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A Test With Gaze Behavior

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NONVERBAL VIOLATIONS OF EXPECTATIONS THEORY:

A Test With Gaze Behavior

By

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ABSTRACT

NONVERBAL VIOLATIONS OF EXPECTATIONS THEORY

By

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The theory of nonverbal violations of expectations suggests that there are clear expectations regarding normative communicative behaviors. Unlike many other claims, the theory states that adherence to these expected norms may not always result in the most positive outcomes. According to the model as it has been applied to proxemic behaviors, deviation from normative spacing patterns causes a recipient of a violation to become physiologically and psychologically aroused. The violation is a subtle one, however, so the "violatee" must search the interaction context to find the source of the arousal. The individual's attention becomes distracted from the verbal message, focusing instead on characteristics of the violating communicator.

The arousal is then interpreted based on the recipient's view of the violator. If the perception of the violator is positive, the violatee will respond by giving a favorable label to the arousal. This will add to the initial regard and result in more benefits to the violator than would have occurred if he or she had adhered to expected proxemic behavior. If the perception of the violator is negative, however, the

violatee will interpret the violation as unfavorable and attach this interpretation onto the already negative perception. In this case, the violation will prove more detrimental to the negatively perceived communicator than would adherence to normative patterns.

The present study attempted to apply the model of nonverbal violations to eye behavior. In an artificial interview situation, four trained confederates acting as naive subjects were interviewed by actual subjects (N = 108). For each interview, the level of "reward" and eye behavior used by the confederate were randomly manipulated in an attempt to measure the subjects' arousal distraction, and the interaction of reward and eye contact level on perceived credibility, attraction, relational messages sent, and persuasibility. Analyses of variance were conducted to measure the hypothesized interactions. In the present study there was no support for the hypothesis that eye behavior fits into the model of nonverbal violations of expectations in a manner similar to proxemic behavior. Instead, the only significant differences detected were main effects for eye contact. Here, individuals using low levels of eye gaze were seen as significantly less immediate than were persons who used normative or high levels of eye gaze, and followers of eye contact norms were perceived as significantly more composed than those interactants violating normative levels of eye gaze.

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CHAPTER I

INTRODUCTION AND REVIEW OF LITERATURE

Social actors often voice that individualism is a virtue. Social scientists, however, have found that this practice is not always followed outside the verbal realm. Instead, a number of researchers have found that there are very precise patterns of nonverbal behaviors to be followed by members of a society. Hall (1959), among others (e.g. Albert & Dabbs, 1970), was drawn toward distancing behaviors and found precise spatial norms that could be conventionally defined. Nielsen (1962), moved by "motoric paticularities", specified socially-prescribed modes of sitting, walking, and gesturing. Other researchers focused on patterns of touch (Kaufmann, 1971; Fisher, Rytting, & Heslin, 1976), body position (Mehrabian & Williams, 1969; McGinley, Lefebvre, & McGinley, 1975), tone of voice (Addington, 1971; Rosenthal, 1974), and dialect (Delia, 1972; Giles, 1973) as examples of enforced social patterns.

These studies presume that, despite declarations of variegation, there is a clear network of social behaviors to be performed in certain situations. Individuals in a social system learn to expect set nonverbal

behaviors from the other members of their group and feel that adherence to these norms indicates an acceptance of the group's status quo. These expected and normative behaviors are said to be "unmarked" for particular social situations.

When an individual deviates from these normative nonverbal patterns, his or her behavior is often thought to reflect a lack of acceptance of society's standards. Recipients of these violations of prescribed expectations are usually taught to see the acts as "marked", as purposefully chosen to go against dictated patterns. Much of the research dealing with norms and expectations claims that individuals whose communicative actions deviate from the prescribed system receive negative evaluations, at best, and, at worst, alienation from other members of society due to breaching the nonverbal contract (e.g. Hall, 1959; Henley, 1977).

Expectation states theory (Berger, Conner, & Fisek, 1974), for instance, claims that a group's perceptions of its members is based on nonverbal status cues. High external status, and its accompanying nonverbal tags, has become the expected and rewarded norm. The cues associated with this group prestige, however, are the nonverbal corollaries usually performed by males. Therefore, the group comes to expect typically "male" behavior from its members. When a female member enters the group, her behavior is often seen as deviating from the prescribed system. Bradley (1980) has found that these women are typically perceived as less competent than are their male counterparts.

Nonverbal Violations of Expectations Theory

Interestingly--and perhaps optimistically--the relationship between normative actions and societal acceptance may not be this clear-cut. Burgoon and her associates (Burgoon, 1978, 1983; Burgoon & Jones, 1976; Burgoon & Aho, 1982), for example, have found that deviation from norms may lead to positive social results. While individuals seen as "low reward" (i.e., poorly regarded, unattractive, or, in general, able to offer little to one's interaction partner) prior to an interaction may be better off acting within the prescribed nonverbal framework, those individuals perceived on the high end of the "reward continuum" (i.e., positively regarded, attractive, or seen as able to benefit his or her dyadic partner) may find it to their advantage to violate normative expectations.

In her work with proxemics, Burgoon (1978) posited that breaching spacing patterns would create a deviation within a system of expected nonverbal behaviors. Since the spacing cue is only one communicative signal among many, the actual behavior would, most likely, be too subtle to make the other individual aware of the particular "malfunction". Instead the act would result in arousing one's partner and triggering an attempt in him or her to label the arousal. Ellsworth (1975) supports this idea by claiming that a psychological arousal accompanies increased awareness of one's communication, particularly when there is no clear source of deviation.

According to Burgoon, the "violatee" tries to find an explanation for the arousal by examining the context of the interaction. This cue, along with the subsequent search for its meaning, works as a distractor

in a communication exchange (Stacks & Burgoon, 1981). Attention is diverted from the usual focus, the oral message, and falls instead on characteristics of the communicator.

The ambiguity caused by the arousal is then interpreted in light of one's perception of his or her partner. If that previous account is negative, the present behavior will be given similar meaning. Likewise, an initially rewarding assessment will result in awarding a positive interpretation for the ambiguous arousal. In addition, nonrewarding individuals will be seen as sending negative relational messages to their partners when the former violates normative expectations. Conversely, positive messages will be read by individuals receiving deviations from highly rewarding interactants. The results of the violation of proxemic expectations, then, would be an inflation of negative characteristics attributed to low-reward communicators and positive qualities ascribed to high-reward interactants.

This view of normative violations sees the act of deviation as resulting in a somewhat more complex process than is posited by many other theories of norm divergence. Rather than stating that a particular violation "cues" a certain negative response, the theory of nonverbal violation of expectations involves the role of other elements in the communication exchange--in this case, the "reward" level of the social actor. By allowing for a greater interconnectedness of cues in a communication exchange, the communication process, and the communicator's role in this process, gains far richer message potential.

In her summary on the findings of the nonverbal violations model, Burgoon (1983) calls for tests of the model's theory beyond the proxemic

arena. An attempt was made to apply the model to eye gaze (Burgoon, Mineo, Manusov, & Hale, 1983), but reward conditions failed to be established and the theory was not legitimately tested. Perhaps because ths data did not measure the model of violations, analyses of variance did not find support for the proposed hypotheses. Main effects for eye contact were found with several of the dependent factors. For example, individuals were seen as more persuasive, intimate, immediate, and relaxed when using normative or high levels of eye contact as compared to low degrees of gaze. A similar trend resulted with competence, composure, sociability, and extroversion.

It was the aim of the present research effort to explain why eye behavior may function in a manner similar to proxemics and to undertake a study that adequately measured the effects of violations of eye gaze expectations. This was done with a refinement and replication of the Burgoon et al. (1983) study.

Social Effects of Eye Behavior

During the last two decades, there has been considerable research based on or inclusive of human eye behavior. The degree of concern for this phenomenon can be recognized in part by the many labels attached to instances of eye gaze. Exline and Fehr (1982) found shades of eye behavior referred to as visual interaction, looking behavior, visual behavior, eye signals, gaze, stare, direct gaze, mutual glance, mutual visual interaction, looking into the line of regard, eye contact, and mutual gaze. In addition, Kirkland and Lewis (1976) classified differing durations of eye contact as glance, look, gaze, leer, and stare.

Similarly, von Cranach (1971) specified eye behavior according to its directionality and identified one-sided looks, face gazes, mutual looks, gaze avoidance, and gaze omission.

This large quantity of research may have been influenced by the ability of visual behavior to be validly and reliably measured (Exline & Fehr, 1978). Ellgring and von Cranach (1972) and Argyle, LeFebvre, and Cook (1974), among others, found that in the controlled environment of the laboratory precise degrees of eye behavior can be successfully detected. Furthermore, levels of eye gaze can be accurately manipulated using trained confederates (Ellyson, Dovidio, Corson, & Vinicur, 1980; Fehr, 1981). The precision is particularly consistent in an interview format (Exline, 1963).

Most of the empirical work aimed at assessing the degree to which communicators take meaning from eye behavior has dealt exclusively with social universals for interpreting eye gaze or gaze avoidance. For instance, high levels of eye contact have been said to signify attraction (Kleck & Nuessle, 1968), intimacy and task satisfaction (Ellsworth & Ross, 1975), social skill (Cherulnik, Neely, Flanagan, & Zachau, 1978), happiness (Exline, Parades, Gottheil, & Winklemayer, 1979) and extroversion (Mobbs, 1968), with low levels of gaze provoking a converse interpretation. In each of these studies, the researcher attempted to measure the one meaning "inherent" in all instances of a particular degree of eye gaze. Similar research has aimed to connect eye behavior with informality (LeCompte & Rosenfeld, 1971), genuineness (Kelly & True, 1980), and persuasion (LaCrosse, 1975).

In spite of the seemingly straightforward approach to the social meaning for this nonverbal behavior, many researchers remain discontented with main effect conclusions drawn by studies of eye behavior. Further probing into the attribution of specific meaning to eye contact or avoidance shows that this skepticism may be warranted. As evidence, a high level of eye gaze has been said to signify both dominance (Lamb, 1981) and submission (Jurie & Hershkowitz-Freidman, 1981). Increased gaze has been linked with positive evaluations (Ellsworth & Ross, 1975) as well as negative attributions (Fromme & Beam, 1974). Likewise, gaze avoidance has been said to indicate anxiety (LeCompte & Rosenfeld, 1971) and yet not to reflect this emotion (Hobson, Strongman, Bull & Craig, 1973). These contradictory findings suggest that evaluations of another based on the use or lack of use of eye gaze may not have complete interpretive symmetry. Instead, eye behavior appears to reveal varying meanings when connected with different communication cues.

To test the idea that the signification of eye contact varies according to its interrelationship with other behaviors, a number of researchers have attempted to tie attributions based on eye behavior with several independent factors. Goldberg, Kiesler, and Collins (1969), for instance, looked at eye gaze meaning in association with distancing behavior. Ellsworth and Carlsmith (1968) found that the verbal content of a message interplayed with the interpretation of eye behavior. Likewise, several researchers have discussed the relationship between attribution of meaning to eye gaze and gender of the actors (i.e., Fromme & Beam, 1974; Hughes & Goldman, 1978). These studies suggest that,

although eye gaze is often thought to emit a consistent and static meaning, this nonverbal behavior may be more accurately seen as having various meanings depending on the other cues simultaneously employed. In this light, eye contact is seen as one part of a system of behaviors "at work" in the interaction context.

Scheflen (1966) explored the role eye gaze plays in a communication network. Arguing for a structural approach to nonverbal phenomena, Scheflen begins with the assumption that all behaviors are potentially communicative. One cue, such as eye gaze, "finds" its meaning only in connection with other nonverbal elements occurring in the same communication exchange. A receiver interprets the meaning of the specific behavior according to how it functions within the combination of elements.

Exline and Fehr (1982) also work on the premise that levels of eye contact do not have consistent cross-contextual meaning. Instead they state:

> "Gaze is clearly only part of one's potentially communicative display behavior. The impact of the display on a receiver is likely to depend on inter-relationships among the various components (p. 119)."

This conclusion has received further support from Harper, Wiens, and Matarazzo (1978) and from Exline (1972).

In spite of the large quantity of work that has been conducted in the region of eye behavior, little of it reflects the assumptions of a nonverbal network. According to Green and Frandsen (1979), this may be

due, in part, to the lack of theoretical foundations and rationale for research that plagues much of nonverbal inquiry--particularly in connection with eye gaze. Burgoon's nonverbal violations of expectations theory, however, seems to respect the idea that nonverbal behaviors do not work in isolation but rather as part of a system of communicative behaviors. It does so by explaining the processes that may occur with the following configuration of elements.

Violations of Eye Contact Expectations

Following the logic of Burgoon's theory as applied to proxemic behavior, there are clear norms for "appropriate" expressions of nonverbal behaviors in each society. The network of behavioral norms becomes "second nature" to a social interactant and expected by receivers of his or her communication. As with other communication rules, this configuration remains largely out of consciousness. The level of awareness tends to become more overt only with a breach of normative patterns.

Working within this system is a norm for eye gaze behavior (Exline, 1972). According to the violations of expectations theory, a deviation from normative eye behavior creates an aberration in the nonverbal network. Such a violation results in making the recipient more aware of the communicative cues occurring within the exchange (i.e., it should heighten the recipient's arousal).

This increased arousal is a key assumption of the violations of expectations model. Although it may be difficult to measure, an effort was made to do so in the present study in the form of a manipulation

check.

According to Stacks and Burgoon (1981), arousal is only one step in the model of nonverbal violations of expectations. Under "normal" conditions, an interactant's attention focuses on a verbal message as well as any nonverbal behaviors that may work to complement or contradict the spoken cue. When this order is disrupted, an individual may be temporarily distracted from the voiced message. Undoubtedly, this could have great impact if a communicator intended to persuade or impress another primarily through his or her words. Based on this, a second manipulation check was made to see if individuals receiving violations of expected eye contact levels become distracted by the nonconforming cue.

Because the only break in the system of expectations is a single cue, it follows that the violation will necessarily be subtle. Rather than providing a clear source for the arousal and distraction, there arises an ambiguity in its stead. The individual has only characteristics of the violator to indicate the cause of the arousal because the interactant has been distracted from the verbal message, and the majority of nonverbal signals remain normative. When the individual who performs the violation is favorably regarded, the other should attribute positive interpretations to the violation. This would add to the initial regard, creating even more favorable outcomes. These results may include such factors as perceived credibility, attraction, persuasion, and positive relational messages. Conversely, negative attributions based on interpretations of an arousal should put a poorly-regarded individual in even less esteem. According to Burgoon, this will occur in any violation regardless of the direction (i.e., more

or less) of the eye gaze deviation.

To test this theory of nonverbal violations of expectations, two hypotheses were put forth:

H1: Persons who are perceived as highly rewarding prior to an interaction and violate the expected levels of eye contact, as opposed to those who act in a normative fashion, will:

a. have more positive relational messages attributed to them.

b. be seen as more credible.

c. be regarded as more attractive.

d. be more persuasive.

H2: Persons who are perceived as nonrewarding prior to an interaction and violate normative eye behavior as compared to those who maintain expected eye gaze levels, will:

a. have more negative relational messages attributed to them.

b. be seen as less credible.

c. be regarded as less attractive.

d. be less persuasive.

CHAPTER II

METHOD

Design

The experiment was a 3 x 2 ANOVA design. Three levels of eye contact were crossed with two levels of reward. Eighteen subjects were randomly assigned to each of the six experimental conditions.

Subjects

Subjects were 108 students enrolled in undergraduate communication courses at a large midwestern university. When solicited, they were informed that they would receive extra credit for their participation in a study looking at interview styles and behaviors.

Procedure

When the subjects arrived at the session, they were told that their "job" would be that of an interviewer and that others had arrived already who were to act as interviewees. The subjects were handed information about a company, a description of the available position, as well as the questions that they were to ask the interviewee (see Appendix A). The forms stressed the necessity of the subjects treating the interview as if it were real and judging the interviewee as if he or she were actually

applying for a position.

After ample time was given for the subjects to feel comfortable with their "duties" and the questions they were to ask, they were escorted into the observation room. An assistant reminded the subjects that they were to ask only those questions provided. The expressed purpose for this was to give each interviewee an "equal" interview opportunity.

The assistant then left to get an application form "just completed" by another awaiting subject. In actuality, the form was either that of an individual highly suited for the position (i.e., with work experience that was relevant to the available position, activities and honors related to the job, notable references, and an outstanding academic record) or that of a person completely unsuited for the job (i.e., minimal and menial work experience, few if any outside activities, no honors, poor and incomplete references, and a weak academic standing). The assignment of the form-type was randomly determined (See Appendix B).

The subject had some time to study the application form before the interviewee was escorted in. The second individual was actually one of four confederates previously trained to maintain normative nonverbal actions and to deliver a prescribed set of answers for the interviewer's questions. Two confederates were male and two were female. Each confederate was blind to the reward condition of the interview so that there was less chance of changing behavior to "fit" with their role. They did, however, manipulate their level of eye contact for each interaction. This manipulation involved one of three specified levels of eye gaze that was randomly assigned to the interchange. These eye behavior conditions included a high amount of eye contact (90-100% of the

interaction), a normative level of eye behavior (40-50%), or a low level of eye gaze (0-10%).

In order to maintain consistent and normative behaviors in the rest of the nonverbal system, the confederates were rated by previously trained coders. Both subjects and confederates knew that they were being observed from behind a one-way mirror, but the subjects were told that this was for observations of effective interview behavior (See Appendix C).

Following the interaction, the participants were escorted to separate rooms. There the subjects were asked to complete a series of scales designed to measure their regard for the other individual. These assessments included evaluations of the other's relational messages, attractiveness, credibility, and the likelihood of hiring the applicant (See Appendix D).

Instrumentation

Twenty four items were included to assess the four dimensions of relational messages identified by Burgoon and Hale (1981): degrees of arousal/composure/formality, intimacy/similarity, immediacy/nonimmediacy, and dominance/submission. These items were rated on seven-interval Likert scales where 1 represented high disagreement and 7 signified total agreement. Their coefficient alpha reliabilities were .70, .77, .78, and .68 respectively. Attraction was assessed by a 12 item scale developed by McCroskey and McCain (1974). These Likert-type scales followed the same format used for the relational messages and consisted of three dimensions of attraction: task, social, and physical attraction. Their

alpha reliabilities were .69, .71, and .76. The credibility measure consisted of 15 seven-interval semantic differential items measuring dimensions of competence, composure, character, sociability, and extroversion (McCroskey, Jensen, & Valencia, 1973). Here the reliabilities measured .76, .76, .62, .78, and .69. Finally, the persuasiveness of an individual, assessed by the likelihood of hiring the interviewee, was attained by using a scale of 0-100 where 0 indicated that the subject would not hire the candidate and 100 signified that the interviewer would definitely hire the applicant.

In order to test the amount of distraction and arousal experienced by the subject, further assessments needed to be made. An eleven item semantic differential measure combining scales by Burgoon, Cohen, Miller, and Montgomery (1978) and Buller (1984) was added to the posttest. Its reliability was .83. Arousal was measured by the relational dimension of arousal already being assessed (Burgoon & Hale, 1981). Although not an actual measure of the subjects' experienced arousal, this dimension attempted to indirectly measure the psychological arousal experienced by the interviewer as well as assessing the relational component.

Manipulation checks were conducted to assess the confederates' consistency in maintaining normative nonverbal cues as well as performing the correct eye gaze levels. During twenty four of the interviews, a pair of trained coders assessed the confederates' interaction behavior using scales developed by McCroskey and Wright (1971). These included six semantic differential items measuring the confederates' degree of nonverbal interest, tension, and social/task orientation. The coefficient alpha reliabilities for these scales were .98, .99, and .99

with alpha reliabilities of .95, .99, and .99. Next, the coders looked at the vocal behavior of the confederates and measured two dimensions of paralinguistics: vocal intensity and vocal pleasantness (Burgoon, 1976). This seven item scale was measured by semantic differential and produced an alpha reliability of .97 for vocal intensity and .98 for vocal pleasantness with interrater reliabilities of .95 and .96. Third, the distraction exhibited by the confederates was measured with four items by Stacks and Burgoon (1981). These semantic differentials produced a reliability of .99 and an interrater reliability of .99. Fourth, the pair coded three dimensions of kinesic behaviors put forth by Burgoon and Aho (1982). The factors of rocking and twisting and of random trunk and limb movement were measured on seven-point Likert scales where 1 indicated no movement and 7 suggested frequent kinesic behaviors. The third dimension, gestural animation, was placed on a Likert-type scale where 1 was used for unanimated and 7 stood for highly animated. The interrater reliabilities were .84, .89, and .86 respectively. Finally the coders, unaware of the manipulation condition, assessed the degree of eye contact used by the confederates. As in the experiment, these included a low level (0-10% of the interaction), a normative degree (40-50%), or a high level of eye gaze (90-100%).

CHAPTER III

RESULTS

Manipulation Checks

Reward Manipulation. In this experiment, unlike the study originally conducted by Burgoon, Mineo, Manusov, and Hale (1983), the manipulation intended to create individuals seen as high and low "reward" seems to have been successful. Prior to the experiment, a check was made to see if the two application forms appeared to be significantly different. Two groups of 20 subjects each were provided with the completed forms accompanied by the same job descriptions seen by the subjects and were asked to rate the potential applicant on their competence and qualification for the position. T-tests produced significant differences for both dimensions: for competence, $t=2.54$, $df=39$, $p < .05$, and for qualification, $t=2.29$, $df=39$, $p < .05$) with the high-level applicant seen as significantly more competent and qualified.

During the interactions the separation of applicants into high and low "reward" also appears to have been successful. Significant main effects for reward on the relational message of arousal ($F=4.05$, $df=1,97$, $p < .05$, eta squared=.04) physical attraction ($F=4.71$, $df=1,97$, $p < .05$,

eta squared=.04), and the likelihood of hiring the applicant ($F=25.69$, $df=1,97$, $p < .05$, eta squared=.20), in addition to a trend on task attraction ($F=3.79$, $df=1,97$, $p < .10$, eta squared=.03), give evidence that the reward manipulation had its intended impact. Here, the high reward interactant was seen as less aroused/more composed, more physically attractive, more persuasive and more task attractive. There were no significant differences with intimacy, immediacy, dominance, social attraction, nor with any of the credibility measures. Unlike the first presentation of this research project, however, there is more confidence that this study was a legitimate test of the premises of the nonverbal violations of expectations theory as put forth by Burgoon (1983).

Arousal and Distraction. Two analyses of variance assessed the main effects of eye contact on the dependent measures of arousal and distraction. The results are presented in Tables 1 and 2. There were no main effects for eye contact nor were there interactions found between the two independent variables and arousal. There was, however, the main effect for reward on arousal noted above. Those individuals who interviewed the high reward interactant perceived that their dyad partner was less aroused, more composed, and relaxed than those who interacted with the low reward confederates. There were no significant results due to distraction.

Confederate Behavior. Nine one-way analyses of variance were conducted to determine if there were any significant differences in the nonverbal behaviors of the confederates. Three significant differences were detected in the confederates level of vocal intensity ($F=3.60$,

df=3,44, $p < .05$) rocking and twisting ($F=13.12$, df=3,44, $p < .05$), and random trunk and limb movements ($F=7.73$, df= 3,44, $p < .05$). The other six nonverbal categories were used consistently by the four confederates. In addition, there was a reliability of .86 between the prescribed and actual eye gaze level used by the confederates.

Hypotheses

Twelve ANOVAs were conducted to test for interactions between eye behavior and reward on the dependent factors of relational messages, credibility, attraction, and persuasion. The results of these analyses are presented in Tables 3-14. There were no significant interactions for any of the dependent factors.

In addition to the earlier reported main effects for reward, a main effect was found for eye contact level on composure as an indicator of credibility ($F=3.97$, df=2,97, $p < .05$, eta squared=.08). Individuals maintaining a normative degree of eye gaze were seen as most composed, with violations consisting of a high level of eye gaze seen as least composed. Post hoc comparisons using the Tukey B approach (Winer, 1971) showed that the three means for the three eye contact conditions conformed to a linear contrast ($t=2.74$, df=2,101, $p < .05$).

A second main effect was found between eye contact and the relational message of immediacy ($F=3.55$, df=2,97, $p < .05$, eta squared=.07). In this case, those interactants who employed the greatest degree of eye gaze were judged as being most involved in the relationship, while those who used a low level of eye behavior were found to signify little immediacy. Again, Tukey B contrasts were performed.

In this case, the differences between the means were not all significantly different. The primary cause of the main effect was due to the effects that low levels of eye gaze have on perceived involvement when compared to both medium and high levels of eye contact ($t=2.19$, $df=2,101$, $p < .05$).

Overall, there was no indication that the theory of nonverbal violations of expectations holds for eye behavior. Instead, perceptions of an individual were most influenced by the perceived level of reward given to an interactant prior to a communication exchange. Eye contact had an impact only insofar as violations of normative levels of eye gaze created impressions of more composure and low levels indicated decreased involvement.

CHAPTER IV

DISCUSSION

This study was designed to extend the theory of nonverbal violations of expectations posited by Burgoon (1983) to eye gaze behavior. Overall, subjects in this experiment did not conform to the hypothesized model. Unlike proxemic behavior, eye gaze did not appear to function as a subtle cue arousing an individual, distracting him or her away from the spoken message and toward an interpretation of the experienced arousal.

In this study, the perceived level of "reward" seems to have had the most impact on evaluations of another interactant. A significant main effect was found for reward level, but not for eye gaze violations, on arousal. This may indicate that eye gaze deviations do not lead a recipient of the violation to experience arousal. However, in this instance, the scale used to measure arousal may not adequately assess the degree to which the state has occurred within the subject. Instead, it ordinarily reports the relational message of arousal sent by another. The arousal is still experienced by the subject but not in a way that is adequate for the present research aim. Therefore, any conclusions based on the subjects experienced arousal must necessarily remain speculative.

The next posited step involved assessing if an individual exposed to an eye gaze deviation would be distracted from the interchange as he or

she looked for an interpretation of the experienced arousal. There were no main effects found which indicate a positive response to this manipulation check. If the reward level proved to be a stronger arouser than the eye gaze violation thus overruling the effects of the eye behavior, it would make sense that there would be no distraction. Unlike a subtle arousal which "requires" an explanatory search, an overt signal that a person should be positively or negatively perceived would not entail removing oneself from the verbal discourse in order to "discover" the source of the arousal. Instead, the social "meaning" for the cue would be so well known that further interpretation would be unnecessary. In a situation when the reward manipulation occurs prior to any interaction with another communicator--as was the case in this study--the significance of the cue would be particularly strong since there are few other interaction behaviors to distract from the manipulation.

Following these manipulation checks, it was hypothesized that there would be an interaction between eye behavior, reward condition, and the dependent variables of relational messages, attraction, credibility, and persuasion whereby low reward individuals would be viewed as sending more negative messages when violating eye gaze expectations and highly rewarding interactants would be seen as "giving off" more positive messages with eye gaze deviations. Again, perceived reward appeared to be the dominant determinant of differential assessments made by the subjects. Main effects were found for the relational message of arousal, for physical attraction, and for persuasion with the high reward manipulation promoting perceptions of decreased arousal, increased attraction, and a greater desire to hire the candidate. In addition, a

trend was seen for task attraction, where high levels of apparent reward resulted in more task attraction. There were no effects found for the relational messages of intimacy, immediacy, and dominance, nor with social attraction or credibility. In addition, no significant interactions between the independent factors of reward and eye gaze level with the dependent variables were detected.

Two main effects were found to be dictated by eye behavior. Views of an individual's level of composure appear to be linked to eye gaze. A person is seen as most composed if he or she uses the rule-governed level of eye gaze and least composed when maintaining a low degree of eye contact. Second, a communicator signifies that he or she is most involved in an interaction when he or she uses a large amount of eye gaze behavior and least involved with low levels of eye contact.

Before any claims can be made about the potential implications of the present study, several "warnings" must be supplied. To begin with, time barriers restricted the number of subjects whoh were able to take part in this study. Because of this, the power of the present study may have been too low to detect effects--should they exist. This possibility of a Type II error provides a strong alternative explanation for the reported results.

Second, both the arousal and distraction measures used as manipulation checks may not be adequate measures of the phenomena said to occur as first "stages" in the violation of expectations theory. Because they both take place well after the proposed reaction was said to occur, the subjects may not have adequately reported the psychological occurrence. Similarly, the cues may have been too subtle for the

subjects to be aware of and, therefore, to state in the posttest. In addition, the arousal measure is, at best, only an indirect measure of the subjects' levels of arousal. All of these situations could alter the subjects' ability to report the potentially experienced states.

Third, there were some significant differences in the nonverbal actions of the confederates. While the majority of their behaviors were highly consistent with one another's and followed the prescribed patterns, the confederates may have "emitted" somewhat different messages to their dyad partners. Although there was an overt attempt to keep all the behaviors (other than eye contact) normative, this may not have actually occurred. Clearly, this could impact the subjects' views of the confederates.

In spite of these shortcomings, the reported results lead to a number of considerations for future research. First, when coupled with reward manipulations, eye behavior did not "send" the messages often attributed to degrees of eye contact (i.e., dominance/ submission, attraction/lack of attraction, extroversion/introversion, etc.). In fact, this replication contradicted some of the main effect findings from Burgoon, Mineo, Manusov, and Hale (1983). While they found that high levels of eye gaze indicated increased composure, the present study found information to suggest that high levels of eye gaze may send messages of decreased composure. This contradiction supports the idea that eye gaze behavior, and, potentially, all communication cues, cannot be looked at as if they occur in isolation. Instead, eye behavior as a signifier of certain social meanings should be studied in conjunction with other potentially occurring communicative behaviors. In this way,

communication elements can be seen as working together interactively, rather than as consistent signs of particular meaning.

Second, evidence that eye contact did not appear to "fit" into the model of nonverbal violation of expectations as did proxemics presents the question of how different communication cues function differently within a communication network. Although this study can certainly not conclude that eye gaze does not conform to the model, future work should concentrate, not only on how the cues in a communication interchange interconnect, but also in what ways those cues may give varied interpretations.

Third, the idea that violations of expectations always lead to negative results was also unsupported. Of the two main effects found for eye gaze behavior, the normative level of gaze was seen as most favorable only in that it connotes increased composure. In the other instance, high levels of gaze were seen as more helpful in signifying the positive relational message of immediacy and involvement than was the normative degree of eye behavior.

These results, along with the confusion that seems to follow much nonverbal research, may indicate that much of the research conducted in the nonverbal arena has been too simplistic. In order to tap the richness of the communication system, it is necessary to measure the relationships among the variables--both verbal and nonverbal--in a communication transaction. While our current state of knowledge makes this a far-off goal, it is a realistic and necessary objective.

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Table 1

Analysis of Variance of the Dependent Variable Arousal with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Signifcance of F
Main Effects	6.377	3	2.126	1.829	.147
Eye Contact	1.952	2	.976	.840	.435
Reward	4.706	1	4.706	4.048	.047
2-Way Interactions	.504	2	.270	.232	.793
Eye Contact Reward	.504	2	.270	.232	.793
Explained	6.917	5	1.383	1.190	.320
Residual	112.751	97	1.162		
Total	119.668	102	1.173		

Means:				
	Eye Contact	1	2	3
		3.04	2.74	2.90
	Reward	1	2	
		2.68	3.09	

	Interaction Reward		
		1	2
Eye Contact	1	2.73	3.36
	2	2.57	2.86
	3	2.71	3.07

Table 2

Analysis of Variance of the Dependent Variable Distraction with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	2.908	3	.969	1.301	.278
Eye Contact	1.893	2	.946	1.270	.285
Reward	1.146	1	1.146	1.539	.218
2-Way Interactions	2.594	2	1.297	1.741	.181
Eye Contact Reward	2.594	2	1.297	1.741	.181
Explained	5.502	5	1.100	1.477	.204
Residual	72.257	97	.745		
Total	77.758	102	.762		

Means:				
	Eye Contact	1	2	3
		2.65	2.33	2.46
	Reward	1	2	
		2.38	2.58	

Interaction Reward			
		1	2
Eye Contact	1	2.76	2.54
	2	2.12	2.51
	3	2.20	2.70

Table 3

Analysis of Variance of the Dependent Variable Dominance with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	2.803	3	.934	.819	.487
Eye Contact	2.588	2	1.294	1.134	.326
Reward	.289	1	.289	.254	.616
2-Way Interactions	3.210	2	1.605	1.406	.250
Eye Contact Reward	3.210	2	1.605	1.406	.250
Explained	6.013	5	1.203	1.054	.391
Residual	110.705	97	1.141		
Total	116.718	102	1.144		

Means:				
	Eye Contact	1	2	3
		3.48	3.85	3.70
	Reward	1	2	
		3.72	3.63	

	Interaction Reward	1	2
Eye Contact	1	3.32	3.63
	2	3.91	3.81
	3	3.99	3.43

Table 4

Analysis of Variance of the Dependent Variable Intimacy with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	1.495	3	.498	.460	.711
Eye Contact	1.317	2	.658	.608	.547
Reward	.182	1	.182	.168	.682
2-Way Interactions	4.289	2	2.144	1.980	.144
Eye Contact Reward	4.289	2	2.144	1.980	.144
Explained	5.784	5	1.157	1.068	.383
Residual	105.040	97	1.083		
Total	110.824	102	1.087		

Means:				
	Eye Contact	1	2	3
		3.71	3.79	3.98
	Reward	1	2	
		3.87	3.78	

	Interaction Reward	1	2
Eye Contact	1	3.53	3.98
	2	4.14	3.52
	3	3.99	3.97

Table 5

Analysis of Variance of the Dependent Variable Immediacy with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	10.932	3	3.644	2.530	.062
Eye Contact	10.221	2	5.110	3.549	.033
Reward	.800	1	.800	.556	.458
2-Way Interactions	.265	2	.132	.092	.912
Eye Contact Reward	.265	2	.132	.092	.912
Explained	11.196	5	2.239	1.555	.180
Residual	139.680	97	1.440		
Total	150.876	102	1.479		

Means:				
	Eye Contact	1	2	3
		4.03	4.44	4.79
	Reward	1	2	
		4.50	4.39	

	Interaction Reward	1	2
Eye Contact	1	4.19	3.87
	2	4.50	4.39
	3	4.84	4.75

Table 6

Analysis of Variance of the Dependent Variable Task Attraction with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	6.071	3	2.024	1.607	.193
Eye Contact	2.538	2	1.269	1.008	.369
Reward	3.793	1	3.793	3.013	.086
2-Way Interactions	1.115	2	.558	.443	.643
Eye Contact Reward	1.115	2	.558	.443	.643
Explained	7.186	5	1.437	1.142	.344
Residual	122.122	97	1.259		
Total	129.308	102	1.268		

Means:				
	Eye Contact	1	2	3
		5.51	5.76	5.41
	Reward	1	2	
		5.76	5.38	

Interaction Reward			
		1	2
Eye Contact	1	5.68	5.33
	2	6.13	5.47
	3	5.48	5.34

Table 7

Analysis of Variance of the Dependent Variable Social Attraction with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	2.200	3	.733	.524	.667
Eye Contact	.852	2	.426	.304	.738
Reward	1.404	1	1.404	1.003	.319
2-Way Interactions	.266	2	.133	.095	.909
Eye Contact Reward	.266	2	.133	.095	.909
Explained	2.465	5	.493	.352	.880
Residual	135.741	97	1.399		
Total	138.206	102	1.355		

Means:				
	Eye Contact	1	2	3
		5.19	5.34	5.39
	Reward	1	2	
		5.42	5.19	
	Interaction Reward	1	2	
Eye Contact	1	5.24	5.14	
	2	5.50	5.21	
	3	5.56	5.24	

Table 8

Analysis of Variance of the Dependent Variable Physical Attraction with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	7.321	3	2.440	1.913	.132
Eye Contact	1.414	2	.707	.555	.576
Reward	6.002	1	6.002	4.706	.032
2-Way Interactions	2.679	2	1.339	1.050	.354
Eye Contact Reward	2.679	2	1.339	1.050	.354
Explained	9.999	5	2.000	1.568	.176
Residual	123.705	97	1.275		
Total	133.704	102	1.311		

Means:				
Eye Contact	1	2	3	
	5.29	5.43	5.57	
Reward	1	2		
	5.68	5.20		

Interaction Reward		1	2
Eye Contact	1	5.32	5.26
	2	5.88	5.08
	3	5.89	5.26

Table 9

Analysis of Variance of the Dependent Variable Competence with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	2.190	3	.730	.646	.587
Eye Contact	.219	2	.110	.097	.908
Reward	1.930	1	1.930	1.708	.194
2-Way Interactions	4.270	2	2.135	1.889	.157
Eye Contact Reward	4.270	2	2.135	1.889	.157
Explained	6.459	5	1.292	1.143	.343
Residual	109.606	97	1.130		
Total	116.066	102	1.138		

Means:				
	Eye Contact	1	2	3
		5.89	5.84	5.96
	Reward	1	2	
		6.04	5.76	

	Interaction Reward	1	2
Eye Contact	1	5.79	5.99
	2	5.98	5.72
	3	6.38	5.57

Table 10

Analysis of Variance of the Dependent Variable Character with the Treatments Reward and Eye Contact as Independent Variables

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	.599	3	.200	.293	.830
Eye Contact	.586	2	.293	.430	.652
Reward	.011	1	.011	.016	.900
2-Way Interactions	1.670	2	.835	1.225	.298
Eye Contact Reward	1.670	2	.835	1.225	.298
Explained	2.269	5	.454	.666	.650
Residual	66.112	97	.682		
Total	68.381	102	.670		

Means:

Eye Contact	1	2	3
	5.99	5.98	6.14

Reward	1	2
	6.05	6.02

Interaction Reward		1	2
Eye Contact	1	5.89	6.08
	2	5.92	6.03
	3	6.34	5.96

Table 11

Analysis of Variance of the Dependent Variable Sociability with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	2.048	3	.683	.718	.544
Eye Contact	2.002	2	1.001	1.053	.353
Reward	.025	1	.025	.027	.870
2-Way Interactions	2.140	2	1.070	1.125	.329
Eye Contact Reward	2.140	2	1.070	1.125	.329
Explained	4.187	5	.837	.881	.497
Residual	92.221	97	.951		
Total	96.408	102	.945		

Means:				
	Eye Contact	1	2	3
		5.33	5.63	5.61
	Reward	1	2	
		5.49	5.54	

	Interaction Reward	1	2
Eye Contact	1	5.17	5.49
	2	5.57	5.68
	3	5.80	5.43

Table 12

Analysis of Variance of the Dependent Varibale Composure with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	9.557	3	3.186	2.656	.053
Eye Contact	9.517	2	4.759	3.968	.022
Reward	.005	1	.005	.004	.947
2-Way Interaction	.066	2	.033	.027	.973
Eye Contact Reward	.066	2	.033	.027	.973
Explained	9.623	5	1.925	1.605	.166
Residual	116.327	97	1.199		
Total	125.950	102	1.235		

Means:				
	Eye Contact	1	2	3
		5.32	5.80	5.06
	Reward	1	2	
		5.37	5.41	

	Interaction Reward	1	2
Eye Contact	1	5.32	5.31
	2	5.82	5.79
	3	5.02	5.10

Table 13

Analysis of Variance of the Dependent Variable Extroversion with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	1.353	3	.451	.422	.738
Eye Contact	.623	2	.312	.291	.748
Reward	.677	1	.677	.633	.428
2-Way Interactions	.288	2	.144	.135	.874
Eye Contact Reward	.288	2	.144	.135	.874
Explained	1.641	5	.328	.307	.908
Residual	103.758	97	1.070		
Total	105.399	102	1.033		

Means:				
	Eye Contact	1	2	3
		4.71	4.89	4.86
	Reward	1	2	
		4.73	4.90	
	Interaction Reward	1	2	
Eye Contact	1	4.56	4.86	
	2	4.83	4.93	
	3	4.83	4.90	

Table 14

Analysis of Variance of the Dependent Variable Hire with the Treatments Reward and Eye Contact as Independent Factors

Source of Deviation	Sum of Squares	df	Mean Square	F	Significance of F
Main Effects	10802.649	3	3600.883	9.077	.001
Eye Contact	666.637	2	333.319	.840	.435
Reward	10192.060	1	10192.060	25.693	.001
2-Way Interaction	56.712	2	28.356	.071	.931
Eye Contact Reward	56.712	2	28.356	.071	.931
Explained	10859.362	1	2171.872	5.475	.001
Residual	38478.852	97	396.689		
Total	49338.214	102	483.708		

Means:				
	Eye Contact	1	2	3
		71.31	73.47	77.21
	Reward	1	2	
		84.33	64.46	

Interaction			
Reward		1	2
Eye Contact	1	80.28	62.33
	2	85.07	64.32
	3	88.19	66.88

Appendix A

INSTRUCTIONS FOR THE INTERVIEWER

This study is designed to approximate real interview situations as much as possible. Attached is a job description for an actual job with Blue Cross/ Blue Shield. Your task is to take the role of an interviewer for the company and conduct a brief interview with a student applicant for the job. In order to approximate actual interview behavior, it is essential that you consider this an actual interview and that the interviewee is attempting to qualify for the position.

The interviewee will be given an application form to fill out. You will have a few moments to review his or her application before conducting the interview. Because we would like all the interviews to be similar, we have prepared a series of questions for you to ask. We would like you to confine yourself to those questions as much as possible.

The interview should last no more than five minutes. Trained observers in an adjoining observation room will take notes on the interview process. Afterwards, you will be asked to indicate how likely you would be to hire the applicant and respond to some questions about the interview. Again, these should be based on the interviewee's qualifications and interview behavior.

Please look carefully over the job description as well as some details about the organization. The interviewee will be given the same information so that they have some base to answer possible questions.

DESCRIPTION OF POSITION AND RESPONSIBILITIES

POSITION: Public Relations staff member, entry level, for Blue Cross/ Blue Shield of Michigan (BCBSM), Health Maintenance Organizaton Division (HMO).

RESPONSIBILITIES:

1. Assist BCBSM management in the development and maintenance of policies designed to project a favorable image of HMOs to the public on a state-wide basis.

2. Provide BCBSM management with news and information of state-wide economic, political, and social developments relating to and affecting HMO interests and operations.

3. Establish and maintain proper relations with the various mass media, gathering and releasing information to both general and special publics in the furtherance of HMO acceptance.

Health Maintenance Organizations are associations of physicians and supporting health care specialists which provide a full range of outpatient services to their members at a lower cost than can be provided by private physicians or hospitals. Members pay a monthly insurance rate rather than paying for individual visits.

A great deal of emphasis is placed on preventative medicine. For example, HMOs provide yearly general examinations for their members (a service not usually provided by conventional insurance plans) and offer lectures and courses to their members either for free or for a nominal fee.

HMO staffs include a full range of medical specialists so that most if not all of a patient's health care needs can be handled in one location, with a centralized record keeping program to help keep costs at a minimum. Patients do not have their own personal physicians, but they are encouraged to see whatever physician is available at the time of their visit. This also helps to minimize costs.

INTERVIEW QUESTIONS

When the interviewee enters, greet and introduce self.

Q1: Why did you choose M.S.U.?

Q2: How do you like going to school here at M. S. U.?

Q3: What kind of things do you like to do outside of school and work?

Q4: Beyond what you've listed on the application, do you have any other work experience?

Q5: I see from your application that you come from (city on application). Are you interested in staying in Michigan for a job

Q6: Why do you think you would like to do public relations work for our company's HMO plan?

Q7: What do you think determines a person's progress in a good company?

Q8: Is it an effort for you to be tolerant of people with backgrounds and interests that are different from your own?

Q9: What are your ideas on salary?

Q10: Are you willing to go anywhere in the state that the company might send you?

Q11: Are you looking for a permanent position?

Terminate interview. Thank interviewee, usher to door, and return to your seat. An assistant will return to escort you to another room.

Appendix B

APPLICATION FOR EMPLOYMENT

NAME: Terry Cutler
AGE: 22
ADDRESS: 3308 Purdue Ave., E. Lansing, MI 48823
EDUCATIONAL BACKGROUND:

HIGH SCHOOL: Garfield	COLLEGE: MSU
YEAR GRADUATED: 1979	MAJOR: Communication
GRADE POINT AVERAGE: 3.9	GRADE POINT AVERAGE: 3.7

WORK EXPERIENCE:

COMPANY	POSITION	HOW LONG	DATES OF EMPLOYMENT
Jacobson's	Ass't Manager (Stationery)	1 yr. 9 mos.	Jan. '81 - Sept. '82
Comm Dept. MSU	Undergraduate teaching ass't	1 yr. 2 mos.	Sept. '82 - present

HONORS AND ACTIVITIES:

JOB RELATED	OTHER
Public Relations Student Association of America	MSU Management Club
Internship, Publicom, Inc. Lansing	Dean's List
Internship, Michigan Health Council	Honors College

REFERENCES:

	NAME	POSITION	YEARS KNOWN
1.	S. Starnaman	Supervisor-Publicom	1
2.	G. R. Miller	Professor-Com. Dept. MSU	3
3.	K. Taylor	Ass't Director-Michigan Health Council	1
4.	P. Rayner	Manager-Stationery Dept. Jacobson's	2

(High Reward-Form A)

APPLICATION FOR EMPLOYMENT

NAME: Terry Cutler
AGE: 22
ADDRESS: 3308 Purdue Ave. East Lansing, Mich 48823
EDUCATIONAL BACKGROUND:

HIGH SCHOOL: Garfield	COLLEGE: MSU
YEAR GRADUATED: 1979	MAJOR: Music
GRADE POINT AVERAGE: 2.9	GRADE POINT AVERAGE: 2.2

WORK EXPERIENCE:

COMPANY	POSITION	HOW LONG	DATES OF EMPLOYMENT
Wendy's	Counter Help	3 mos.	June '82 - Sept. '82
"	"	3 mos.	June '83 - Sept. '83

HONORS AND ACTIVITIES:

JOB RELATED	OTHER
NONE	Play in a band

REFERENCES:

	NAME	POSITION	YEARS KNOWN
1.	K. Taylor	Student	2
2.	D. Miles	Student	1 1/2
3.			
4.			

(Low Reward-Form B)

Appendix C

Coder: Confederate: Interview #:

Nonfluent :	1	2	3	4	5	6	7	: Fluent
Soft :	1	2	3	4	5	6	7	: Loud
Unpleasant :	1	2	3	4	5	6	7	: Pleasant
Nonintense :	1	2	3	4	5	6	7	: Intense
Slow :	1	2	3	4	5	6	7	: Fast
Unclear :	1	2	3	4	5	6	7	: Clear
Monotone :	1	2	3	4	5	6	7	: Varied Tone

Rocking & Twisting

None :	1	2	3	4	5	6	7	: Frequent

Random Trunk & Limb Movement

None :	1	2	3	4	5	6	7	: Frequent

Gestural Animation

Unanimated :	1	2	3	4	5	6	7	: Animated
Comfortable :	1	2	3	4	5	6	7	: Uncomfortable
Calm :	1	2	3	4	5	6	7	: Anxious
Distracted :	1	2	3	4	5	6	7	: Not Distracted
Attentive :	1	2	3	4	5	6	7	: Inattentive
Involved :	1	2	3	4	5	6	7	: Withdrawn
Interested :	1	2	3	4	5	6	7	: Apathetic
Bothered :	1	2	3	4	5	6	7	: Cool
Tense :	1	2	3	4	5	6	7	: Relaxed
Social Orient :	1	2	3	4	5	6	7	: Task Orient
Personal :	1	2	3	4	5	6	7	: Ideational

Eye Contact

Low	Med	High
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Appendix D

INTERVIEW NUMBER: YOUR GRADE POINT AVERAGE:

Using the adjective pairs below, evaluate the interviewee. Please mark the number that best reflects your feelings about him/her during the interview. Please be careful to answer all the questions. Work quickly, indicating your first response. If you are neutral or not sure, mark a 4. DO NOT LEAVE ANY ITEMS BLANK.

Believable	:	1	2	3	4	5	6	7	: Unbelievable
Dishonest	:	1	2	3	4	5	6	7	: Honest
Cooperative	:	1	2	3	4	5	6	7	: Uncooperative
Unsociable	:	1	2	3	4	5	6	7	: Sociable
Poised	:	1	2	3	4	5	6	7	: Nervous
Cautious	:	1	2	3	4	5	6	7	: Adventurous
Competent	:	1	2	3	4	5	6	7	: Incompetent
Cruel	:	1	2	3	4	5	6	7	: Kind
Unjust	:	1	2	3	4	5	6	7	: Just
Active	:	1	2	3	4	5	6	7	: Passive
Outgoing	:	1	2	3	4	5	6	7	: Withdrawn
Tense	:	1	2	3	4	5	6	7	: Relaxed
Energetic	:	1	2	3	4	5	6	7	: Tired
Informed	:	1	2	3	4	5	6	7	: Uninformed
Illogical	:	1	2	3	4	5	6	7	: Logical
Irritable	:	1	2	3	4	5	6	7	: Good Natured
Calm	:	1	2	3	4	5	6	7	: Anxious
Unfriendly	:	1	2	3	4	5	6	7	: Friendly
Composed	:	1	2	3	4	5	6	7	: Excitable
Gloomy	:	1	2	3	4	5	6	7	: Cheerful

Below are a series of statements. Please evaluate the interviewee using

the statements. Again, leave no statements unanswered and work quickly, indicating your first response.

I couldn't get anything done with him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

It would be difficult to meet with and talk with him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

If I wanted to get things done, I could probably depend on him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I find him/her attractive physically.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

We could never establish a personal friendship with each other.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I think he/she is handsome/pretty.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I have confidence in his/her ability to get things done.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I would like to have a friendly chat with him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I don't like the way he/she looks.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

I think he/she could be a friend of mine.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she would be a poor problem solver.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she is somewhat ugly.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

Now we would like you to evaluate the kinds of messages, verbal or nonverbal, you think that the person being interviewed was sending to you. Please respond to the statements below according to what kinds of cues and attitudes you think that the person communicated to you during the interview. Mark the appropriate number and answer all items.

He/she was frustrated with me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she wanted to dominate me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she wanted me to trust him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she emphasized disagreement between us.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she expressed attraction toward me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she tried to control the interaction.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she tried to establish good rapport between us.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she attempted to persuade me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she created a sense of closeness between us.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she was comfortable interacting with me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she was competitive.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she made our conversation seem intimate.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she communicated aggressiveness.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she tried to win my approval.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she seemed not to care if I liked him/her.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she communicated coldness rather than warmth.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she made our conversation distant.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she felt very tense talking to me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she made our conversation seem superficial.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she showed no hostility toward me.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she was very unemotional.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she was intensely involved in our conversation.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she tried to make the interaction informal.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

He/she was bored with our conversation.

Strongly Agree : 1 2 3 4 5 6 7 :Strongly Disagree

Using the adjective pairs below, describe the interviewee's overall behavior. Again, mark all the statements with your first response.

Expected	:	1	2	3	4	5	6	7	: Unexpected
Good	:	1	2	3	4	5	6	7	: Bad
Appropriate	:	1	2	3	4	5	6	7	: Inappropriate
Positive	:	1	2	3	4	5	6	7	: Negative
Usual	:	1	2	3	4	5	6	7	: Unusual
Inoffensive	:	1	2	3	4	5	6	7	: Offensive
Distracting	:	1	2	3	4	5	6	7	: Not Distracting
Predictable	:	1	2	3	4	5	6	7	: Unpredictable
Surprising	:	1	2	3	4	5	6	7	: Not surprising
Likely	:	1	2	3	4	5	6	7	: Unlikely
Anticipated	:	1	2	3	4	5	6	7	: Unanticipated

On a scale from 0 (very unlikely) to 100 (very likely) with 50 being neutral, how likely would you be to hire the interviewee?

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