenced the level and form of pressure exerted on the receiver" (p. 270). The relationship was positive: As the source's self-interest increased so did the pressure for compliance. Interestingly, when liking for the other was considered, message production was not significantly affected; i.e., the amount of compliance pressure did not vary with the degree of liking or disliking. In this circumstance, however, message producers attempted to preserve the self image of receivers by emphasizing the solution rather than the problem when designing their messages.

In their study of compliance-gaining message selection behavior, Boster and Stiff (1984) found that people were more concerned with equitable treatment for others than for themselves. In a compliance-gaining setting, participants' message use demonstrated their concern that their partner (actually a confederate) in an experimental task receive additional points when that partner was apparently the victim of an inequity in point allocation. These researchers conclude that a benefit-self (high self-interest) condition has great impact on message construction.

Two studies have concluded that self-interest affects message selection. In their reanalysis of Marwell and Schmitt (1967) and of Miller, Boster, Roloff, and Seibold (1977), Hunter and Boster (1979) concur with Clark (1979). This research varied both the short and the long term consequences of the compliance task and found that neither had much impact on message selection. In contrast, <u>who</u> would benefit

from the compliance significantly affected strategy selection. More strategies would be used when the persuader "can regard himself as asking for compliance for the good of the persuadee" (p. 18). Williams and Boster (1981) also found that perceptions of who would benefit were a strong predictor of compliance-gaining message selection. In this experiment, respondents were asked to put themselves in the the place of a persuader and rate whether they would or would not use one of two persuasive messages. Results demonstrated the benefit-other manipulation to be a strong predictor of message selection when mediated by perceptions of who would benefit.

If the source's perceptions of who will benefit from a message outcome influences both message construction and selection, then observer perceptions about that outcome can also be expected to vary. If observer perceptions about the outcome vary, then attributions about message designers should also vary with observers' perceptions of self-interest. Specifically, as the level of a source/deceiver's self-interest increases, the nature of a deception attribution would be expected to shift from environmental to dispositional. This would occur because when it is apparent that someone is lying to benefit his or her own interests (i.e, the source, alone, will benefit) then attributions about that person's character will tend to be made.

H2: Perceived sender self-interest will be positively related to the dispositional component of a deception attribution.

Stated differently, as sender self-interest is perceived to increase, observer attributions about deceivers will become more dispositionally based.

Social attractiveness

Self-interest, then, should counter the overall tendency of observers to prefer environmental attributions about detected deception. This tendency toward environmental judgments might also be both exacerbated and attenuated by the effect of the social attractiveness of the other person. Social attractiveness is one dimension of a three dimensional construct evaluated by McCroskey and McCain (1974) using exploratory factor analysis. While all three dimensions; physical, social and task attractiveness might impinge on deception attributions, the social dimension is particularly relevant. Specifically, since social attractiveness is partially based on perceived candor, this dimension of the construct seems particularly pertinent to the deception attribution process.

Social attractiveness, which was not conceptually defined by McCroskey and McCain, is measured by five items (see Appendix A) that assess a person's evaluation of a target's similarity to him or herself, as well as the perceived likability and friendliness of the target. In some respects, social attractiveness seems related to the character (or trustworthiness) dimension of credibility (McCroskey, 1966). This character dimension includes the "good will" and intention(s) attributed to a target by a receiver. In part, one's social attractiveness includes an assessment of how trustworthy, and thus approachable and desirable, others find a person. This assessment would include an evaluation of both message transmissions and perceived appropriateness of behavior.

Another similar conceptualization of interpersonal attractiveness was termed social desirability (Walster, Aronson, Abrahams, & Rottman, 1966). These authors postulated a three dimensional construct composed

of personableness, physical attractiveness, and material assets which they felt would influence selections of potential dating partners. The dimension of personableness is analogous to the idea of the social attractiveness component of interpersonal attraction.

Such a socially attractive/desirable person would be more likely to be deemed a potential friend. Consequently, one should be willing to report that she or he liked this socially attractive other. Additionally, liking should create expectancies from and about the attractive other (Tedeschi, 1974). The halo effect generated by attractiveness thus leads others to assume that they are "...more likely to possess almost every personality trait which [has] been determined to be 'socially desirable'" (Berscheid & Walster, 1974, p. 169).

Closely allied to social attractiveness, because it undoubtedly will contribute to a person's evaluation of another's interpersonal attractiveness, is physical attractiveness. Unless another is evaluated without any visual contact, this dimension will likely be considered in the overall judgment of attractiveness. Considerable research (see Berscheid & Walster, 1973 for a review) has shown this dimension of attractiveness to be a particularly powerful determinant of <u>overall</u> ratings of attractiveness. Work by Dion, Berscheid, and Walster (1972) affirms the existence of a "what is beautiful is good" stereotype along the attractiveness dimension. Regardless of the sex of the rater, persons making judgments of photographs of three physical attractiveness conditions (very attractive, average attractiveness, relatively unattractive) assumed the attractive people would attain more prestigious occupations, be more likely to marry, be more

competent spouses, and have happier marriages and social lives. These evaluations indicate that beautiful people are also assumed to be socially desirable people. The two dimensions would seem to be positively correlated although there are no data to support this suspicion. McCroskey and McCain (1974) specified an orthogonal rather than an oblique rotation in their investigation. It seems that physically attractive people stimulate attributions about their social attractiveness. Therefore, studies investigating the former dimension have probably investigated the latter without clearly measuring it.

However, while probably correlated with physical attractiveness, social attractiveness is a distinct construct which focuses on the desirability of people's behaviors to others. Both physically attractive and physically unattractive people might be judged to be socially attractive because of their affability and friendliness. The "life of the party" is often not the most beautiful person there. While an initial judgment might be made about someone because of his or her physical appearance, a moment's interaction with, or observation of that person to garner social attractiveness information might do much to moderate that initial judgment. To separate the impact of social attractiveness, then, physical attractiveness will be held constant so that its contribution to social attractiveness evaluations will not vary.

Nevertheless, the results of several physical attractiveness studies will be reviewed because the reasoning used in them is applicable to social attractiveness. In addition, little work has been done utilizing social attractiveness alone.

Physical attractiveness has been found to affect others' honesty (Sroufe, Chaikin, Cook, & Freeman, 1977). Attractive confederates stimulated significantly more honest behaviors by others, when that honest behavior was considered to be socially desirable. A situation was constructed where "lost" money was claimed by the person who had inadvertently left it behind. When approached by a physically attractive claimant, people were much more likely to return the forgotten coins. Sroufe et al. suggested an impression management (Goffman, 1959) explanation for these results, positing that the regard of the attractive person was more highly valued than that of the less attractive person. Alternatively, these authors felt that a "just world" (Lerner, 1970) rationale might explain their results. "People may rationalize dishonesty by reasoning that unattractive people are 'bad' anyway, and so deserve bad things (i.e, losing money) to happen to them" (p. 61). A third explanation is possible. Given that attractive others are assumed to possess (regardless of whether they actually do) socially desirable traits, perhaps their presence may elicit a reciprocity-like response; i.e., "I will act toward this person as I know she or he would probably act toward me. In this way, I might engender further benevolent favors from this attractive person or other attractive people I encounter."

Given that some studies reveal greater benevolence toward attractive others (Tedeschi, 1974), the "reciprocity" rationale for the Sroufe et al. (1977) finding seems plausible. When deception is socially prescribed (this is likely to be in low deceiver self-interest situations) socially attractive deceivers might be extended the benefit of the doubt more than their unattractive counterparts. This means

that attributions about their deceptive behavior would be largely situational. This is not to say that the deceit of socially unattractive people in similar circumstances would be attributed exclusively to their character; however, the attributions about unattractive people might contain more of a dispositional component because their overall behavior is apparently less desirable. Socially unattractive people, because their general demeanor is less acceptable, might be expected to lie more readily. In both instances, the apparent consistency of their behavior would be assumed to stem from their character.

H3: Attributions about the deceit of socially attractive persons telling low self-interest lies will tend to be more situational than attributions about socially unattractive people.

However, running counter to this tendency for beneficent behavior and assumptions is an opposite pressure. Thus, an interesting question addresses whether this forgiving behavior would be extended to deception situations where the deceit would not be considered socially desirable because it is high in the deceiver's self-interest.

Attractive others are assumed to be freer from environmental constraints than their less attractive peers. Miller (1970, cited in Hocking, Walker, & Fink, 1982) found direct evidence that physically attractive people may be viewed by raters as being relatively free from external influences when compared to less attractive people. Beautiful people were judged to be less "external" on Rotter's (1966) locus of control scale than their less beautiful counterparts. This aspect of attractiveness implies that attributions about interpersonally attractive people should reflect a stronger dispositional component, because they are perceived as being free agents in their environment.

In the case of social attractiveness, when caught performing socially undesirable acts, such as lying, highly socially attractive people may be judged more harshly. One would expect the attributions to swing toward the dispositional with less willingness to explain away the behavior using an environmental component. However, in these same circumstances, less attractive people might be given the benefit of the doubt because they are assumed to be more affected by their environment.

A similar logic was used by Hocking et al., (1982) in their investigation of the effect of attractiveness on judgments of morality. In this study, participants "...judged the morality of a female who was described as having premarital sexual intercourse with a male she had never met before or with whom she had been dating for six months." As predicted, the attractive perpetrator was labelled immoral while the unattractive perpetrator was not. Following this reasoning;

H4: Attributions about the detected deceit of socially attractive persons telling high self-interest lies will tend to be more dispositional than attributions about socially unattractive people.

Social attractiveness should deflect the weight of an attribution from a dispositional to an environmental judgment in some circumstances where deception has been detected. Therefore, the reciprocity benefit discussed earlier might also apply; i.e., an assumption that the situation was responsible for another's reprehensible behavior might lead to a reciprocal assumption in the future. This line of reasoning is similar to social exchange theory's view (Roloff, 1981) that interactants weigh the costs and benefits of their behaviors in order to maximize their outcomes. While making either an environmental or dispositional judgment is relatively cost-free, the decision to act in

line with that judgment isn't. Environmental judgments might perpetrate lower interpersonal costs (e.g., one wouldn't have to allege that another person is a liar because the situation is held responsible for the action) for hoped for interpersonal benefits from another, while dispositional judgments might result in higher costs (e.g., an allegation of deceit) for unknown or low benefits. Thus, discounting an attractive person's deception by writing it off to the environment should yield a more desirable interpersonal outcome.

In sum, the four hypotheses predict that the effect of self-interest and social attraction should result in an interaction effect when observers make attributions about known deceit. It is also predicted that these attributions will contain both a dispositional and an environmental component (see Table 1). In high/high sender self-interest conditions (Cells 1 & 2), attributions about socially attractive deceivers will be more dispositional than attributions about socially unattractive deceivers overall, although both sets of judgments will contain each kind of attribution. In such conditions deception is less likely to be condoned because only the deceiver will benefit from the lie. Attractive deceivers, who are supposed to be relatively free agents, should be dispositionally condemned in these situations while their less attractive counterparts should be extended the benefit of the environmental doubt. In these circumstances, where attractive people are perceived as having more available options, observers should more readily condemn their behavior by attributing it, primarily, to the actor's flawed character. As the negative consequences of the deceit increase, one would expect the dispositional component to increase in Cell 1 and the environmental component to

Table 1

Hypothesized Effects of Social Attractiveness and Self-Interest on Attributions

SOCIAL ATTRACTIVENESS

SELF INTEREST	Attractive	Unattractive
High/High	1 D > E	2 E > D
High/Low	3 D > E or E > D	4 D > E or E > D
Low/High	5 E > D or D > E	6 E > D or D > E
Low/Low	7 E > D	8 D > E

D = Dispositional Attribution
E = Environmental Attribution

increase in Cell 2. In low/low sender self-interest conditions (Cells 7 & 8), the reverse should be true; attributions about socially attractive deceivers will be more environmental than dispositional, while attributions about socially unattractive deceivers will be more dispositional than environmental. In situations where deception is low in apparent deceiver self-interest (and high in deceivee self-interest) and deception is detected, both attractive and unattractive perpetrators might be judged environmentally. However, attributions about less attractive people may be expected to contain a stronger dispositional component because their beneficent behavior to others will stand in contrast to their socially unattractive posture and presentation. Attributions about attractive people in similar circumstances (Cell 7) will contain less of a dispositional component by comparison. Their behavior will be in keeping both with their general demeanor and the demands of the situation. Judgments of that behavior will tend to favor the environmental explanation because such a judgment might create the reciprocal arrangement discussed earlier; i.e., "If I make an environmental judgment for this person, maybe one will be made for me in the future." In each pair of Cells (1 and 2, 7 and 8), the balance of the attributional judgments will be in opposition.

However, scenarios other than the high/high and low/low self-interest conditions are more likely to reflect the ambivalent situations of everyday life where information about others is apt to be more bipolar. A deceiver's self-interest may shift to reflect situational demands. In some cases, the same person may be known to have told both kinds of lies. For instance, what if another describes

two lies: the first high in self-interest and the second low? If that person is attractive (Cell 3), will the predicted tendency to condemn him or her for the more selfish lie create a primacy-like effect that is not ameliorated by the added knowledge of the second less selfish lie? If that person is unattractive (Cell 4), will the opposite (environmental) pressure operate? Research in this area (Crano, 1977, Stewart, 1965) suggests that attention is the variable that actually accounts for attitude formation. One could argue then that others will pay more attention to socially attractive people simply because they are attractive. Thus, one would expect a primacy-like effect in this condition, and the attractive person would be mostly dispositionally judged. The same logic would predict that a mostly environmental judgment would occur in Cell 5 when ab attractive person tells a low self-interest lie and then a high self-interest one.

However, one could also argue that an attractive person telling a low self-interest lie is behaving attractively, as expected. Therefore, telling a low self-interest lie first might not be as attention provoking as the immediately following high self-interest lie. If attention shifts in this way, then a mostly dispositional judgment would again result in Cell 5. By the same token, one's willingness to believe good things about attractive people might cause one to discount the high self-interest lie that preceeds the low in Cell 3. If this occurs, then a mostly environmental attribution would occur here because of a recency-like effect.

Either line of logic seems plausible, so predictions for Cells 3 and 5 are difficult to make. A research question is appropriate:

R2: What is the effect of mixed self-interest information about

deceit on subsequent attributions about socially attractive deceivers?

In a similar way, predictions about unattractive deceivers are not clear cut. One could argue that socially unattractive people will have less attention paid to them. Therefore, recency-like effects might be expected in Cells 4 and 6. The last lie told in these mixed conditions would be the primary determinant of the attribution. When a low self-interest lie is last (Cell 4), then the subsequent attribution will be mostly dispositonal as is also expected in the low/low condition. When a high self-interest lie is last (cell 6), then the subsequent attribution will be mostly environmental as is also expected in the high/high condition.

However, perhaps socially unattractive people command more attention because of their unattractiveness, which would be deemed socially inappropriate. If this is the case, then the subsequent attributions would be similar to those for attractive people who "naturally" command our attention. These resulting predictions would be the reverse of those just discussed for Cells 4 and 6. Another research question seems in order.

R3: What is the effect of of mixed self-interest information about deceit on subsequent attributions about socially unattractive deceivers?

Finally, one could also argue that social attractiveness, by itself, will determine the nature and balance of the attributions in these mixed conditions but this argument is still beset with contradictions: Socially attractive people will be <u>dispositionally</u> judged because they are free agents in their environment, vs. socially attractive people will be <u>environmentally</u> judged because attractive people deserve the benefit of the doubt; socially unattractive people

will be dispositionally judged because they are obviously bad people, vs. socially unattractive people will be environmentally judged because they are helpless in the face of situational demands. Given these competing lines of logic, predictions here, again, seem premature.

CHAPTER TWO

METHOD

Design

The study used a three factor independent groups design. Four levels of self interest (high/high, high/low, low/high, and low/low) and two levels of social attractiveness (attractive, unatttactive) were completely crossed with each other. Since the self-interest manipulation involved the description of two different lies, either one of which could be high or low in sender self-interest, an order effect was possible. Therefore, both orders were used and the resulting design contained 16 cells that reflected this potential methodological effect.

Participants

Participants were 224 (142 females, 82 males) undergraduate communication students from a large Midwestern university. Students received extra class credit for their participation and were assigned randomly to groups of seven.

Stimulus Materials

Interview scripts consisting of four questions to be asked of a "student" named Stacey were employed to manipulate both self-interest and social attractiveness. The first question asked Stacey briefly to identify herself. The second question asked her to describe herself. The third and fourth questions probed for descriptions of two lies that she had told.

This brief interview was videotaped using a trained actress posing as Stacey. A video format was selected for three reasons: (1) While

previous attribution research used paper and pencil manipulations (MacArthur, 1972) to investigate the components of causal attribution, the intention of the videotape was to create a more vivid manipulation. The videotape format provided a multi-modal stimulus that left less to observers' imaginations; (2) deception and its detection usually involve visual and vocal interaction with or observation of others and deception research has generally relied on videotape to increase the verisimilitude of a natural setting while still maintaining some amount of control (Bauchner, Brandt, & Miller, 1977; Ekman, Friesen, O'Sullivan, & Scherer, 1980; Kraut, 1978; Maier & Lavrakis, 1976, manipulations 4 & 5; Maier & Thurber, 1968; Littlepage & Pineault, unpub.; Miller et al., 1981; Miller, DeTurck & Kalbfleisch, 1983; Riggio & Friedman, 1983; Stiff & Miller, 1986; Stiff et al., 1988; Stiff & Sleight, 1987; Zuckerman, Amidon, Bishop, & Pomerantz, 1982; Zuckerman, Koestner, & Alton, 1984; Zuckerman, Koestner, Colella, & Alton, 1984; Zuckerman, Larrance, Spiegel, & Klorman, 1981); and (3) videotape facilitated a more forceful manipulation of social attractiveness using certain nonverbal behaviors. A paper and pencil measure would not have accomplished these ends.

Self-interest manipulation. Based on the deception typology (Sleight, 1988) and utilizing the compliance findings regarding self-interest (Boster & Stiff, 1984; Clark, 1979; Hunter & Boster, 1979; Williams & Boster, 1981), four different deceptive conditions were developed for "Stacey". Two situations were selected from the typology based on the apparent similarity of intention for telling the lie, and the likelihood that a student would find herself in such circumstances.

One situation involved Stacey's lying about having padded a resume; the other involved lying to a boyfriend about being an honors student.

The self-interest manipulation was created by varying who benefited from the lie. In high self-interest conditions Stacey was lying to protect herself, while in low self-interest conditions she lied to protect a friend. Four possible self-interest situations resulted; a high self-interest lie about the resume incident versus the low self-interest alternative, and a high self-interest lie to the boyfriend versus the low self-interest alternative.

To avoid a confound, it was important that the two lies were seen as being relatively equal in severity. A pretest (N = 86) demonstrated that the lies were apparently seen as similar in quality. Participants read four of the eight scenarios; the high self-interest/socially attractive version, the low self-interest/socially attractive version, the high self-interest/socially unattractive version and the low self-interest/socially unattractive version, and rated the "similarity of the lies" even though the circumstances were slightly different. They also rated whether persons telling such lies would view their own behavior as consistent. Collapsing across attractiveness, these two lies were viewed as similar to one another ($\underline{F} < 1$, $\underline{p} > .05$, $\underline{r} = .02$), and the means (2.73 and 2.67) were nearly identical to one another. Collapsing across self-interest yielded similar results ($\underline{F} < 1$, $\underline{p} > .05$, $\underline{r} = .01$; means = 2.71 and 2.68). Therefore, given the power (.98) of this test to detect differences between groups, these two lies were judged as having equal strength and were used in the experimental manipulation.

Social attraction manipulation. Social attraction was manipulated in several ways. Since this dimension of interpersonal attraction is likely to be highly correlated with physical attractiveness, the physical attractiveness of the stimulus person was held constant. A verbal description of Stacey's social attractiveness was developed based on work with this construct (McCroskey & McCain, 1974; Tedeschi, 1974). These authors suggest that socially attractive people are friendly, well-liked and approachable by others.

To create this impression, the socially attractive Stacey described herself as friendly and well-liked. She claimed to have made many friends while social director on her floor in the dorm. By contrast, the socially unattractive Stacey claimed to be basically a loner with only one or two friends. Unattractive Stacey also maintained that "it's basically a waste of time to do things with a big group of people." The two descriptions were approximately equal in length.

Finally, this construct was manipulated visually through the use of selected nonverbal behaviors. Recent work (Burgoon & Aho, 1982; Burgoon, Buller, Hale, & deTurck 1984; Burgoon & Hale, 1988) on the impact of immediacy in relational interaction suggests that certain nonverbal behaviors reliably communicate the level of involvement between communicators. Immediacy behaviors are those cues that "function to increase or decrease the physical and psychological distance between people" and "that may index the degree of involvement and sensory stimulation...and imply positive and negative evaluations" (Mehrabian, 1971, cited in Burgoon et al., 1984, p. 353).

Burgoon and Aho (1982) found that immediacy was signalled by smiling, increased eye contact, head nods, and greater facing behavior. Distance violations (i.e., non-immediate or too-immediate behaviors) were shown to have significantly negatively arousing effects on interactants. Burgoon et al., (1984) found that interactants do interpret high eye contact, close proximity, forward body lean and smiling as signs of trust, attraction and intimacy. Therefore, these cues do communicate immediacy. Finally, Burgoon and Hale (1988) demonstrated that non-immediacy does result in lowered credibility ratings between interactants. Non-immediate behavior communicates detachment, nonintimacy and dissimilarity compared to normally immediate behavior.

Because immediacy is associated with perceptions of trust and attraction, the amount of eye contact, degree of body lean and amount of smiling were used to reinforce the verbal social attraction manipulation. Socially attractive Stacey leaned toward her interviewer, maintained eye contact and smiled during the course of her interview. Socially unattractive Stacey leaned away (the chair was able to rock back over 90 degrees), avoided eye contact and did not smile while being queried.

A pretest of the social attraction segment of the videotape was conducted. Participants (N = 40) viewed only that portion of the stimulus tape where Stacey described herself and exhibited the reinforcing immediacy behaviors. Socially attractive Stacey was found to be significantly more attractive (F = 45.6, $p < .01$, r = .74) than unattractive Stacey. Raters stated they would want to meet attractive Stacey (r = .82) and that they would want to make friends with her (r =

.58). The combined effect of these items indicated a significant difference between the two Staceys (F = 102.86, p < .01, r = .85).

To assure that the selected immediacy cues had been manipulated successfully, three coders viewed each segment of the stimulus tape. Coders worked independently and were unaware of the treatment conditions. They were instructed to code each behavior separately to promote accuracy in their work. Thus, each coder received one definition of a behavior at a time, coded it and then repeated the process.

Seven different behaviors were defined and coded to ascertain that additional cues had not been inadvertently varied by the actress. Based on calculations of inter-rater reliabilities, all cues were coded reliably on the first attempt (see Appendix B). All reliabilities but one ("response latency") were above .98. When corrected for attenuation using the Spearman/Brown prophecy formula, this low correlation reached .86, which was considered an acceptable level. It is likely that the apparent disagreement among coder ratings of this variable was due to discrepancies in working with the stopwatch. Response latency tended to be very short and thus difficult to time.

Procedure

Participants were invited to the research setting in groups of 12. As soon as seven people appeared they were ushered in and seated in two rows in front of a 25 inch color monitor. After completing a research consent form, they heard this brief statement:

> What you will be doing today is watching a short videotaped interview. The interview is only a few minutes long, so please watch and listen carefully.

When the clip is over, you'll be asked to respond to what you've seen. Please don't open the booklets until asked to do so. Are there any questions before we get started?

Once procedural questions were answered, the monitor was turned on and participants watched one of the 16 stimulus segments. At the conclusion of the two minute segment, respondents were asked to open and complete their questionnaires. They were reminded to "read carefully and take enough time to mark the answer that really represents how you feel."

Measures

The questionnaire contained five sets of measures. The first four sets consisted of seven Likert type questions (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) to assess how respondents thought the stimulus person might react in four additional differing situations.

Each situation potentially called for a lie of some kind. The severity of the kind of lie was varied based on the Sleight (1988) typology. One lie involved concealing a surprise birthday party; a second involved concealing a bad test grade; a third suggested that Stacey might lie about having change to a stranger she would never see again because she knew she could get away with it; and a fourth involved lying in order to take revenge on someone. These four scenarios were randomly presented to respondents.

Questions were designed to determine if Stacey would be likely to lie in each situation and, if so, how the respondent would attribute her behavior. The attributional choices provided were: (1) dispositional (i.e., the kind of person she is determines her behavior), (2) generally situational (i.e., the environment demands

this kind of behavior), (3) normative (i.e., everyone would act this way), and (4) specifically situational (i.e., only in this particular circumstance).

The fifth measure was a semantic differential scale used both as a manipulation check and to poll respondents' global feelings about Stacey. A total of 23 adjective pairs (e.g., good-bad, friendly-unfriendly, attractive-unattractive) were used to form four measures: social attractiveness, character, physical attractiveness, and selfishness.

CHAPTER THREE

Results

Manipulation checks

Confirmatory factor analysis. The four manipulation check measures (i.e., social attractiveness, character, physical attractiveness, and selfishness, see Appendix B) were subjected to a confirmatory factor analysis using LIMSTAT (Hunter & Lim, 1988) to determine their validity as scales. The criteria for determining that a factor is uniformly measuring a trait are internal consistency and parallelism (Hunter & Gerbing, 1982). Once unidimensionality is ascertained, the reliability of the cluster can be calculated.

The social attractiveness measure contained six items. It was found to be internally consistent; i.e., the inter-item correlations satisfied a product rule stating that "the correlation between two items in the same cluster should be the product of their correlations with the underlying trait" (Hunter & Gerbing, 1982, p.277). An additional criterion for unidimenionality is flatness (Hunter, 1980). If the items in a scale satisfy the product rule, they should also tend to be of the same strength because each item's relation to the trait should be similar. The social attractiveness scale was nearly flat. One correlation of the 36 in the matrix was found to deviate by .04 from the average r of .88 for the cluster. This deviation might well have occurred by chance alone.

Character, a four item measure, was found to be both internally consistent and flat. No deviations from expected values occurred.

These two clusters correlated highly (r = .91) with each other, suggesting they were measures of the same factor. A cluster combining all 10 items (alpha = .97) was analyzed and found to be neither internally consistent nor flat. Thus, the idea of combining them was discarded even though the reliability was apparently high.

The parallelism criterion stipulates that item-factor correlations should meet a product rule similar to that for inter-item correlations (Hunter, 1980). This measure of external consistency specifies how items should correlate with variables outside of the cluster (Hunter & Gerbing, 1982). The parallelism criterion was not met, perhaps because of the large correlation between factors. Since this is the most stringent criterion in confirmatory factor analysis and because these factors were found to be parallel to others with which they were uncorrelated (i.e., selfishness and physical attractiveness, discussed below) these two clusters were used separately in the manipulation check. Reliabilities for both scales were high (social attractiveness, alpha = .98; character, alpha = .90).

Selfishness (alpha = .84) contained three items found to be internally consistent but not completely flat. One item significantly deviated from the mean correlation of .64, and this deviation could not have been expected randomly. A reordering of the items according to their communalities produced a strong-weak gradient with no unorderly row or column items. Such a gradient illustrates that the items in a cluster systematically vary in their relation to the underlying trait. This hierarchical arrangement of correlations within a cluster is an acceptable alternative to flatness (Hunter, 1977; Hunter & Gerbing, 1982).

The selfishness scale met the criterion for parallelism with both the character (one deviant correlation) and physical attractiveness (no deviant correlations) scales. However, the selfishness scale was not parallel to the social attractiveness scale. Given the internal consistency and flatness of both scales, this result was unexpected. The pattern of deviations suggests that the best measure of selfishness (not surprisingly) is the single item containing the adjective pair selfish/unselfish. Both the selfishness scale (because it is parallel to other scales) and the single selfishness item were used for the manipulation check.

The physical attractiveness scale contained only two items; therefore, statistically meaningful calculation of the reliability of this scale could not be done. However, the two adjective pairs (ugly/beautiful, plain/cute) are obviously measuring a similar dimension and this scale was found to be both consistent and flat. Alpha was .84 for the scale, which was found to be parallel to all other manipulation check scales.

Manipulation check results. Using the social attractiveness, character and physical attractiveness scales as dependent variables, an ANOVA using SPSS/PC+ (Norusis, 1986) was run. Results showed a strong main effect for the social attractiveness manipulation in all three instances (social attractiveness, $F = 1514.93$, $r = .93$, $p < .001$; character, $F = 298.60$, $r = .75$, $p < .001$; physical attractiveness, $F = 118.06$, $r = .59$, $p < .001$; see Tables 2A-2C). These results indicate that social attractiveness was manipulated successfully.

Self-interest, evidently, was not manipulated successfully (see Tables 2D-2E.) Using the selfishness scale as the dependent measure,

Tables 2A - 2E

Manipulation Checks

2A Anova of Dependent Variable Social Attractiveness by Attraction Manipulation

Source	SS	df	MS	F	p	eta²	r
Attractiveness	27764.81	1	27764.81	1514.93	<.001	.87	.93
Self-Interest	68.56	3	22.86	1.25	>.05	.00	.00
A x S	79.11	3	26.37	1.44	>.05	.00	.00
S/AS	3940.40	215	18.33	--	--	.+2	.35
Total	31856.93	222	143.50	--	--	.99	--

2B Anova of Dependent Variable Character by Attraction Manipulation

Source	SS	df	MS	F	p	eta²	r
Attractiveness	3159.59	1	3159.59	298.60	<.001	.57	.75
Self-Interest	31.62	3	10.54	.97	>.05	.01	.10
A x S	46.53	3	15.51	1.47	>.05	.01	.10
S/AS	22.75	215	10.58	--	--	.41	.64
Total	5514.72	222	24.84	--	--	1.00	--

Tables 2A - 2E (continued)

2C

Anova of Dependent Variable Physical Attractiveness by Attraction Manipulation

Source	SS	df	MS	F	p	eta²	r
Attractivenss	454.39	1	454.39	118.06	<.001	.35	.59
Self-Interest	4.37	3	1.46	.38	>.05	.00	.00
A x S	5.00	3	1.67	.43	>.05	.00	.00
S/AS	827.49	215	3.85	--	--	.64	.80
Total	1291.74	222	5.82	--	--	.99	--

2D

Anova of Dependent Variable Selfishness (Item) by Self-Interest Manipulation

Source	SS	df	MS	F	p	eta²	r
Attractiveness	122.47	1	122.47	72.99	<.001	.25	.50
Self-Interest	2.96	3	.96	.59	>.05	.01	.10
A x S	2.68	3	.89	.53	>.05	.01	.10
S/AS	360.77	215	1.68	--	--	.74	.86
Total	489.01	222	2.20	--	--	1.01	--

2E

Anova of Dependent Variable Selfishness (Scale) by Self-Interest Manipulation

Source	SS	df	MS	F	p	eta²	r
Attractiveness	1497.88	1	1497.88	208.70	<.001	.49	.70
Self-Interest	18.44	3	6.15	.86	>.05	.01	.10
A x S	16.16	3	5.39	.75	>.05	.01	.10
S/AS	1543.13	215	7.18	--	--	.50	.71
Total	3075.71	222	13.86	--	--	1.01	--

participants did not rate the four self-interest conditions as significantly different from one another ($F < 1$, eta squared = .01, $p > .05$). Similar findings resulted when the selfish/unselfish item was used as the sole measure ($F < 1$, eta squared = .01, $p > .05$. This disappointing result may reflect the strong effect for social attractiveness which evidently dominated participants' perceptions.

An examination of the correlations (see Appendix D) among self-interest, selfishness, dispositional judgments and environmental judgments suggests that the selfishness scale did not measure self-interest. The average correlation between these two measures (-.04) is low. The correlation is negative because the two measures were scaled in opposition to each other; i.e., high self-interest was coded as 4, while ratings of selfishness ranged from 1 (selfish) to 7 (unselfish). Therefore, this negative correlation implies that as self-interest increased, so did ratings of Stacey's selfishness. Nevertheless, the relationship between the two variables is negligible. Therefore, one cannot confidently conclude that the self-interest manipulation did not work based on the selfishness measure that was used.

However, it is also interesting to note that three of the matrices are similar to one another. In the lie to conceal a party scenario, lie about a grade scenario and lie about having change scenario, the relationships among the variables are fairly similar. Correlations are of similar strength and direction.

In the lie to get revenge scenario, this is not the case. In this scenario self-interest and selfishness were most strongly correlated with each other ($r = .10$) and selfishness was most strongly correlated

with dispositional attributions (r = .60). These relationships are stronger than in any other scenario. Note also that correlations between social attractiveness and sociableness (r = .88), social attractiveness and character (r = .58) and social attractiveness and physical attractiveness (r = .49) are lower here than in any other scenario. Evidently there is something about this lying situation that affected perceptions of Stacey.

Finally, inspection of these matrices shows that self-interest has little relation to environmental or dispositional judgments regardless of the situation. On the other hand, selfishness has a steady and strong relationship to dispositional judgments in all but the lie to conceal a party scenario. This suggests that the aspect of self-interest that is reflected by selfishness is attributed to a person's character rather than the environment. This interpretation is bolstered by the correlations of selfishness with environmental attributions in all four scenarios. These correlations are either negative (i.e., as a person becomes less selfish attributions become less environmental) or absent.

Order effects. A three way ANOVA for independent groups found some effects for the order in which Stacey described the lies she had told. A significant three way (social attraction X self-interest X order) interaction occurred in the lie to conceal a party scenario for both dispositional (F = 2.75, r = .22, $p < .05$) and environmental (F = 2.74, r = .22, $p < .05$) explanations of her deceitful behavior. No order effects occurred in the lie about a grade scenario. A two way (self-interest X order) interaction occurred in the lie about having change scenario for dispositional attributions (F = 3.22, r = .42, $p <$

.05). No order effects appeared in the environmental judgments for this scenario. Finally, a main effect for order occurred in the lie to get revenge scenario for dispositional attributions (F = 4.76, r = .39, p < .05).

While none of these effects are trivial, no discernible pattern emerged among them. No effect for order was expected given the pretest results, which indicated that respondents thought the lies to be similar in kind and outcome. This order effect was suspected to be an artifact. The analysis was rerun collapsing the two mixed self-interest conditions into one, which reduced the levels of this factor from four to three (high/high self interest, mixed self-interest, low/low self-interest). No effects for order were found for any of the four possible attributional conditions. All further analyses were conducted collapsing across order.

Tests of the Hypotheses

Using ANOVA for independent groups, t-tests, and cross-tabulation, data relevant to the hypotheses were analyzed using SPSS/PC+ (Norusis, 1986). Respondents were asked to indicate whether they thought Stacey would lie in each of four hypothetical scenarios: 186 respondents thought she would lie to conceal a surprise party, 123 thought she would lie about a bad grade, 72 thought she would lie to a stranger about having change, and 37 thought she would lie to get revenge. Separate analyses were conducted for each situation to determine the attributional explanations for this lying behavior. Scores ranged from a low of 1 (strongly agree) to a high of 5 (strongly disagree). While participants were offered four attributional choices (i.e., dispositional, the environment in general, this situation in

particular, human nature [anyone would act this way]) after they indicated how Stacey might act in the four hypothetical situations, only the choices concerning the degree to which Stacey's behavior was attributable either to her disposition or to the environment in general will be considered here. Analyses indicate that one of the four hypotheses was clearly supported, one was partially supported and two were not supported.

Hypothesis 1. The hypothesis that attributions would contain both environmental and dispositional components was supported. A cross-tabulation (see Tables 3A-3D) of environmental versus dispositional responses shows that every cell on the left-hand side (i.e, the strongly agree or agree responses) is filled; i.e., nearly every observer made both an environmental and dispositional choice as predicted. In the lie to conceal a party, lie about a grade and lie to get revenge, unfilled cells tend to cluster in the lower right hand section of the tables. This is the area where strong disagreement with both kinds of attributions would fall (i.e., that neither explanation was judged sufficient). In fact in the revenge scenario, note that the strongly disagree category is missing altogether. In the lie about having change scenario, the fewest number of responses is found in this same portion of the table. Overall, observers selected both environmental and dispositional explanations.

The expected leveling of the actor/observer effect, due to observer's environmental attributions, was not supported by the data. Only in the lie about a party scenario did observers feel that an environmental ($M = 1.59$) rather than a dispositional ($M = 2.21$) attribution would explain Stacey's deceit ($t = 6.54$, $p < .001$, df =

Tables 3A-3D

Cross-Tabulations of Dispositional and Environmental Choices by Scenario

3A

Party Scenario

Dispositional \ Environmental	SA	A	N	D	SD	
SA	41	5	3	0	2	51 (27.4%)
A	43	28	1	5	1	78 (41.9%)
N	17	13	2	0	0	32 (17.2%)
D	10	4	2	1	0	17 (9.1%)
SD	4	0	1	0	3	8 (4.3%)
	115 (61.8%)	50 (26.9%)	9 (4.8%)	6 (3.2%)	6 (3.2%)	186 (100%)

$\underline{r}$ = .20

3B

Grade Scenario

Dispositional \ Environmental	SA	A	N	D	SD	
SA	6	1	5	7	6	25 (20.3%)
A	6	23	8	13	8	58 (47.2%)
N	6	16	4	2	0	28 (22.8%)
D	2	6	0	0	0	8 (6.5%)
SD	2	2	0	0	0	4 (3.3%)
	39 (17.9%)	48 (39.0%)	17 (13.8%)	22 (17.9%)	14 (11.4%)	123 (100%)

$\underline{r}$ = -.31

Tables 3A - 3D (continued)

3C Change Scenario

Dispositional	Environmental SA	A	N	D	SD	
SA	0	4	5	0	6	15 (20.8%)
A	4	9	4	14	8	39 (54.2%)
N	1	3	5	4	0	13 (18.1%)
D	0	3	0	0	0	3 (4.2%)
SD	1	0	0	0	0	5 (2/2%)
	6 (8.3%)	19 (26.4%)	14 (19.4%)	18 (25.0%)	15 (20.8%)	72 (100%)

$\underline{r}$ = -.33

3D Revenge Scenario

Dispositional	Environmental SA	A	N	D	SD	
SA	2	2	5	3	2	14 (37.8%)
A	3	5	4	5	3	20 (54.1%)
N	--	--	--	--	--	--
D	0	1	1	1	0	3 (8.1%)
SD	--	--	--	--	--	--
	5 (13.5%)	8 (21.6%)	10 (27%)	9 (24.3%)	5 (13.5%)	37 (100%)

$\underline{r}$ = -.04

Table 5

t-Tests Comparing Means Within Scenarios

Party Scenario	$\bar{X}$	sd	se	t	df	p
Disposition	2.21	1.08	.08	6.54	185	<.001
Environment	1.59	.96	.07			

Grade Scenario	$\bar{X}$	sd	se	t	df	p
Disposition	2.25	.96	.09	2.40	122	<.05
Environment	2.66	1.28	.12			

Change Scenario	$\bar{X}$	sd	se	t	df	p
Disposition	2.07	.86	.10	5.60	71	<.001
Environment	3.24	1.28	.15			

Revenge Scenario	$\bar{X}$	sd	se	t	df	p
Disposition	1.78	.82	.14	4.99	36	<.001
Environment	3.03	1.26	.21			

185). Since smaller means indicate stronger agreement, the smaller mean for environmental attributions indicates that participants choosing it more strongly agreed than those choosing the dispositional alternative. In the remaining three scenarios a signifcant preference for dispositional attributions occurred (see Table 5).

Closer examination of the cross-tabulations (see Tables 3A-3D) reveals how observers split their decisions. For the lie to conceal a party scenario, 115 strongly agreed that an environmental attribution explained Stacey's behavior while only 51 strongly agreed with a dispositional attribution. Overall, 152 of 186 respondents (89%) either checked strongly agree or agree for the environmental attribution. The upper left portion of the table, where environmental agreement and dispositional disagreement occurs, contains 60% of the responses.

For the lie about a grade scenario, 83 of 123 respondents (68%) strongly agreed or agreed with a dispositional explanation versus 70 (57%) who strongly agreed or agreed with an environmental explanation. Interestingly, 19% agreed that both the environment and Stacey's disposition were equal in influence. This agree/agree cell was a popular choice in other scenarios as well.

In the lie about having change scenario, 54 of 72 (75%) respondents who thought Stacey would lie strongly agreed or agreed with a dispositional explanation while only 25 (35%) strongly agreed or agreed with an environmental preference. The agree/agree cell again was a popular choice, accounting for 13% of the table total. However, in this scenario the most popular response (14 = 19%) occurred in the dispositional agree/environmental disagree cell. These respondents

felt that Stacey's character accounted for her deceitful behavior, although they were not willing to discount some environmental influence.

In the lie to get revenge scenario, 34 of 37 (92%) respondents strongly agreed or agreed with a dispositional attribution while 13 (35%) selected the environmental alternative. Participants were more ambivalent in their responses, and no pattern is readily discernible. The agree/agree cell again was a popular choice (13.5%) but the disagree/disagree cell (13.5%) was chosen just as frequently, as was the strongly agree dispositional/neutral environmental cell. The significant preference for dispositional attributions in this situation is due to the fact that fewer respondents disagreed with a dispositional choice (0%) than disagreed with an environmental one (14%).

Overall, observers more strongly agreed that Stacey's disposition rather than environmental forces explained her behavior. Nevertheless, within situations a pattern of support for environmental attributions is suggested.

Hypothesis 2. Hypothesis 2 was not supported. Observers' attributions did not become more dispositional as the self-interest level of the lies increased. An ANOVA for dispositional attributions for each scenario (see Tables 6A-6D) revealed a significant main effect only for social attraction and no significant interaction with self-interest in the lie about a grade scenario and the lie about having change scenario. It would be expected that the means in the high self-interest conditions in these scenarios should be smaller than those in other conditions because observers should express stronger

Tables 6A - 6D

Party Scenario

6A Anova of Dependent Variable Disposition
By Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	1.42	1	1.42	1.19	<.05	.01	.10
Self	.90	3	.30	.25	>.05	.00	.00
AxS	1.40	3	.46	.39	>.05	.01	.10
S/AS	210.94	177	1.19	--	--	.98	.99
Total	214.78	184	1.17	--	--	1.00	

Anova of Dependent Variable Environmental
by Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	5.34	1	5.34	6.41	<.01	.03	.17
Self	1.83	3	.61	.73	>.05	.01	.10
AxS	4.49	3	1.50	1.80	>.05	.03	.17
S/AS	147.47	177	.83	2	--	.93	.96
Total	159.27	184	.87	--	--	1.00	

Tables 6A - 6D

Grade Scenario

6B Anova of Dependent Variable Disposition
By Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	7.47	1	7.47	8.35	<.01	.07	.26
Self	1.02	3	.34	.38	>.05	.01	.10
AxS	.98	3	.33	.37	>.05	.01	.10
S/AS	101.99	114	.89	--	--	.91	.95
Total	111.61	121	.92	--	--	1.00	--

Anova of Dependent Variable Environmental
by Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	24.81	1	24.81	17.62	<.001	.13	.36
Self	3.89	3	1.30	.92	>.05	.02	.14
AxS	5.88	3	1.96	1.39	>.03	.03	.17
S/AS	160.54	114	1.41	--	--	.83	.91
Total	194.54	121	1.60	--	--	1.01	--

Tables 6A - 6D

Change Scenario

6C Anova of Dependent Variable Disposition
By Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	7.97	1	7.97	12.23	<.01	.15	.39
Self-Interest	.83	3	.28	.43	>.05	.02	.14
AxS	2.25	3	.75	1.15	>.05	.04	.20
S/AS	41.04	63	.65	--	--	.78	.88
Total	52.65	70	.75	--	--	.99	--

Anova of Dependent Variable Environmental
by Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	15.21	1	15.21	10.00	<.01	.13	.36
Self-Interest	1.39	3	.46	.30	>.05	.01	.10
AxS	1.70	3	.57	.37	>.05	.01	.10
S/AS	95.80	63	1.52	--	--	.84	.92
Total	113.83	70	1.63	--	--	.99	--

Tables 6A - 6D

Revenge Scenario

6D Anova of Dependent Variable Disposition
By Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	5.57	1	5.57	11.67	<.01	.23	.48
Self-Interest	1.16	3	.39	.81	>.05	.05	.22
AxS	4.10	3	1.37	2.88	>.05	.17	.41
S/AS	13.78	29	.48	--	--	.57	.75
Total	24.27	36	.67	--	--	1.02	--

Anova of Dependent Variable Environmental
by Attraction and Self-Interest

Source	SS	df	MS	F	p	eta²	r
Attraction	.20	1	.20	.12	>.05	.00	.00
Self-Interest	.80	3	.27	.16	>.05	.01	.10
AxS	7.89	3	2.63	1.58	>.05	.14	.37
S/AS	48.18	29	1.66	--	--	.85	.92
Total	56.97	36	1.58	--	--	1.00	--

agreement for a dispositional attribution than for an environmental attribution. This pattern of means (see Table 7) does not emerge in either of these scenarios.

In the lie to get revenge scenario a significant main effect for social attraction (F = 11.67, , p <.002, r = .63) and a small but significant interaction between social attraction and self-interest (F = 2.88, p < .05, eta squared = .30) were found (see Table 6D). An inspection of the means (see Table 7) does not show the expected pattern of smallest values in the high/high self-interest condition. The pattern of means indicates that the interaction occurs in the high/low self-interest cells. However, the small and unequal cell sizes (n = 3 in the attractive cell, n = 9 in the unattractive cell) here point to a trivial effect. Overall, social attractiveness produced the only significant effect when dispositional attributions were being made. This was true in three of the four scenarios (all but the lie about a party scenario) and the effect was the opposite of the one predicted.

Social attractiveness also produced a main effect in three of the four scenarios when environmental attributions were being made. In the lie about a party scenario, the lie about a grade scenario and the lie about having change scenario, attributions for attractive Stacey were significantly more environmental than those for unattractive Stacey (see Tables 6A - 6C). No other effects or interactions occurred. In the lie to take revenge scenario no main effects or interactions occurred (see Table 6D).

Hypothesis 3. Support for this hypothesis was found in two of the four scenarios (see Table 8). In the lie about a grade scenario, a

Table 7

Means and Standard Deviations for Dependent Variables
Disposition and Environment

SELF-INTEREST	DISPOSITION								ENVIRONMENT							
ATTRACTION	S1		S2		S3		S4		S1		S2		S3		S4	
	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd	$\bar{x}$	sd
Hi/Hi	2.30	.92	1.94	.80	2.00	.79	1.93	.80	2.00	1.17	3.33	1.46	3.75	1.12	3.27	1.44
Lo/Hi	2.11	1.05	1.91	.94	2.11	1.23	1.73	.79	1.70	.92	3.55	1.37	3.39	1.72	3.29	1.19
Hi/Lo	2.41	1.22	2.00	.85	1.71	.71	1.50	.67	1.91	1.18	3.48	1.18	3.48	1.25	2.75	1.29
Lo/Lo	2.40	.88	2.14	.77	1.77	.87	1.67	.65	1.45	.83	2.93	1.27	3.18	1.26	3.33	1.07
UNATTRACTION																
Hi/Hi	2.31	1.19	2.42	.96	2.00	.85	2.00	.00	1.15	.37	1.95	1.08	2.42	1.16	2.00	.00
Lo/Hi	2.10	1.10	2.73	1.16	2.50	.71	2.00	.00	1.54	.88	2.47	1.06	2.60	1.08	4.00	.00
Hi/Lo	2.12	1.13	2.31	1.20	2.80	.79	3.33	1.15	1.56	1.04	2.44	1.27	2.50	.71	3.00	1.00
Lo/Lo	2.00	1.11	2.57	.76	2.23	.83	1.60	.54	1.44	.85	2.07	.62	2.54	1.05	2.80	1.48

S1 = Party Scenario, N = 186
S2 = Grade Scenario, N = 122
S3 = Change Scenario, N = 126
S4 = Revenge Scenario, N = 62

Table 8

t-tests Comparing Means in Low/Low Self-Interest Conditions

	$\bar{X}$	sd	se	t	df	p
Dispositional						
Party Scenario						
Attractive	2.00	1.11	.21	1.38	45	>.05
Unattractive	2.40	.88	.20			
Grade Scenario						
Attractive	2.57	.76	.20	1.49	26	>.05
Unattractive	2.14	.77	.21			
Change Scenario						
Attractive	2.57	.79	.30	2.37	11	<.05
Unattractive	1.72	.65	.20			
Revenge Scenario						
Attractive	2.00	.00	.00	--	--	--
Unattractive	1.50	.58	.29			
Environmental						
Party Scenario						
Attractive	1.44	.85	.16	.02	41	>.05
Unattractive	1.45	.83	.19			
Grade Scenario						
Attractive	2.07	.62	.17	2.27	19	<.05
Unattractive	2.93	1.27	.34			
Change Scenario						
Attractive	2.29	.95	.36	2.14	16	<.05
Unattractive	3.45	1.37	.41			
Revenge Scenario						
Attractive	4.00	1.41	1.00	1.58	2	>.05
Unattractive	2.25	.96	.48			

significant difference between environmental attributions in the socially attractive/low self-interest (M = 2.07) and socially unattractive/low self-interest (M = 2.93) conditions occurred (t = 2.27, $p < .05$, df = 19). In the lie about having change scenario, a significant difference between situational attributions in the socially attractive/low self-interest (M = 2.29) and socially unattractive/low self interest (M = 3.45) conditions also was observed (t = 2.14, $p < .05$, df = 16). No significant difference occurred in the lie about a party scenario (attractive/low self-interest M = 1.44, unattractive/low self-interest M = 1.45) or in the lie to get revenge scenario (whose n of 6 allowed for apparently discrepant means; attractive/low self interest M = 4.00, unattractive/low self-interest M = 2.25).

Thus, Hypothesis 3 was partially supported. In the grade and change scenarios, when a socially unattractive person told lies for the benefit of another, resulting attributions were less firmly environmental than were those for an attractive person. This result implies that an unattractive person's unselfish character would be credited for this kind of lie. In the lie about a grade scenario, a comparison of the mean agreement of observers with a dispositional attribution (attractive M = 2.57, unattractive M = 2.14) revealed that, as expected, the mean for unattractive Stacey was smaller, reflecting a stronger dispositional preference, but the difference was not significant (t = 1.49). This result fails to provide additional support for the hypothesis. However, in the lie about having change scenario, a comparison of the mean agreement of observers with a dispositional attribution (attractive M = 2.57, unattractive M =1.72) reveals a significant preference in the unattractive condition (t =

2.37, $p < .05$, df = 11) thus corroborating Hypothesis 3; i.e., unattractive Stacey's lie was more dispositionally judged as well as having been less environmentally attributed.

Hypothesis 4. Hypothesis 4 was not supported. A socially attractive person was not found to be dispositionally directed when lying to protect herself in any of the four scenarios. Indeed, in three instances she was found to be significantly more environmentally directed (see Table 9); In the lie about a party scenario, attractive Stacey telling high self-interest lies (M = 1.15) was judged more environmentally than unattractive Stacey (M = 2.00; t = 3.12, $p < .01$, df = 22); in the lie about a grade scenario, attractive Stacey (M = 1.94) was judged more environmentally than unattractive Stacey (M = 3.33, t = 3.28, $p < .01$, df = 31); and in the lie about having change scenario, attractive Stacey telling high self-interest lies (M = 2.67) was judged more environmentally than unattractive Stacey (M = 3.71; t = 2.13, $p < .05$, df = 18). (No variance occurred in the lie to take revenge scenario, therefore the t statistic could not be calculated.) These results indicate that socially attractive people telling self-serving lies are thought to be more environmentally governed than their socially unattractive counterparts.

Research Question 1. Research Question 1 asked if perceived situational variance would have an effect on subsequent attributions about prevaricators. The results of a series of paired comparisons show that it did only when the lie about a party scenario was compared to the other scenarios. Table 10 displays this outcome graphically.

Dispositional attributions were significantly more strongly agreed with when the lie to get revenge scenario (M = 1.78) was compared to

Table 9

t-tests Comparing Means in High/High Self-Interest Conditions

	$\bar{X}$	sd	se	t	df	p
Dispositional						
Party Scenario						
Attractive	2.31	1.19	.23	.02	44	>.05
Unattractive	2.30	.92	.21			
Grade Scenario						
Attractive	2.42	.96	.22	1.64	34	>.05
Unattractive	1.94	.80	.19			
Change Scenario						
Attractive	2.22	.83	.28	.91	14	>.05
Unattractive	1.93	.62	.17			
Revenge Scenario						
Attractive	2.00	.00	.00	--	--	--
Unattractive	1.91	.83	.25			
Environmental						
Party Scenario						
Attractive	1.15	.37	.07	3.12	22	<.01
Unattractive	2.00	1.17	.26			
Grade Scenario						
Attractive	1.95	1.08	.25	3.28	31	<.01
Unattractive	3.33	1.46	.34			
Change Scenario						
Attractive	2.67	1.12	.37	2.13	18	<.05
Unattractive	3.71	1.20	.32			
Revenge Scenario						
Attractive	2.00	.00	.00	--	--	--
Unattractive	3.36	1.50	.45			
Change Scenario						
Attractive	2.29	.95	.36	2.14	16	<.05
Unattractive	3.45	1.37	.41			
Revenge Scenario						
Attractive	4.00	1.41	1.00	1.58	2	>.05
Unattractive	2.25	.96	.48			

Table 10

Paired Comparisons of Dispositional and Environmental Means Across Situations

	Party	Grade	Change	Revenge
Party				
Grade	t_e = 7.51			
Change	t_e = 8.53			
Revenge	t_d = 2.49 t_e = 5.03			

the lie to conceal a party scenario (M = 2.41, t = 2.49, $p < .05$, df = 36). Dispositional judgments were not affected by changes in scenario in any other paired comparison.

Environmental attributions were significantly preferred in every lie to conceal a party comparison. (Note that comparisons were made when observers agreed that Stacey would lie in both situations of interest. Therefore, the lie to conceal a party mean is different in each of these distinct comparisons because different groups of observers were used.) Significant differences were obtained when the lie to conceal a party scenario environmental mean (1.63) was compared to the lie about a grade scenario (M = 2.66, t = 7.51, df = 122), when the lie to conceal a party scenario (M =1.74) was compared to the lie about having change scenario (M = 3.24, t = 8.53, $p < .001$, df =71), and when the party scenario (M = 1.87) was compared to the lie to get revenge scenario (M = 3.03, t = 2.49, p .05, df = 36).

These results affirm that in some social circumstances prevarication is expected and is routinely attributed to the environment. On the other hand, there is very modest support here for the idea that certain more heinous (i.e., to wreak revenge) lies are likely to be attributed to a person's character.

Research Questions 2 and 3. Research Question 2 probed the effect of mixed self-interest information given by socially attractive liars on subsequent attributions, while Research Question 3 probed the effect of the same mixed information given by socially unattractive liars on subsequent attributions. Two mixed information conditions were experimentally manipulated: a low self-interest/high self-interest condition vs. a high self-interest/low self-interest condition.

Independent paired comparisons were made in each scenario between socially attractive and socially unattractive groups in the low/high condition and then in the high/low condition.

The only significant difference occurred when preferences for an environmental explanation between socially attractive Stacey (M = 2.47) were compared to environmental explanations about socially unattractive Stacey (M = 3.56; $t = 2.18$, $p < .05$, df = 18) in the lie to conceal a grade scenario. In this mixed self-interest condition, the low self-interest lie was reported before the high self-interest lie. In this particular scenario, attractive Stacey's behavior was judged to be primarily environmentally motivated. No other comparisons showed a significant difference between means in this mixed self-interest condition.

Different results emerged in the high/low self-interest treatment where the high self-interest lie preceded the low self-interest lie. In neither the lie to conceal a party scenario, the lie about a grade scenario nor the lie to get revenge were any differences found between dispositional or environmental means. This was not the case in the lie about having change scenario.

When dispositional attributions about socially attractive Stacey (M = 2.71) were compared to those for socially unattractive Stacey (M = 1.54) a significant difference was observed ($t = 3.68$, $p < .05$, df = 9). Socially unattractive Stacey's behavior was attributed by her disposition in this scenario. In this same scenario, socially attractive Stacey's behavior (M = 2.57), when compared to socially unattractive Stacey's behavior (M = 3.62), was attributed to the environment ($t = 2.43$, $p < .05$, df = 16). These two results reinforce

each other; unattractive people provoke stronger dispositional judgments while attractive people provoke stronger environmental judgments in this circumstance. However, the small sample size must be taken into consideration when interpreting these results. Consequently, the overall results provide only sketchy answers to Research Questions 2 and 3.

CHAPTER FOUR

Discussion

The major purpose of this study was to examine the process of making attributions about deception while taking into account the effects of social attractiveness and self-interest. While these results concern attributions about how respondents thought Stacey might act in certain situations (as opposed to how she did act), they nonetheless provide insight into this attributional process.

First, the results show that attributional judgments are not mutually exclusive choices. On the contrary, an attribution is likely to contain both a dispositional and an environmental component. While this finding may strike some as unsurprising, it supports Hypothesis 1. When presented with distinct possible explanations for another's deceptive actions, respondents in the study favored varying combinations of attributional explanations. Frequently, respondents indicated that they felt dispositional and environmental choices were equally valid explanations. Only once did an observer indicate that an environmental attribution alone would account for Stacey's deceptive behavior.

The response format used in the study permitted observers to consider each kind of attribution separately; it did not force them to choose between them. Thus, the format permitted respondents to express agreement to more than one attribution. One mutually exclusive choice out of the 1792 made lends credence to the claim that both dispositional and situational factors are brought to bear in the

judgment, and bolsters the finding (Taylor & Fiske, 1975) that the attribution scale in not unidimensional. Although future studies might profit from the use of an interview or open response format to probe observers' attributional processes, these findings point to the potential value of individual measures of attribution.

Second, the results also provide partial support (only observer data were collected) for the actor-observer effect (Jones & Nisbett, 1972); i.e., observers in the present study tend to favor dispositional judgments. This unexpected overarching preference for dispositional attributions runs counter to the expected preference for environmental explanations in deception situations. The assumption that the moral component of a dispositional judgment of deceit would make such an attribution more repugnant than its environmental alternative was supported in only one of the four situations, the lie to conceal a party scenario. The environmental preference in this situation may have emerged because lying about a surprise party is so socially acceptable that one would never think to attribute it to someone's disposition. Indeed, truthful revelation of the surprise party might produce a dispositional attribution. Thus, differences in the deceptive situations selected may influence the tendency to rely on environmental attributions.

Further work in this area should seek to clarify when each kind of attribution is more strongly favored in order to further our understanding of the impact of varying situations, and should determine the valence of these attributions. The implicit assumption that dispositional attributions would be negatively valenced while environmental attributions would be positively valenced was not tested

here. Furthermore, future work should include actor data to determine whether actors as well as observers exhibit the attributional preference predicted by Jones and Nisbett (1972). While the presence of both attributional components in observer judgments dilutes the claim that observers tend to make only one kind of attributional judgment, the lack of actor data prevents the claim that the actor-observer distinction, as a whole, is affected by these bicameral judgments.

It should be noted, however, that the clustered responses observed in the cross-tabulation tables point to preferences for certain kinds of decisions about lying. Consequently, the cognitive efficiency implied by the actor-observer effect is not operating. Rightly or wrongly, people evaluate another's deceptive behavior by weighting their judgments both dispositionally and environmentally. This suggests that people are perhaps not as cognitively stingy as current theories (Taylor, 1981) suggest. Even though the main effect for social attraction suggests that this variable serves as the primary basis for the ensuing attribution, that attribution is composed of at least two components. This main effect also implies that the valence of dispositional judgments might often be positive. Therefore, as noted earlier, the valence of attributions as well as their composition should be considered in future work.

Finally, socially attractive people benefit, attributionally, from their attractiveness. This finding repeatedly emerges here, and its emergence coincides nicely with prior research (Berscheid & Walster, 1974). It is important to note, however, that this study held physical attractiveness constant, thus, the effect for attractiveness primarily

stemmed from the manipulation of Stacey's social attractiveness. Based on her short description of herself, observers evidently made judgments about her that strongly colored every subsequent judgment thereby again confirming the importance of attractiveness.

Attractive Stacey was given the benefit of the doubt; i.e., attributions were more strongly environmental, no matter what kind of lie (or in which order) she admitted telling. In fact, this outcome was unexpectedly found when only high self-interest lies were described. When Stacey admitted that she had lied to protect herself, observers found attractive Stacey even more environmentally motivated than unattractive Stacey. Relationally, then, if a person seems attractive and holds relational promise, others will be reluctant to make judgments (at least initially) about his or her character. Unattractive people are not as fortunate. It is important to note that these differences arise in the degree of environmental attribution, not in the simple notion that attractiveness equals environmental judgments while unattractiveness equals dispositional.

The willingness of observers to assume stronger environmental influence on the deceptive behavior of attractive others conflicts with Hocking, Walker and Fink's (1982) earlier finding that attractive people's undesirable behavior will be more harshly (dispositionally) judged. Since the present study used hypothetical situations (what will this person do and why?) while Hocking et al. (1982) did not (this person did this and why?), the results are not strictly comparable. Although the logic that attractive people are context free and thus more responsible for their own behavior used by Hocking et al. (1982) seemed applicable to deceptive scenarios, the kind of situation or

specific behavior may be an important moderating factor when one judges or speculates about another's deceptive behavior. Results here did indicate that environmental attributions are sensitive, generally, to situational variance. As situations become graver (i.e., the kind of lie becomes more serious) attributions become less strongly environmental.

A number of limitations of this study should be noted or reiterated. Respondents were asked to speculate about how the stimulus person might act and then to make attributions about that hypothetical behavior. As noted, this procedure made strict comparisons with other work (Hocking et al., 1982) impossible. Notwithstanding, this kind of attributional speculation is probably not unusual after meeting someone for the first time: People probably begin to think about how the other person might act in other situations, particularly if they find the person attractive.

Only 37 of the 224 respondents felt Stacey would lie in every situation. Therefore, asking respondents how Stacey might act reduced the number of deceptive behaviors that needed to be explained while intimating that there are situational determinants influencing whether people <u>expect</u> deceptive behavior from others. Though it is interesting that as scenarios became more serious, fewer people thought Stacey would lie, the reason for this variance is unclear. In particular, drawing conclusions from the lie about having change scenario (n = 72) and the lie to get revenge scenario (n = 37) is risky. While comparison of the correlation matrices among the four scenarios tentatively suggests that in serious situations (lying to get revenge) observers are more willing to make dispositional attributions once they

know that someone has lied, the unequal sample sizes from scenario to scenario must be kept in mind.

The lie to conceal a party scenario may be viewed as either a poor selection or as one that provided a good contrast with the other scenarios. Apparently, behavior in this situation is so normatively governed that responses lack much variability. A wider range of scenarios needs to be used to determine their impact on deception attributions. In this way, conclusions about preferences for one kind of attribution over another could be produced more confidently. Indeed, what might be expected is that the ambivalent patterns found in the lie about having change scenario and the lie to get revenge scenario are more normative than a distinct attributional preference. An attributional threshold might also be discovered if a wider array of situations were to be utilized. There may be a point beyond which an environmental or dispositional deception attribution will always be made. Such a point might be due to both relational development and to situational factors. Regardless, the present findings for the overall preference for dispositional explanations need further testing to delineate the factors governing such a preference.

The self-interest manipulation may not have worked. The data to make this judgment are missing. Selfishness is not necessarily self-interest. The manipulation check did serve to bring to mind the fact that these two constructs cannot be equated.

It must also be noted that self-interest and other-interest were perfectly confounded in this study. It was assumed that high self-interest meant low other-interest, and that low self-interest meant high other-interest. Therefore, this study inadvertently

eliminated two other possible self/other interest conditions (i.e., high self/high other-interest and low self/low other-interest). Both low self-interest lies involved deceit to benefit a friend, so this kind of behavior was "obviously" low in self-benefit as well as high in other-benefits. Both high self-interest lies involved deceit to benefit only Stacey, but whether or not the target of the lies would actually suffer (i.e., low benefit-other) was left unstated. To which dimension observers were reacting is impossible to tell with this manipulation. It is reasonable to assume that if observers are capable of making two dimensional attributional judgments that also account for social attractiveness and situational factors, they are capable of making finer distinctions between self and other benefit than were presented here. Disentangling these two dimensions opens up yet another area for future work.

Finally, responses throughout this research were interpreted to mean that strongly agreeing or agreeing with a dispositional or environmental attribution is synonomous with preferring it. This may not be the case. Strong agreement may indicate confidence rather than preference.

In sum, this study augments our knowledge in the areas of deception, attribution, and attractiveness. What is clear from these results is that deception attributions are two dimensional judgments that involve both an environmental and a dispositional choice. Therefore, past work, which has found that either a dispositional or and environmental attribution occurs in certain circumstances, might be reinterpreted in line with the idea that the dispositional and environmental labels indicate that one explanation has been given more

weight than the other, not that selecting one excludes the other. These findings also provide limited support for the actor-observer effect, as noted earlier.

These results also confirm the importance of attractiveness as a variable that influences judgments made by observers initially encountering someone. Here, social attractiveness was found to color the attributions about another whose physical attractiveness was held constant. The effect of attractiveness (social as opposed to physical) is again demonstrated by these results. This study does suggest that the degree of environmental judgment is particularly sensitive to outside influence. Relationally, these findings imply that people are more willing to make relatively benign, environmental attributions about the the apparent transgressions of attractive others, at least initially, perhaps in order to encourage potential relational development. How far this attributional beneficence would extend into the relationship provides a new avenue for future research on the effects of deception on subsequent interactions.

Appendices

Appendix A

Social Attraction Items Used by McCroskey and McCain (1974)

1. I think he (she) could be a friend of mine.
2. It would be difficult to meet and talk with him (her).
3. He (she) just wouldn't fit into my circle of friends.
4. We could never establish a personal friendship with each other.
5. I would like to have a friendly chat with him (her).

Appendix B

A List of Visual Cues and Average Interrater Reliabilities

Response time was defined as "the total amount of time a person spends answering a question or responding to a statement. Response time begins at the moment the first sound is made and ends after the last sound." r = .99, r' = .99

Response latency was defined as "the amount of time between the end of a question or statement and when a person first begins to speak in response." r = .75, r' = .86

Audible pauses were defined as "once a response has begun, the times between words or phrases when a person says 'er' or 'um' while s/he is thinking of the next thing to say." r = 1.00

Body lean was defined as "once a response has begun, the amount of time a person spends leaning away from the person s/he is talking to. Body lean is visible as a backward lean of over 90 degrees and might involve tipping the chair back." r = .99, r' = .99

Posture shifts were defined as "moving the body in the chair. This includes shifting body weight or readjusting body position during a response. This does not include moving the hands or arms alone." r = 1.00

Indirect eye gaze was defined as "the amount of time spent not meeting the interviewer's eyes while responding. This includes all the time during any one response." r = .99, r' =.99

Smiles were defined as "the amount of time a person spends smiling once a response has begun." r = .98, r' = .99

r' = correlations corrected for alteration

Appendix C

Manipulation Check Scales

Social Attractiveness
Unpleasant/Pleasant
Irritable/Good Natured
Gloomy/Cheerful
Friendly/Unfriendly
Unsociable/Sociable
Not Likable/Likable

Character
Bad/Good
Undependable/Responsible
Awful/Nice
Inconsiderate/Considerate

Physical Attractiveness
Ugly/Beautiful
Plain/Cute

Selfishness
Cruel/Kind
Trustworthy/Untrustworthy
Selfish/Unselfish

APPENDIX D

Correlations Among Independent, Dependent and Manipulation Check Variables for Each Scenario

Party Scenario

	Att	SI	Selfish	Sociable	Character	Pretty	Disp	Environ
Att	1.00							
SI	.01	1.00						
Selfish	.51	-.03	1.00					
Sociable	.92	-.04	.61	1.00				
Character	.74	-.60	.57	.84	1.00			
Pretty	.58	-.02	.38	.63	.59	1.00		
Disp	-.08	.03	-.03	.13	-.11	-.03	1.00	
Environ	-.19	.01	-.15	-.20	-.29	-.12	.21	1.00

Grade Scenario

	Att	SI	Selfish	Sociable	Character	Pretty	Disp	Environ
Att	1.00							
SI	.02	1.00						
Selfish	.48	-.05	1.00					
Sociable	.92	-.06	.60	1.00				
Character	.75	-.10	.57	.83	1.00			
Pretty	.61	.02	.38	.67	.59	1.00		
Disp	.26	.04	.33	.27	.32	.07	1.00	
Environ	-.35	.06	-.23	-.37	-.38	-.15	-.38	1.00

These correlations are not corrected for attentuation due to error in measurement.

APPENDIX D (continued)

Correlations Among Independent, Dependent and Manipulation Check Variables for Each Scenario

Change Scenario

	Att	SI	Selfish	Sociable	Character	Pretty	Disp	Environ
Att	1.00							
SI	.02	1.00						
Selfish	.48	-.11	1.00					
Sociable	.92	-.10	.60	1.00				
Character	.77	-.16	.58	.84	1.00			
Pretty	.58	-.02	.45	.65	.59	1.00		
Disp	.40	.03	.29	.41	.55	.26	1.00	
Environ	-.36	.08	-.01	-.27	-.33	-.19	-.34	1.00

Revenge Scenario

	Att	SI	Selfish	Sociable	Character	Pretty	Disp	Environ
Att	1.00							
SI	-.15	1.00						
Selfish	.63	.04	1.00					
Sociable	.88	-.30	.67	1.00				
Character	.58	-.31	.48	.66	1.00			
Pretty	.49	-.18	.50	.59	.36	1.00		
Disp	.46	.08	.60	.43	.49	.27	1.00	
Environ	.04	.10	-.00	-.05	-.21	.23	-.02	1.00

These correlations are not corrected for attentuation due to error in measurement.

Appendix E

Correlation Matrix of Manipulation Check Items

	1	4	5	14	6	7	8	9	17	18	3	10	15	12	13	2	11	16	19	20	21	22	23
1	74	70	74	71	72	71	66	71	67	73	74	68	55	49	46	65	58	43	62	35	66	61	20
4	70	67	64	73	66	70	63	65	62	67	67	71	64	47	49	61	63	39	62	34	64	58	11
5	74	64	68	70	85	77	73	77	75	78	78	64	52	54	54	51	64	44	51	44	69	69	20
14	71	73	70	73	77	76	73	77	75	78	73	69	62	50	53	61	67	52	59	46	67	67	17
6	72	66	85	77	88	89	87	89	88	89	80	65	57	56	59	55	70	48	53	47	75	81	17
7	71	70	77	76	89	86	87	87	88	88	78	65	62	55	61	54	74	50	56	53	76	80	18
8	66	63	73	73	87	87	88	92	90	87	74	58	53	57	60	46	70	44	55	48	74	83	23
9	71	65	77	77	89	87	92	92	93	89	78	64	57	58	63	52	70	51	56	50	74	84	21
17	67	62	75	75	88	88	90	93	91	90	76	61	56	58	62	48	70	49	54	52	78	86	25
18	73	67	78	78	89	88	87	89	90	88	78	67	61	62	62	56	70	49	58	49	79	80	21
3	74	67	78	73	80	78	74	78	76	78	69	73	58	50	54	62	67	43	52	48	65	70	19
10	68	71	64	69	65	65	58	64	61	67	73	75	62	46	48	65	58	46	57	35	59	55	2
15	55	64	52	62	57	62	53	57	56	61	58	62	53	42	44	47	50	46	51	36	57	47	-01
12	49	47	54	50	56	55	57	58	58	62	50	46	42	79	78	37	57	28	49	39	56	56	19
13	46	49	54	53	59	61	60	63	62	62	54	48	44	78	79	37	59	33	43	44	53	57	17
2	65	61	51	61	55	54	46	52	48	56	62	65	47	37	37	29	45	34	45	25	49	45	5
11	58	63	64	67	70	74	70	70	70	70	67	58	50	57	59	45	70	42	61	56	69	67	18
16	43	39	44	52	48	50	44	51	49	49	43	46	46	28	33	34	42	30	46	29	42	47	10
19	62	62	51	59	53	56	55	56	54	58	52	57	51	49	43	45	61	46	50	36	64	51	9
20	35	34	44	46	47	53	48	50	52	49	48	35	36	39	44	25	56	29	36	32	48	56	10
21	66	64	69	67	75	76	74	74	78	79	65	59	57	56	53	49	69	42	64	48	71	73	17
22	61	58	69	69	81	80	83	84	86	80	70	55	47	56	57	45	67	47	51	56	73	75	32
23	20	11	20	17	17	18	23	21	25	21	19	2-500		19	17	5	18	10	9	10	17	32	4

Character = Items 1, 4, 5, 14
Social Attractiveness = Items 6, 7, 8, 9, 17, 18
Selfishness = Items 3, 10, 15
Physical Attractiveness = Items 12, 13

Appendix F

Correlations For Manipulation Check Measures, Social Attractiveness, Character, Physical Attractiveness, and Selfishness

Character	100			
Social Attractiveness	91	100		
Selfishness	-98	87	100	
Physical Attractiveness	67	71	66	100

Appendix G

Means and Standard Deviations for Manipulation Check Variables

		Sociable		Character		Physical Attractiveness		Selfish Scale		Selfish Item	
SELF-INTEREST	**Attractive**										
	Hi/Hi	15.43	2.69	12.68	2.89	7.11	2.13	11.18	1.16	2.68	1.12
	Lo/Hi	16.75	3.63	13.29	3.90	6.61	1.18	11.14	1.46	2.79	1.16
	Hi/Lo	17.57	3.59	13.93	3.22	7.29	2.09	11.57	1.62	3.00	1.22
	Lo/Lo	17.29	2.49	14.41	2.66	7.30	2.05	11.33	1.47	3.15	1.35
	Unattractive										
	Hi/Hi	31.00	3.67	20.71	3.58	9.86	2.01	13.07	1.70	4.21	1.42
	Lo/Hi	32.18	2.68	22.00	3.12	9.96	1.73	13.07	1.68	4.57	1.32
	Hi/Lo	31.36	2.68	20.93	2.65	9.86	1.74	12.96	1.48	4.43	1.35
	Lo/Lo	31.43	3.04	20.75	3.74	10.04	2.08	13.29	1.30	4.32	1.39

Appendix H

Scales Used to Measure Attributions About Stacey

Given what you now know about Stacey, how will she react if asked to conceal plans for a surprise birthday party for her brother?

Stacey would lie to her brother in order to keep the surprise party a surprise.

strongly agree 5____ 4____ 3____ 2____ 1____ strongly disagree

Stacey would <u>not</u> lie to her brother to keep the party a secret.

strongly disagree 1____ 2____ 3____ 4____ 5____ strongly agree

Stacey would not keep the secret.

strongly agree 5____ 4____ 3____ 2____ 1____ strongly disagree

What is the probability that Stacey will act this way about her brother's birthday? Fill in a probability between 0% and 100%.

_____%

Stacey would act this way because of the kind of person she is.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because the situation demands this kind of behavior.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because anyone in this situation would do the same.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way only in this particular situation.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

GO ON TO THE NEXT PAGE, PLEASE

Given what you now know about Stacey, would she lie to someone to conceal a bad test grade that she'd gotten?

Stacey would lie about the grade.

strongly agree 5____ 4____ 3____ 2____ 1____ strongly disagree

Stacey would not lie about the grade.

strongly disagree 1____ 2____ 3____ 4____ 5____ strongly agree

Stacey would admit to a bad test grade.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

What is the probability that Stacey will act this way about her bad test grade? Fill in a probability between 0% and 100%.

_____%

Stacey would act this way because of the kind of person she is.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because the situation might demand this kind of behavior.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because anyone asked about a bad test grade would do the same.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way only in this particular situation.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

GO ON TO THE NEXT PAGE, PLEASE

Given what you know about Stacey, would she lie to a stranger that she knew she'd never see again, just because she knew she could get away with it? For instance, would she say she didn't have 20 cents for the phone when she really did?

Stacey would lie about having change.

strongly agree 5____ 4____ 3____ 2____ 1____ strongly disagree

Stacey would <u>not</u> lie to a stranger about having the 20 cents.

strongly disagree 1____ 2____ 3____ 4____ 5____ strongly agree

Stacey would check to see if she had the change.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

What is the probability that Stacey will act this way to a stranger? Fill in a probability between 0% and 100%.

_____%

Stacey would act this way because of the kind of person she is.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because this kind of situation demands this kind of behavior.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because anyone approached by a stranger would act this way.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way only in this particular situation, i.e., a stranger asking for 20 cents.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

GO ON TO THE NEXT PAGE, PLEASE

Given what you know about Stacey, would she lie to someone she knew in order to take revenge on or get even with that person?

Stacey would lie to a person she knew in order to take revenge on or get even with that person.

strongly agree 5____ 4____ 3____ 2____ 1____ strongly disagree

Stacey would <u>not</u> lie to a someone she knew in order to take revenge or get even with that person.

strongly disagree 1____ 2____ 3____ 4____ 5____ strongly agree

Stacey would not take revenge on a friend.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

What is the probability that Stacey will act this way to someone she knows? Fill in a probability between 0% and 100%.

_____%

Stacey would act this way because of the kind of person she is.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because the situation might demand this kind of behavior.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would act this way because everyone sometimes has to tell this kind of lie.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

Stacey would lie only in this particular kind of situation, i.e., to get even with someone.

strongly agree 1____ 2____ 3____ 4____ 5____ strongly disagree

GO ON TO THE NEXT PAGE, PLEASE

Circle the number that represents how you think Stacey should be described.
Mark in the direction, toward either end of the scale that is most compatible with your perception of her. CIRCLE ONLY ONE NUMBER PER SCALE and COMPLETE ALL SCALES. Remember to read carefully.

I would describe Stacey as;

Bad	1	2	3	4	5	6	7	Good
Honest	7	6	5	4	3	2	1	Dishonest
Kind	7	6	5	4	3	2	1	Cruel
Undependable	1	2	3	4	5	6	7	Responsible
Awful	1	2	3	4	5	6	7	Nice
Unpleasant	1	2	3	4	5	6	7	Pleasant
Irritable	1	2	3	4	5	6	7	Good-natured
Cheerful	7	6	5	4	3	2	1	Gloomy
Friendly	7	6	5	4	3	2	1	Unfriendly
Untrustworthy	1	2	3	4	5	6	7	Trustworthy
Poised	7	6	5	4	3	2	1	Awkward
Ugly	1	2	3	4	5	6	7	Beautiful
Cute	7	6	5	4	3	2	1	Plain
Considerate	7	6	5	4	3	2	1	Inconsiderate
Selfish	1	2	3	4	5	6	7	Unselfish
Altruistic	7	6	5	4	3	2	1	Egoistic
Sociable	7	6	5	4	3	2	1	Unsociable
Not likable	1	2	3	4	5	6	7	Likable
Intelligent	7	6	5	4	3	2	1	Unintelligent
Relaxed	7	6	5	4	3	2	1	Tense
Inattentive	1	2	3	4	5	6	7	Attentive
Animated	7	6	5	4	3	2	1	Withdrawn
Dramatic	7	6	5	4	3	2	1	Not dramatic

References

REFERENCES

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 1 (pp. 229-244). New Brunswick, NJ: Transaction Books.

Berscheid, E., & Walster, E. (1974). Physical attractiveness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 7) (pp. 157-215). New York: Academic Press.

Bok, S. (1979). Lying: Moral choice in public and private life. New York: Vintage Press.

Boster, F.J., & Stiff, J.B. (1984). Compliance-gaining message selection behavior. Human Communication Research, 10, 539-556.

Burgoon, J.K., & Aho, L. (1982). Three field experiments on the effects of violations of conversational distance. Communication Monographs, 49, 71-88.

Burgoon, J.K., Buller D.B, Hale, J.L., & deTurck, M.A. (1984). Relational messages associated with nonverbal behaviors. Human Communication Research, 10, 351-378.

Burgoon, J.K., & Hale, J.L. (1988). Nonverbal expectancy violations: Model elaboration and applications to immediacy behaviors. Communication Monographs, 55, 58-79.

Clark, R.A. (1979). The impact of self-interest and desire for liking on the selection of communication strategies. Communication Monographs, 46, 257-273.

Crano, W.D. (1977). Primacy versus recency in retention of information and opinion change. The Journal of Social Psychology, 101, 87-96.

Dion, K.K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. Journal of Personality and Social Psychology, 24, 285-290.

Ekman, P., Friesen, W.V., O'Sullivan, M., & Scherer, K. (1980). Relative importance of face, body, and speech in judgments of personality and affect. Journal of Personality and Social Psychology, 38, 270-277.

Fiske, S.T., & Taylor, S.E. (1984). Attribution theory. In S.T. Fiske & S.E. Taylor (Eds.), Social cognition (pp. 72-99). Reading, MA: Addison-Wesley.

Goffman, E. (1959). The presentation of self in everyday life. Garden City, NY: Doubleday.

Greene, J.O., O'Hair, D.O., Cody, M.J., & Yen, C. (1985). Planning and control of behavior during deception. Human Communication Research, 11, 335-364.

Hocking, J.E., Walker, B.A., & Fink, E.L. (1982). Physical attractiveness and judgments of morality following an "immoral" act. Psychological Reports, 51, 111-116.

Hunter, J.E., & Boster, F.J. (November,1979). Situational differences in the selection of compliance gaining messages. Paper presented at the annual meeting of the Speech Communication Association, San Antonio, Texas.

Jones, E.E., & Nisbett, R.E. (1972). The actor and the observer: Divergent perceptions of the causes of behavior. In E.E. Jones, D.E. Kanouse, H.H. Kelley, R.E. Nisbett, S. Valins & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior (pp. 79-94). Morristown, NJ: General Learning Press.

Kalbfleisch, P.J. (1985). Accuracy in deception detection: A quantitative review. Unpublished doctoral dissertation, Michigan State University.

Kraut, R.E. (1978). Verbal and nonverbal cues in the perception of lying. Journal of Personality and Social Psychology, 36, 380-391.

Kraut, R.E. (1980). Humans as lie detectors. Journal of Communication, 30, 209-216.

Lerner, M. (1970). The desire for justice and reactions to victims. In J. Macaulay & L. Berkowitz (Eds.), Altruism and helping behavior. New York: Academic Press.

Littlepage, G.E., & Pineault, M.A. Detection of deception in planned and spontaneous communications. Unpublished manuscript.

Maier, N.R.F., & Janzen, J.C. (1967). Reliability of reasons used in making judgments of honesty and dishonesty. Perceptual and Motor Skills, 25, 141-151.

Maier, R.A., & Lavrakas, P.J. (1976). Lying behavior and evaluation of lies, Perceptual and Motor Skills, 42, 575-581.

Maier, R.A., & Thurber, J.A. (1968). Accuracy of judgments of deception when an interview is watched, heard, and read. Personnel Psychology, 21, 23-30.

Marwell, G. & Schmitt, D.R. (1967). Dimensions of compliance-gaining behaviors: An empirical analysis. Sociometry, 30, 350-364.

McArthur, L.Z. (1981). What grabs you? the role of attention in impression formation and causal attribution. In E.T. Higgins, C.P. Herman, & M.P. Zanna (Eds.), Social cognition: the Ontario Symposium (Vol. 1) (pp. 201-246). Hillsdale, NJ: Erlbaum.

McArthur, L.Z., & Post, D.L. (1978). Figural emphasis and person perception. Journal of Experimental Social Psychology, 13, 520-535.

McCroskey, J.C. (1966). Scales for the measurement of ethos. Speech Monographs, 1, 65-72.

McCroskey, J.C., & McCain, T.A. (1974). The measurement of interpersonal attraction. Speech Monographs, 41, 261-266.

Miller, G.R., Bauchner, J.E., Hocking, J.E., Fontes, N.E., Kaminski, E.P., & Brandt, D.R. (1981). "...and nothing but the truth": How well can observers detect deceptive testimony? In B.D. Sales (Ed.), Perspectives in law and psychology, Vol. II: The trial process. New York: Plenum.

Miller, G.R., Boster, F.J., Roloff, M., & Siebold, D. (1977). Compliance-gaining message strategies: A typology and some findings concerning effects of situational differences. Communication Monographs, 44, 37-51.

Miller, G.R., DeTurck, M.A., & Kalbfleisch, P.J. (1983). Self-monitoring, rehearsal and deceptive communication. Human Communication Research, 10, 97-118.

Miller, G.R. (1983). Telling it like it isn't and not telling it like it is: Some thoughts on deceptive communication. In J.E. Sisco (Ed.), The Jensen lectures: Contemporary communication studies. Tampa, FL: University of South Florida Press.

Pryor, J.B., & Kriss, N. (1977). The cognitive dynamics of salience in the attribution process. Journal of Personality and Social Psychology, 35, 49-55.

Riggio, R.E., & Friedman, H.S. (1983). Individual differences and cues to deception. Journal of Personality and Social Psychology, 45, 899-915.

Roloff, M. (1981). Interpersonal communication: The social exchange approach. Beverly Hills, CA: Sage.

Ross, L. (1977). The intuitive psychologies and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), Advances in experimental social psychology (pp.173-220). New York: Academic Press.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, Whole No. 609.

Sleight, C. (1988, May). A typology of deceptive situations. Paper presented at the annual meeting of the International Communication Association, New Orleans.

Sroufe, R., Chaiken, A., Cook, R., & Freeman, V. (1977). The effects of physical attractiveness on honesty: A socially desirable response. Personality and Social Psychology Bulletin, 3, 59-62.

Stewart, R.T. (1965). Effect of continuous responding on the order effect in personality impression formation. Journal of Personality and Social Psychology, 1, 161-165.

Stiff, J.B., & Miller, G.R. (1986). "Come to think of it...": Interrogative probes, deceptive communication, and deception detecton. Human Communication Research, 12, 339-358.

Stiff, J.B., Miller, G.R., Sleight, C., Mongeau, P.A., Garlick, R., & Rogan, R. (under review). Explanations of visual cue primacy in judgments of honesty and deceit. Journal of Personality and Social Psychology.

Stiff, J.B., & Sleight, C. (1987, May). Heuristic processing of verbal and nonverbal information and judgments of honesty and deceit. Paper presented at the annual meeting of the International Communication Association, Montreal.

Storms, M.D. (1973). Videotape and the attribution process: Reversing actors' and observers' points of view. Journal of Personality and Social Psychology, 27, 165-175.

Taylor, S.E., & Fiske, S.T. (1975). Point-of-view and perception of causality. Journal of Personality and Social Psychology, 32, 439-445.

Taylor, S.E., & Fiske, S.T. (1978). Salience, attention, and attribution: Top of the head phenomenon. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 11) (pp. 249-288). New York: Academic Press.

Taylor, S.E., & Thompson, S.C. (1982). Stalking the elusive "vividness" effect. Psychological Review, 89, 155-181.

Tedeschi, J.T. (1974). Attibutions, liking, and power. In T.L. Huston (Ed.), Foundations of interpersonal attraction (pp.193-215). New York: Academic Press.

Walster, E., Aronson, V., Abrahams, D., & Rottman, L. (1966). Importance of physical attraction in dating behavior. Journal of Personality and Social Psychology, 4, 508-516.

Williams, D.L., & Boster, F.J. (May, 1981). The effects of beneficial situational characteristics, negativism, and dogmatism on compliance. Paper presented at the annual meeting of the International Communication Association, Minneapolis, Minnesota.

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). Verbal and nonverbal communication of deception. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 14) (pp. 1-59). New York: Academic Press.

Zuckerman, M., & Driver, R.E. (1985). Telling lies: Verbal and nonverbal correlates of deception. In S. Feldstein & A. Siegman (Eds.), Multichannel integration of nonverbal behavior (pp. 129-147). Hillsdale, NJ: Erlbaum.

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

Zuckerman, M., Koestner, R., Colella, M.J., & Alton, A.O. (1984). Anchoring in the detection of deceoptin and leakage. Journal of Personality and Social Psychology, 47, 301-311.