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## **Influence of Touch and Preferences for Control on Visual Behavior**

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INFLUENCE OF TOUCH AND PREFERENCES FOR CONTROL  
ON VISUAL BEHAVIOR

by

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B.S. August 1979, Old Dominion University

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## ABSTRACT

### INFLUENCE OF TOUCH AND PREFERENCES FOR CONTROL ON VISUAL BEHAVIOR

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The present study investigated the effects of touch, as mediated by the preference for control (PC) of the recipient, upon visual behavior as well as evaluative and affective responses. Subjects were female students at Old Dominion University, selected on the basis of their scores on the Expressed Control subscale of the Fundamental Interpersonal Relations Orientation (FIRO-B) Inventory (Schutz, 1958). Based upon their scores on the subscale, 29 females scoring high and 30 females scoring low were randomly assigned to either touch or no touch conditions. Subjects in the touch condition were touched on the arm by a male confederate after two minutes of conversation, while those in the no touch condition were not touched. After two more minutes, the interview ended and the subject was administered the evaluative and affective measures. Results showed that high PC subjects evaluated the confederate more negatively and experienced less positive affect when touched than when not touched. High PC subjects also looked more while listening (lwl) when touched than did subjects in the other groups. This result was contrary to the hypothesis that high PC subjects would decrease lwl when touched in order to regain control.

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## Influence of Touch and Preferences for Control on Visual Behavior

Despite the growing literature on human touch, one basic question remains unanswered: What is actually communicated to an individual when he or she is touched? Some studies have indicated that touch conveys warmth and affection (Nguyen, Heslin, & Nguyen, 1975); others have suggested that touch communicates sexual desire, or that it may represent sexual harassment (Gutek, Nakamura, Gahart, Handschumacher, & Russel, 1980). Touch has also been interpreted as a means by which dominance is communicated (Henley, 1977). Indeed, touch is one of the principal means by which dominance is established and maintained in many animal species, and it seems to serve the same function in humans (Frieze & Ramsey, 1976). When might touch communicate dominance? According to Frieze and Ramsey (1976), "When touch is uninvited and non-reciprocal, it becomes both a violation and a status indicator. The higher status individual has the social right to breach the spatial boundaries of the lower ranked" (p. 136).

The notion that touch may be a means by which dominance is conveyed has not been directly considered. Henley (1977) suggested that dominance might have been one of the meanings attributed to touch had the questionnaires used in recent research included dominance as a response option. Based upon the hypothesis that people higher in the power hierarchy touch others more frequently than do people lower in status, Henley (1973) conducted naturalistic observations of touching

frequency and found that, as expected, older people touched more than did younger people, males touched more than did females, and bosses touched more than did subordinates. Support for the idea of touch as a power symbol was obtained by Forden (1981), who investigated inferences about the personality characteristics of males and females who touched or were touched; the only adjective clusters that were significant involved considerations of power ("dominant" for the female who touched and "passive" for the male who received touch).

While the expectations and attributions that people make about touch are of importance in understanding the communicative function of touch, so are the subjective experiences of the person who is touched. Indeed, a person's emotional and behavioral responses to being touched may be quite different from the evaluations that he or she might make in a detached or merely hypothesized situation. On the whole, while male reactions to touch tend to be relatively negative, females have responded favorably to touch in most studies to date. Females who were touched by a library clerk experienced more positive affective and evaluative reactions than did females not touched; males were more ambivalent in their reactions (Fisher, Rytting, & Heslin, 1976). Witcher and Fisher (1979) explored responses to touch in a more thorough manner than have many studies, encompassing not only the usual affective and evaluative domains, but the behavioral and physiological consequences of receiving touch, as well. Results indicated that female subjects who were touched experienced more positive affective, behavioral, and physiological reactions than did females who were not touched; again, males experienced more negative reactions to touch. In both of these experiments, females responded more favorably to touch

than did males. These sex differences may be viewed in light of sex-role socialization, during which dependency (including the acceptance and expectation of being touched by others) is accepted and even encouraged for females but not for males. It is not then surprising that females experienced fewer negative reactions to touch than did males. The hypothesis in the present study is that this overall positive response will in fact be less pronounced for females with high preferences for control (PC) as compared with females with low preferences for control. Also, because most of the studies previously mentioned involved only female touchers, some of the reported positive effects may be due in part to the same-sex confederates used. Because Henley's (1973) study found parallel touch patterns in males and in superiors, and similar patterns in females and subordinates, it is also hypothesized in the present study that females may be less unanimous than in previous studies in their positive responses to touch when touched by a male.

Based largely upon the aforementioned negative responses of males to touch, some explanations have been offered for such reactions. Fisher et al. (1976) suggest that negative reactions to touch will occur when the touch is (a) inappropriate to the situation, (b) conveys a negative message, such as condescension, or (c) imposes more intimacy than the recipient desires.

Because no attributional data was obtained from the studies in which negative reactions to touch were displayed or reported by males, the question remains: What causes negative reactions to touch? Broadly speaking, negative reactions occur when the toucher oversteps the boundaries of the recipient. Because individuals do have boundaries be-

yond which touch becomes offensive to them, it follows that such "line-drawing" varies as a function of the personality of each individual. One personality characteristic which has been shown to influence attitudes about touch is dominance, or the preference for control over people and situations. Henley (1973) found that the likelihood of touching another person and of being touched varied as a function of (a) situations in which a person is dominant (trying to force something, persuade, etc.), and (b) relationships in which one person is dominant. She found that subjects low in dominance, as measured by the Dominance subscale of the California Psychological Inventory, touched others less often and expected to be touched more often than did highly dominant subjects. One hypothesis of the present study is that subjects will "draw lines" regarding the appropriateness of touch based in some degree upon the extent to which they desire to control people and situations, as measured by Schutz's (1958) Fundamental Interpersonal Relations Orientation (FIRO-B) Inventory. Specifically, subjects high in preference for control are expected to consider touch appropriate in fewer contexts, based upon their dominance and the challenge that touch, as a power gesture, might suggest to them; thus, high PC subjects are expected to respond more negatively to touch than are low PC subjects.

Visual behavior was used to measure the influence of touch in this study. The rationale for this choice was that nonverbal behavior may reveal more about a person's spontaneous reactions to a behavior such as touch during the interaction than would written measures alone. According to Ekman and Friesen (1968), such nonverbal channels of communication are quite resistant to censorship and other distortions. Visu-

al behavior was the nonverbal behavior chosen because of its effectiveness and sensitivity in reflecting subtle changes in the relationship of partners in dyads (Ellyson, Dovidio, Corson, & Vinicur, 1980; Ellyson, Dovidio, & Corson, 1981; Exline, 1972; Exline, Ellyson, & Long, 1975). Thus, the behavioral manifestations of the subjects' reactions were recorded both as complements to and as comparisons with the more typical post-interaction written measures of subjects' evaluations and responses.

Like touch, visual behavior is a means of maintaining dominance hierarchies in several animal species (Hall & Devore, 1965), and it has also been investigated in terms of dominance in human interaction. Visual behavior has been shown to be a very sensitive indicator of power, dominance, and the desire to control others. Exline et al. (1975) observed the visual patterns of both high and low power interactants, ROTC officers and ROTC cadets. The visual behavior of each officer and cadet was monitored as they interacted, and results showed that officers looked while speaking and while listening at roughly equivalent rates, while cadets looked while listening significantly more than while speaking. Similar results were found for subjects with high preferences for control and subjects with low preferences for control, as measured by the FIRO-B, respectively, by Exline et al. (1975). These authors described the equivalent rates of looking while listening and looking while speaking manifested by high PC subjects as "visual dominance displays". Two studies have investigated visual behavior in females. Ellyson et al. (1980) found that both high status females and high PC females manifested visual dominance displays, while low status females and low PC females did not. In a subsequent study, Ellyson et



al. (1981) found that subjects who felt confident in their knowledge about the topic which they discussed with their partners exhibited visual dominance displays. However, the subjects who felt neutral and those who did not feel confident displayed the more typical pattern, also found in low power subjects across studies, of greater looking while listening than while speaking.

Particularly relevant to the hypotheses of the present study is the finding made by Ellyson et al. (1980) that subjects looked while listening less when interacting with high PC partners than with low PC partners. These same subjects, however, looked while speaking at the same rate with high PC partners and with low PC partners. Of all subjects, those who looked the least while listening were the high PC subjects; the authors concluded that the interaction between two high PC individuals, in comparison with other combinations (high and low, low and low) involves the greatest struggle for dominance. This is based in part on Exline's (1972) suggestion that avoiding eye contact with the person who is speaking can communicate potency and dominance over that person, and this was in fact supported by the results of that study. Subjects high in the desire to control in the present study who were touched were expected to exhibit visual behavior similar to that of Exline's visual dominance display, that is, equivalent rates of looking while listening (lwl) and looking while speaking (lws). If touch can indeed convey dominance, then touch may represent a challenge to one's sense of control; and if control is highly valued by the recipient of touch, then reduced looking while listening may be one means by which control is regained.

Because touching has been shown to occur most frequently in situ-

ations in which a higher status person touches a lower status person (Henley, 1973), the depiction given to subjects in the present study of their partners as graduate students was chosen in order to increase the relevance and generalizability of the results. While this dyad composition may have elicited a certain degree of behavior by the subjects that is typical of lower status persons, it was hypothesized that individual differences would be manifested in subjects' responses to touch, in spite of the subordinate status which was held by all subjects.

The choice of female subjects and male confederates in the present study was also made out of concern for relevance. This combination is the prototype for most of the interactions involving touch in this society, because men do most of the touching (Henley, 1973), while women, more often than men, receive touch. This norm is quite apparent in the evaluations of female touchers and male recipients as "dominant" and "passive", respectively (Forden, 1981). It was reasoned that any knowledge gained about the reactions of females to touch by males would be both timely and useful in an age of sexual harassment lawsuits and general miscommunication between the sexes.

In summary, the present study investigated the effects of touch, as mediated by the preference for control of the recipient, upon visual behavior as well as evaluative and affective responses. Subjects with high preferences for control were expected to display more equivalent rates of looking while speaking and looking while listening than were subjects with low preferences for control. High PC subjects who received touch were expected to manifest the most equivalent rates of lwl and lws of all subjects. These hypotheses were based upon the idea

that touch would be interpreted as a challenge to the authority or control of high PC subjects, whereas the same touch would be accepted or go unnoticed by those subjects with low preferences for control. Hence, high PC subjects were expected to evaluate the confederate more negatively when touched, while low PC subjects were expected to evaluate the confederate in the same manner, whether or not they were touched. In the same way, high PC subjects were expected to experience less positive affect when touched than when not touched, while low PC subjects were not expected to differ in their affective responses, whether or not they received touch.

## Method

### Subjects

Subjects were female students enrolled in introductory psychology classes at Old Dominion University. Subjects were selected on the basis of their responses to the FIRO-B Expressed Control subscale (Schutz, 1958), which was one of several measures administered during a large paper-and-pencil testing session. Of all females tested in that session, 29 scoring high (range, five to nine) and 30 scoring low (range, zero to two) on the subscale were selected to participate as subjects. These students received credit for part of their course requirements by participating in the experiment.

### Procedure

The 29 high PC and 30 low PC subjects were randomly assigned to one of two conditions, touch or no touch. When the subject arrived for the experimental session, the female experimenter joined the subject in the room in which the interaction would take place. The experimenter explained the procedure to the subject in the following manner:

The purpose of this study is to assess the effectiveness of the graduate clinical training program, with emphasis on the development in graduate students of good interpersonal skills. To achieve this, graduate students who participate in this study will interact with two undergraduates. The interview will be videotaped for observational measurement, but, we are also interested in your own reactions to the student. For this reason, you will

be asked for your evaluations of and responses to the student, following the interview. Keep in mind that these evaluations in no way reflect upon the graduate students who participate; our purpose is to measure the effectiveness of the clinical training program.

The experimenter then left the room and returned with the confederate. The experimenter, after introducing the subject and confederate to one another, directed them into the standard seating arrangement. This arrangement consisted of two chairs, approximately 10 inches apart, both facing the camera that was positioned in the room beside a one-way mirror. The experimenter then pretended to have forgotten some evaluation forms which were needed before the interview could begin. Saying that she would return with the forms momentarily and then start the camera, the experimenter left the room. Two cameras, operating from an adjoining room through the one-way mirror, were arranged so that a split-screen recording was obtained; one side of the screen gave a close-up of the subject's face, while the other side presented a full body shot of both the subject and the confederate. The camera in the interview room was clearly "on", but pointed towards the ceiling. The subjects were thus led to believe that the videotaping could begin only when the experimenter had returned to position the camera. Confederates were instructed to reinforce the impression that they were waiting for the filming to begin by relaxing and talking very casually with the subjects. The confederate kept the conversation centered on school-related topics for the first two minutes; a large clock on the wall was visible to the confederate. At the two-minute mark, the confederate asked the subject if she had heard of a certain professor, and recom-

mended that she take a course with that professor. This was standard for all subjects. The subjects in the touch condition were touched on the upper arm by the confederate during this standard statement, followed by another touch three to five seconds later, while subjects in the no touch condition were not touched. After two more minutes of conversation, the confederate looked at his watch and said that he wondered what was delaying the experimenter. He said that he would try to find her, and left the room. The experimenter returned, and told the subject that the videotaping had just been done. The reason given for the deception was that many subjects in the pilot work for this study became very nervous and had difficulty in speaking when they knew that they were being videotaped; this was indeed the case.

The subject was then given the evaluative scale and the mood measure. After five minutes, the experimenter led the subject to the camera room, where the subject was asked to watch the first two minutes of her videotaped interview. Once the tape reached the standard statement, the experimenter stopped the tape and administered the affective measure to the subject, asking her to rate her feelings as she remembered them at the point at which the tape had been stopped. After responding to the emotion checklist, the subject was debriefed and given the rationale for the experiment. The experimenter thanked the subject for participating and asked her not to discuss the experiment with anyone until all subjects had been tested.

Training of confederates. Confederates, "blind" to the hypotheses and to the preference for control variable, were trained to behave as though they were casually passing the time until the beginning of the interview, and to maintain standard nonverbal behavior with all sub-

jects. Specifically, confederates were trained to maintain uniform proportions of looking while listening and looking while speaking for all subjects (approximately 60% lwl and 40% lws). Confederates were also instructed to maintain a casually positive and friendly attitude, both verbally and nonverbally, with all subjects. After several practise interviews in pilot work for this study, confederates' behaviors were quite uniform and consistent.

Training of raters. Training of the two raters consisted of having the rater measure lwl and lws of a confederate during practise interviews between the confederate and the experimenter. The confederate measured his own lwl and lws as well, and these measurements were compared with those obtained by the rater. In addition to this training method, used by Ellyson et al. (1980), raters scored several videotaped pilot interviews before beginning to rate the experimental interviews. Raters were "blind" both to the control differentiation and to the hypotheses of the study. Interrater reliability, calculated by Pearson's product-moment correlation coefficient, was .88.

### Measures

Preference for control measure. Subjects' preferences for control were measured by the Expressed Desire subscale of Schutz's (1958) Fundamental Interpersonal Relations Orientation (FIRO-B) Inventory. This subscale consists of nine Guttman scaled items. Subscale scores range from zero to nine. Predictive validity was established by relating responses to the FIRO-B to observed behavior (Hampton, 1955). Reproducibility, as the appropriate measure of internal consistency for this inventory, was established by Schutz (1958) with college students and Air Force personnel.

Looking behavior measure. Looking behavior was measured by two raters, who activated the switch of an event recorder when the behaviors to be rated could be perceived from the videotapes of the interactions. In this manner, measures were obtained on time, in seconds, that (1) the subject spent talking to the confederate, (2) the subject spent listening to the confederate, (3) the subject spent looking while speaking, and (4) the subject spent looking while listening. Percentages were then calculated of looking while speaking and looking while listening, out of the total time spent speaking and listening by the subject, respectively. These measurements were taken on the 75 seconds directly preceeding the standard statement and on the 75 seconds just after the standard statement. In this way, neither the initial getting-settled period nor the final termination period were included in the analysis. Thus, the two segments used in the analysis were fairly stable ones.

Evaluative measures. Subjects' evaluations of the confederates were measured by three questions, which asked the subject to rate (1) the degree to which she felt comfortable with the confederate, (2) the degree to which she liked the confederate, and (3) the degree to which she thought that the confederate liked her. Subjects responded to these questions on a nine-point scale, from "Not at All" to "Very Much".

Affective measures. Two indices of subjects' affective states were obtained. One was a question with a nine-point response scale, similar to the evaluative questions, which asked the subject to rate how positive her current mood was; this question was included with the evaluative questions, which was administered just after the interview.



The response options of the scale ranged from "Not at all Positive" to "Very Positive". The second index was a checklist of emotions (Davitz, 1969) which was administered after the subject viewed the first two minutes of the interview, at which point the interviewer held the tape on "pause" during the standard statement. The subject was asked to rate each of the 19 emotions as she remembered feeling them at that point. The emotions were rated on a scale of one to five, from "Not Experienced" to "Experienced Strongly". The emotions rated were: amusement, anger, anxiety, apathy, boredom, cheerfulness, contentment, delight, depression, embarrassment, enjoyment, fear, frustration, guilt, impatience, pride, sadness, shame, and surprise.

## Results

### Looking Behavior Measure

A 2 (high PC vs. low PC) x 2 (touch vs. no touch) x 2 (looking while listening vs. looking while speaking) x 4 (confederate) mixed design analysis of covariance was performed on the visual behavior dependent measure. Preference for control, touch, and confederate were the between-subjects independent variables in this analysis, while mode (lwl and lws) was a within-subjects independent variable. Baseline lwl and lws rates, obtained during the first half of the interview, served as covariates for the lwl and lws rates of the second half, respectively. No significant main effect or interaction terms incorporating the confederate independent variable were found in this analysis. Hence, the results were collapsed across the confederate independent variable and a 2 (preferences for control) x 2 (touch) x 2 (mode) analysis of variance was recomputed. The results of this analysis revealed a main effect for visual mode,  $F(1,54) = 165.07$ ,  $p < .001$ . Consistent with past research (e.g., Ellyson et al., 1980,1981), looking behavior was greater while listening than while speaking overall (lwl = 65.38%, while lws = 21.92%).

The preference for control x touch x mode interaction was significant,  $F(1,54) = 5.66$ ,  $p < .05$ . As shown in Figure 1, high PC subjects who were touched spent more time looking while listening than did subjects in the other three groups. Utilizing an individual comparison of means (the Scheffe' test), the percentage of time that high PC subjects

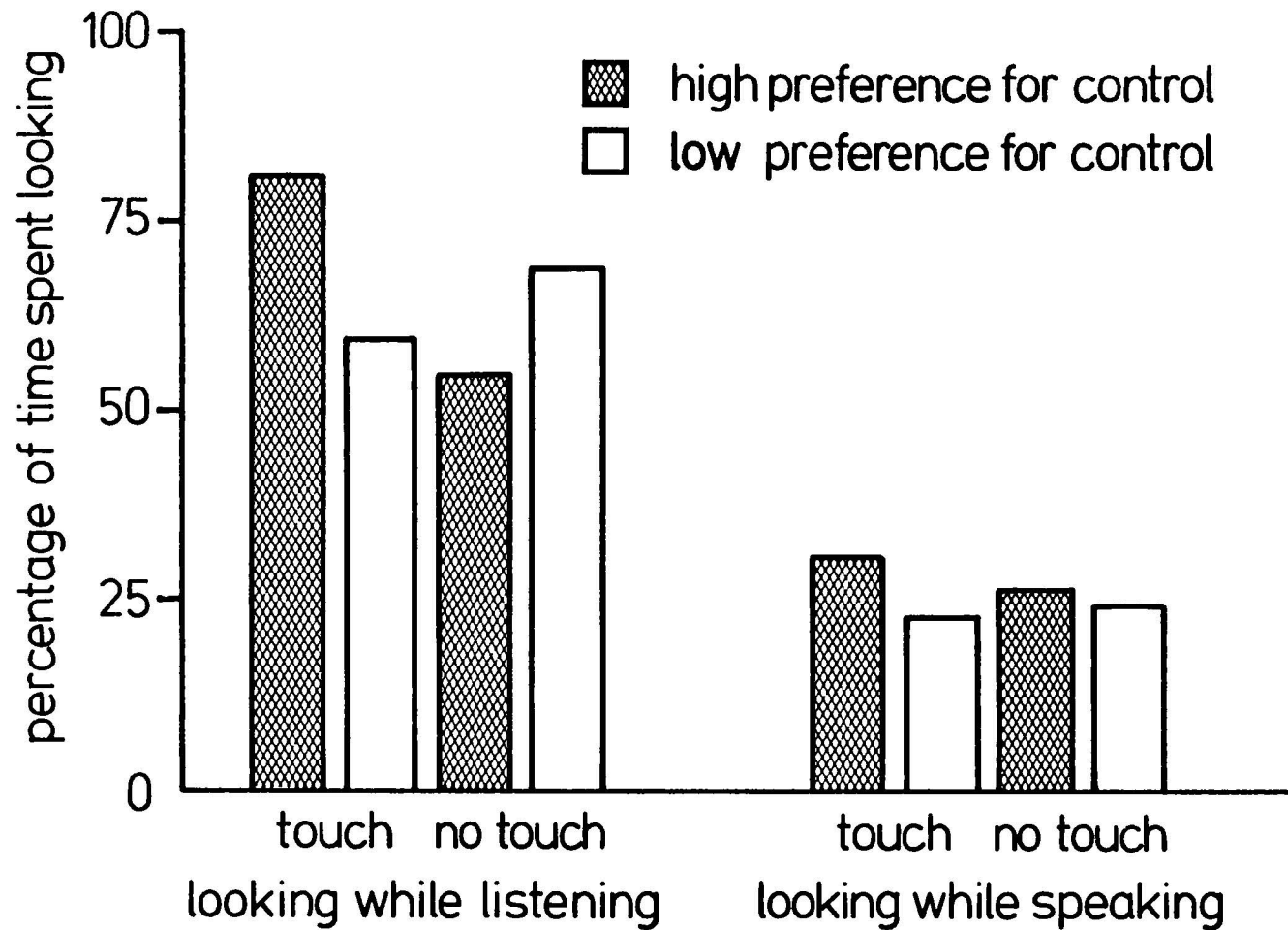


Figure 1. Percentage of time in seconds spent looking while listening and looking while speaking.

who were touched spent looking while listening to the confederate was found to be significantly greater than that of the high PC subjects who were not touched, the low PC subjects who were touched, and the low PC subjects who were not touched ( $p < .01$ ). However, the percentage of time that subjects spent looking while listening in the high PC-no touch, the low PC-touch, and the low PC-no touch conditions did not significantly differ from one another. Also, there were no significant differences in looking while speaking rates among the four groups. Thus, subjects' preferences for control interacted with the touch condition to affect the looking while listening behavior of high PC subjects who were touched.

It should be noted that this triple interaction of preference for control x touch x mode did not occur in the manner that had been anticipated. It was expected that subjects in the high PC-touch condition would display roughly equivalent visual behavior when listening and when speaking; this finding was not obtained. The results indicated that high PC subjects who were touched increased their looking while listening (relative to the other preference for control by touch conditions), whereas these subjects did not change (relative to the other groups) in the percentage of time spent looking while speaking.

It should also be noted that there were no other significant effects, besides the main effect due to visual mode and the triple interaction, on looking behavior.

### Evaluative Measures

A 2 (preferences for control) x 2 (touch) analysis of variance was performed on the evaluative measures. Subjects' feelings of comfort were associated with a significant preference for control x touch in-

teraction,  $F(1,55) = 5.02$ ,  $p < .05$ . The results indicated that high PC subjects were more comfortable in the no touch (mean = 8.29) than in the touch (mean = 6.93) condition, whereas low PC subjects were slightly more comfortable in the touch (mean = 7.50) than in the no touch (mean = 7.21) condition. Though this two-way interaction was significant, results of post hoc comparisons among the various pairs of means were nonsignificant, based on the Scheffe' test. The only other effect to approach significance on the evaluative measures was the preference for control x touch interaction on the subjects' liking for the confederate,  $F(1,55) = 3.57$ ,  $p < .10$ . The pattern of means on liking for the confederate was somewhat similar to the results on the preference for control measure: subjects in the high preference for control groups tended to like the confederate more in the no touch (mean = 8.29) than in the touch (mean = 7.23) condition, whereas subjects in the low preference for control groups did not differ in their liking for the confederate in the no touch (mean = 7.93) and in the touch (mean = 7.94) condition.

#### Affective measures

A 2 (preference for control) x 2 (touch) analysis of variance was performed on the affective measures. There were no effects on the mood variable, but there was a significant main effect for touch on four of the emotions: contentment ( $F(1,58) = 18.76$ ,  $p < .001$ ), delight ( $F(1,58) = 6.37$ ,  $p < .01$ ), enjoyment ( $F(1,58) = 8.50$ ,  $p < .01$ ), and surprise ( $F(1,58) = 11.87$ ,  $p < .001$ ). Overall, subjects who were touched reported feeling less contentment, delight, and enjoyment than did subjects who were not touched. Subjects who were touched also reported feeling more surprise than did subjects who were not touched. Mean

ratings on the affective measures for the touch and no touch conditions are shown on Table 1.

Table 1  
Significant Differences between Touch and No Touch  
Subjects on Affective Measures

	<u>Contentment</u>	<u>Delight</u>	<u>Enjoyment</u>	<u>Surprise</u>
<u>Touch</u>				
Mean	2.42	2.39	2.58	3.27
<u>No Touch</u>				
Mean	3.57	3.11	3.46	2.88
<u>F</u> (1,58)	18.76**	6.37*	8.50*	11.87**

Mean ratings were obtained from a five-point scale, from one ("Not at all Experienced") to five ("Experienced Strongly").

\*  $p < .01$

\*\* $p < .001$

### Discussion

Results of the present study confirm the hypothesis that females do not respond to touch in a uniformly positive manner, but differ according to their preferences for control over people and situations. The visual behavior of high PC subjects who received touch was different from that of other subjects, as were their evaluative and affective responses. Specifically, high PC subjects who were touched spent significantly more time looking while listening to the confederate, evaluated the confederate more negatively, and experienced less positive affect than did other subjects. While the evaluative and affective responses differed as predicted, the specific pattern of differences in looking while listening was contrary to that which was expected. This surprising pattern warrants closer examination.

While low PC subjects who were touched were expected to display higher rates of looking while listening relative to looking while speaking rates, high PC subjects who were touched were expected to display roughly equivalent looking while listening and looking while speaking rates. This expectation was based upon the findings of several studies (e.g., Exline et al., 1975; Ellyson et al., 1980, 1981) in which subjects high in actual or perceived power or status displayed visual dominance behavior (equivalent rates of lwl and lws) when interacting with persons lower in power or status. Subjects low in power or status were found in those studies to look while listening significantly more than they looked while speaking when interacting with a higher



status person. The high PC subjects in the present study, after being touched, displayed visual behavior which has heretofore been manifested by subjects of relatively low status or power. However, it must be kept in mind that one nonverbal behavior may communicate very different messages according to the context in which it occurs. Thus, the unexpected visual behavior in the present study may well represent a different communication from that of the same behavior in previous studies. Therefore, the results of this study may be seen not as a contradiction of those earlier findings, but as indicative of the multiple meanings which may accompany any given nonverbal behavior. Because all subjects were placed in the same subordinate status by virtue of interacting with a graduate student, lwl rates were higher than lws rates in all groups. This overall effect was to be expected, considering the composition of the dyads. The specific pattern of lwl rates in the present study could not, however, be predicted from the conclusions drawn by those studies.

High PC subjects who were touched manifested far greater rates of looking while listening than did subjects in other groups, contrary to the prediction that lwl rates would be lowest for these subjects. Because lwl is the mode associated with deference (Ellyson et al., 1981), one might be tempted to conclude that the high PC subjects responded to the touch with deference and respect; however, the results of the evaluative and affective measures render such an interpretation untenable. High PC subjects who were touched reported liking the confederate less and feeling less comfortable with him than did the other subjects. High PC subjects who were not touched, on the other hand, liked the confederate more and felt more comfortable with him than did subjects in the other groups. High PC subjects were clearly not dispositionally

more negative in their attitudes towards the confederate, but reacted strongly against the confederate in their evaluations and affective responses due, in all probability, to the touching behavior initiated by the confederate. Even so, why did the high PC subjects who received touch display such high *lwl* rates? A possible explanation for this unexpected result rests upon Patterson's (1982) functional model of nonverbal involvement.

Patterson (1982) proposes a model of nonverbal involvement (as opposed to the rather limited construct of nonverbal intimacy) which includes five functional categories. One of these functions is that of social control, and may be used to understand the unexpected visual behavior of the high PC subjects who were touched. Patterson describes social control as "the managed involvement of one person that is designed to change the behavior of another person" (in press). Such behavior is managed and purposeful. The functional model makes a distinction between the overt behavioral manifestation of involvement and the functional motives which underly that involvement, and the social control function represents a clear example of this distinction. For instance, a person may display high nonverbal involvement (close approach, gaze, and smiling) when interacting with a close friend (intimacy motive) and behave in the same manner when interacting with a boss from whom a promotion is desired (social control motive). There is much less consistency between the underlying feeling towards the person with whom one interacts and one's behavior when the social control function is in operation. The high PC subjects who were touched and who displayed such high rates of *lwl* in the present study might well have been behaving in a consciously managed manner, for the purpose

of changing the confederate's behavior. Specifically, the confederate's touch may have been interpreted by the subjects as signalling a desire by the confederate for more visual attention from the subject. This interpretation by the subject would then have caused her to behave in a manner which would likely deter the confederate from touching her again (i.e., by increasing the amount of looking at the confederate while he was speaking). Citing similar instances of subjects behaving in a warm manner when their feelings were in fact negative (Bond, 1972; Coutts, Schneider, & Montgomer, 1980; Ickes, Patterson, Rajcecki, & Tanford, in press), Patterson (in press) concludes that those subjects "initiated a warm behavioral strategy in an attempt to avert or minimize the anticipated difficulty in interacting with their partners." This is in line with the low liking for and low comfort with the confederate that the high PC subjects who were touched reported. Thus, the increased low liking for high PC subjects who were touched may be seen as an attempt to make the interaction more pleasant or to avoid further difficulties with the confederate, rather than to express warmth and intimacy, as arousal theory would suggest (Patterson et al., 1976), or as a manifestation of feelings of deference, as was hypothesized in the present study on the basis of past visual behavior theory and research (Ellyson et al., 1980, 1981; Exline et al., 1975).

According to Patterson's model, a social interaction will be unstable to the extent that functional attributions are consistent with one another. When the interactants have dissimilar expectancies about the nature and/or purpose of the exchange, the involvement of the first person is more likely to be discrepant from the second person's antici-

pated level of involvement. In the present study, high PC subjects who were touched became acutely aware (there were several instances of incredulous expressions and of sentences cut short at the point of the touch) of the discrepancy between the level of involvement which they had assumed would persist throughout the interaction, and that which the confederate was apparently expecting. Once an exchange has become unstable, the person whose preferred level of involvement has been violated will become more aroused and begin to reassess the interactant and his or her motives. During such a period of reassessment, the individual would increase monitoring of the other person, so that additional cues necessary for coping with that person may be obtained. This may represent an alternative explanation for the high lwl rates of the high PC subjects who were touched: the high degree of lwl may have been a manifestation of increased vigilance by the subjects, a sort of wary watchfulness for the purpose of obtaining more information and/or predicting further undesirable behavior from the confederate. In all likelihood, both explanations are sound; the subject increased her visual attention to the confederate as he spoke, perhaps both as an indication to him that he most certainly had gotten her attention, and need not touch her again, and as a means of predicting further touches.

An explanation which is similar to the foregoing, but which is focused more upon the power-related aspects of the interaction, is offered by Henley (1977). She suggests that when a person is attempting to alter an existing relationship (or to initiate a relationship), power and dominance are communicated by looking. This is characteristic of the nature of interactions in the steady gaze or "staring" studies (Ellsworth, Carlsmith, & Henson, 1972; Ellsworth & Langer, 1976), in

which the stare was concluded to be a dominant social cue with profound impact upon its recipient. Henley states that when the structure of a relationship has been defined, the dominant individual need not give visual attention to the deferent party. The deferent party is willing to continue the relationship in the manner in which it is structured and indicates this by visual attention as well as by other nonverbal behaviors. This view of the power dynamics in an interaction are consistent with past research, in which high PC individuals reduced their lwl time, while low PC subjects increased their rates of lwl (Ellyson et al., 1981). The results of the present study, however, are consistent with a suggestion by Ellyson et al. (1981) that is based upon Henley's theory: "One would imagine that if the low power person resisted or tried to take over, the high power individual would increase monitoring to regain control. One must be secure not to attend to the social environment" (p. 170). In the present study, it is suggested that the confederate's touch, representing an attempt to "take over" for the high PC individuals, led those subjects to increase monitoring for the purpose of regaining control.

It is hoped that the results of the present research will encourage others to investigate the many functions of touch and of visual behavior, with particular attention to the ways in which power is conveyed, and control gained and lost, by both. Awareness of the subtle, continuous influence of one person's nonverbal behavior upon another person's attributions, emotions, and behavior is one way by which individuals may come to have more control over their own behavior and over the messages conveyed by that behavior to others. Such awareness is

particularly critical for the person who finds himself or herself at the low end of the totum pole in this society because of sex, race, or social class. For these individuals particularly, nonverbal behavior is one aspect of life in which ignorance is most certainly not bliss.

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