PERCEPTIONS OF CROSS-SEX AND SAME-SEX NONRECIPROCAL TOUCH: IT IS BETTER TO GIVE THAN TO RECEIVE

Brenda Major Richard Heslin

ABSTRACT: Observers' perceptions of actors engaged in cross-sex and same-sex nonreciprocal touch vs. no-touch interactions were assessed. Touchers were rated significantly higher than recipients on dimensions of status/dominance, instrumentality/assertiveness, and warmth/expressiveness. Furthermore, touchers were rated higher, and recipients were rated lower, on these dimensions than no-touch controls. Female observers rated actors involved in touch interactions as more attractive than those involved in no-touch interactions, whereas male observers did the reverse. Results suggest that nonreciprocal touch conveys several messages, and appears to benefit the toucher more than the recipient. Implications of these results for evaluations of the nonverbal communication patterns of women and men were discussed.

Touch has been described as both the most basic sensory process and the earliest and most elemental form of communication (Frank, 1957; Montagu, 1971). A number of studies have demonstrated the crucial role that touch plays in healthy emotional, intellectual, social, and physical development (e.g., Harlow, 1958; Spitz, 1946). Yet, despite its acknowledged importance, touch is the least researched and least understood area of nonverbal communication (see Major, 1982, for a review). Although empirical research on touch is scarce, however, statements and assertions about the meaning of touch are not. Tradi-

Brenda Major is in the Department of Psychology at the State University of New York at Buffalo. Richard Heslin is at the Department of Psychology at Purdue University. Reprint requests should be addressed to Brenda Major, Department of Psychology, State University of New York at Buffalo. 4230 Ridge Lea Road. Buffalo. New York 14226

tionally, touch has been seen as synonymous with affection, warmth, and sexuality (cf. Heslin, Note 1; Jourard, 1966; Jourard & Rubin, 1968; Mehrabian, 1972; Montagu, 1971). Early research on the meaning of touch supported this interpretation (e.g., Kleinke, Meeker & LaFong, 1974; Nguyen, Heslin & Nguyen, 1975, 1976). A serious limitation of this research, however, was that all of the dependent variables presented to respondents reflected dimensions of emotional warmth.

In contrast to traditional perspectives, Henley (1973; 1977) theorized that touch, as well as other forms of nonverbal communication, also communicates a different message—one of status, power, and dominance. Henley suggests that touch, like use of another's first name, indicates closeness and solidarity when it is used reciprocally, but status and power when it is used nonreciprocally. Furthermore, Henley asserts that while a man's touch to a woman is not necessarily interpreted as conveying sexual intent, a woman's touch to a man is.

In support of Henley's arguments concerning the status implications of nonreciprocal touch, observational studies have indicated that the initiation of nonreciprocal touch is associated with higher status variables such as being male, older, or of higher socioeconomic status (Goffman, 1967; Henley, 1973; Heslin & Boss, 1980; Major & Williams, Note 2). Furthermore, a study by Alber (Note 3) suggests that people randomly cast into a dominant role may use touch as a means of conveying dominance over another person randomly cast into a submissive role. These findings cast doubt on traditional assumptions that touch communicates uniformly positive emotions.

Only one experiment has investigated whether nonreciprocal touch is *interpreted* as conveying status and dominance. Summerhayes and Suchner (1978) showed observers magazine photographs of male-female dyads who were engaging in nonreciprocal touch or not touching. They asked them to rate each member of the dyad on four scales: powerful/powerless, strong/weak, superior/inferior, and dominant/submissive. Dyad members' status was varied so that either the female was higher status, the male was higher status, or both were of equal status. Touchers were seen as more dominant than females, and higher status actors were seen as more dominant than lower status actors. Comparisons of ratings of touchers and recipients to those of persons not touching generally indicated that nonreciprocal touch reduced the perceived dominant contents.

nance of the recipients without appreciably raising the perceived dominance of the toucher. This occurred regardless of the initial status of the participants.

Summerhayes and Suchner's (1978) research shares limitations of earlier research in that they examined perceptions of touch along only one dimension and examined only cross-sex touch. Furthermore, they used different magazine photographs as their stimuli in each condition, and thus may have confounded the appearance of the actors with their relative status and touching behavior. Nevertheless, their research, when combined with that of earlier research (e.g., Kleinke et al., 1974; Nguyen et al., 1975, 1976) suggests that nonreciprocal touch may communicate dual messages of both warmth and dominance.

This speculation is supported by research on recipients' reactions to nonreciprocal touch. A number of studies have found that recipients of both genders respond positively when touched by another (cf. Alagna, Whitcher, Fisher & Wicas, 1979; Jourard & Friedman, 1970; Pattison, 1973; Silverthorne, Noreen, Hunt, & Rota, 1972). In contrast, others (cf. Fisher, Rytting, & Heslin, 1976; Whitcher & Fisher, 1979) have found that women respond positively while men respond ambivalently or negatively to nonreciprocal touch. In a recent review, Major (1982) suggested that these inconsistencies may be due to the relative status of toucher and recipient in these studies. In those studies finding positive responses in both genders, the toucher was of higher status than the recipient, thus the touch was role-appropriate and did not alter the relative status of the two participants. In contrast, in those studies that found men reacting negatively and women reacting positively to being touched, the toucher was of equal or ambiguous status relative to the recipient. In this situation, males may be more attuned to the status/dominance implications of nonreciprocal touch, whereas females may be more attuned to the emotional warmth implications of nonreciprocal touch. This speculation is consistent with Deaux's (1977) assertion that men are more likely to adopt a status-assertive style of interpersonal behavior, while women are more likely to adopt a status-neutralizing style. To date, no research has examined whether the same gesture of nonreciprocal touch may simultaneously communicate messages of both status/dominance and emotional warmth. This is the purpose of the present research.

The present experiment investigated observers' perceptions of both cross-sex and same-sex nonreciprocal touch between persons of equal status. Observers viewed male and female actors portrayed in high contrast slides. This method was used to minimize a number of possible confounds (e.g., physical attractiveness, facial expression, body posture) present in most prior touch research. Perceptions were measured along four major dimensions: status/dominance, warmth/expressiveness, instrumentality/assertiveness, and sexuality. In accord with prior research (e.g., Summerhaves & Suchner, 1978), it was hypothesized that touchers would be rated higher on status/dominance than recipients. Second, since instrumentality/assertiveness is also a stereotypically masculine dimension, it was further hypotehsized that touchers would be rated higher than recipients on this dimension as well. Third, it was expected that touching pairs would be seen as warmer and more expressive than nontouching pairs. Fourth, in accord with Henley's (1977) predictions, it was expected that dyads where a female was touching a male would be perceived as higher in sexual desire than dyads where a male was touching a female. Finally, since prior research has suggested that female recipients respond more favorably than male recipients to touch from an equal status other, it was hypothesized that female observers would view those involved in touch interactions more positively than male observers would.

METHODS

Overview of Design

Male and female subjects each viewed a series of high contrast slides portraying two actors standing side by side. Half of the subjects viewed slides depicting the actor on the left touching the actor on the right on the shoulder. Control subjects viewed slides depicting no touch between actors. All four possible male-female combinations were depicted. Subjects rated both actors in each slide on 9 bipolar adjectives and the pair on the extent of sexual desire present. Thus, five factors were varied in a $2 \times 2 \times 2 \times 2 \times 2$ between—within factorial design. The between factors were sex of subject and touch portrayed (nonrecpirocal touch vs. no-touch). The within factors were target of ratings (actor on left vs. actor on right), sex of actor on left (or toucher in touch condition), and sex of actor on right (or recipient in touch condition).

Subjects

Thirty-six male and 30 female university undergraduates participated in this research in partial fulfillment of a course requirement. Males and females were assigned randomly in approximately equal numbers to either the touch or no-touch conditions.

Stimuli

Eight high contrast (silhouette) slides were created for both the touch and no-touch conditions so as to control for possible biasing of ratings due to extraneous stimulus variables such as physical attractiveness and specific personal characteristics. Within each condition all four possible combinations of male-female pairs were photographed and appeared twice with two male and two female actors appearing equally often in the role of toucher or recipient (or actor on left or right). The same two male and female actors posed for both touch and no-touch slides and were selected so as to be relatively equal in status and appearance (e.g., age, physical attractiveness, clothing). Although sex of actors was readily discernable from the slides, females wore skirts and males wore pants to further clarify the actors' gender. Actors stood the same distance apart and maintained the same general body and head positioning in both touch and no-touch slides. In touch slides, however, the actor on the left was additionally touching the actor on the right on the shoulder. Thus, the same type of touch was portrayed and the person on the left was always the toucher and the person on the right was always the recipient in the touch slides. Arms remained at the sides in no-touch slides.

Procedure

Subjects participated in groups of 6 to 10 and were informed that this was an experiment on person perception. All subjects viewed a series of eight slides that depicted either touch or no-touch and were asked to evaluate both the actor on the left and the actor on the right in each slide. The order of presentation of slides was counterbalanced, as was the order of rating actors (i.e., half of the subjects rated the actor on the left first and half rated the actor on the right first). Subjects rated each actor on eight trait adjectives reflecting three primary dimensions: status/dominance (dominant, high in status); instrumentality/assertiveness (aggressive, independent, confident); and warmth/expressiveness (friendly, understanding, playful). As a check on a potentially confounding factor, subjects also rated each actor on attractiveness. All traits were rated on 7-point scales from 1 (not at all) to 7 (very). After rating the two actors in each slide, subjects were further asked to rate the extent of sexual desire existing between the two actors from 1 (no sexual desire) to 7 (high sexual desire).

RESULTS

To control for effects which might have been caused by the characteristics of a particular male or female actor, ratings of the actors were summed across identical male-female combinations, resulting in composite ratings of two actors in each of four malefemale combinations for both the touch and no-touch conditions. Ratings of the actors on the nine traits were initially analyzed with separate 2 (Sex of Subject) \times 2 (Touch/No-touch) \times 2 (Target) \times 2 (Sex of Actor on Left) \times 2 (Sex of Actor on Right) between-within analyses of variance (ANOVAS). Patterns of results for the individual traits were identical within each of the three trait clusters (status/dominance, warmth/expressiveness, and instrumentality/assertiveness). Thus, ratings on the individual traits were averaged within each cluster to yield evaluations of the actors on these three primary dimensions. Separate five factor ANOVAS were then performed on these three composite scores and ratings of attractiveness. Ratings of sexual desire were analyzed separately. Due to the large number of effects possible with five factor designs, only those effects attaining statistical significance are discussed below. All significant interactions were further analyzed using simple effects F tests, as recommended by Winer (1971).

Status/dominance

Our first hypothesis was that touchers would be perceived as higher in status and dominance than recipients. Analysis of the composite rating of status/dominance revealed, as predicted, a highly significant Touch/No-touch \times Target interaction, F(1,62) = 31.13, p < .0001. Means for this interaction are presented in Table 1. Touchers were rated significantly higher on status/dominance (M = 9.36) than recipients (M = 7.61), whereas there were no differences between ratings of actors on the left (M = 8.73) and right (M = 8.44) in the no-touch slides. Furthermore, touchers were perceived as significantly higher than, and recipients were perceived as significantly lower than, no-touch controls on status/dominance. Thus, the act of touch raised the perceived status/dominance of the toucher and lowered that of the recipient relative to those not touching.

A significant interaction betwen Sex of Left Actor and Sex of Right Actor was obtained, F(1,62) = 13.99, p < .01, but this was qualified by a significant Touch/No-touch \times Sex of Left Actor \times

Table 1.

Touch/no-touch x target interactions

for ratings of status, warmth, and assertiveness.

	Touch Int	teraction	No-touch Interaction		
Dimension	Toucher	Recipient	Left Actor	Right Actor	
Status/dominance	9.36 _a	7.61 _b	8.73 _c	8.44 _c	
Warmth/expressiveness	10.01 _a	8.25 _b	8.99 _c	8.87 _c	
Instrumentality/ assertiveness	10.34 _a	7.20 _b	8.90 _c	8.63 _c	

Within a row, means with different subscripts differ from one another at the .05 level of significance.

Sex of Right Actor interaction, F(1,62) = 5.51, p < .05. Means for this interaction are presented in Table 2. In the No-touch condition only, actors in male-male pairs were rated highest on status/dominance, and actors in cross-sex pairs were rated lower on status/dominance than those in same-sex pairs. Sex of actor effects did not occur in the Touch condition, suggesting that the act of touching may have neutralized the perceived status/dominance of these pairs (i.e., raised that of the toucher and lowered that of the recipient), regardless of the sex of the actors.

Instrumentality/assertiveness

Our second prediction was that touchers would be rated higher on instrumentality/assertiveness than recipients. As expected, analysis of the composite variable of instrumentality/assertiveness revealed a highly significant interaction between Touch/No-touch and Target, F(1,62) = 70.26, p < .0001 (see Table 1). Touchers were rated significantly higher (M = 10.34) on instrumentality/assertiveness than recipients (M = 7.20), while actors on the left (M = 8.90) and right (M = 8.63) in the no-touch condition were not rated differently. Furthermore, touchers were seen as significantly more, and recipients were seen as significantly more, and recipients were seen as significantly less, instrumental/assertive than no-touch actors.

Table 2.

Means for Touch/no-touch x Sex of left actor (toucher) x

Sex of right actor (recipient) interactions for ratings of status, assertiveness, warmth, and attractiveness.

	Touch				No-touch			
Trait Rating	Sex of Left Actor (Toucher)			Sex of Left Actor				
	Mal	Male Female		l le	Male		Female	
	Sex of Right Actor (Recipient)			Sex of Right Actor				
	Male	Female	Male	Female	Male	Female	Male	<u>Female</u>
Status dominance	8.47	8.51	8.60	8.37	8.85 _a	8.52 _{ab}	8.30 _b	8.67 _a
Instrumentality/ assertiveness	8.78	8.82	8.67	8.81	9.08 _a	8.55 _b	8.32 _b	9.12 _a
Warmth/expressiveness	8.70 _a	9.25 _b	9.70 _b	8.85 _a	8,32	8.85	9.14	9.40
Attractiveness	9.25 _a	9.73 _b	9.88 _b	9.33 _a	9.16	9.04	9.28	9.36

¹Means presented for these interactions reflect combined ratings of both actors in the dyad.

Within a row, means with different subscripts differ from one another at the .05 level of significance.

Higher scores indicate greater attributions of attractiveness, status, warmth and assertiveness.

An interaction also was obtained between Touch/No-touch, Sex of Subject, and Sex of Right Actor, F(1,62) = 4.16, p < .05. This interaction was due to ratings within the touch condition only. Males rated the male recipient of touch as significantly less instrumental/assertive (M = 8.46) than they rated the female recipient of touch (M = 8.97). Female subjects did not rate male (M = 8.98) and female (M = 8.66) recipients differently.

A significant Sex of Left Actor \times Sex of Right Actor interaction was qualified by a significant Touch/No-touch \times Sex of Left Actor \times Sex of Right Actor interaction, F(1,62) = 8.29, p < .01.

Means for this interaction are presented in Table 2. Within the notouch condition only, actors in same-sex pairs were rated significantly higher on instrumentality/assertiveness than actors in mixed-sex pairs. That is, actors in male-male and female-female pairs were rated similarly, and both were rated higher than actors in male-female or female-male pairs. Sex of actor had no effect on ratings of instrumentality/assertiveness in the touch condition, suggesting that the act of touching served to neutralize differential ratings of same-sex and mixed-sex pairs.

Warmth/Expressiveness

Our third prediction was that the act of nonreciprocal touch would also be seen by observers as warm and expressive. A highly significant Touch/No-touch \times Target interaction was obtained for the composite variable of warmth/expressiveness, F(1,62) = 49.98, p < .0001. Means are presented in Table 1. Touchers were rated as significantly more warm/expressive (M = 10.01) than recipients (M = 8.25), whereas actors on the left (M = 8.99) and right (M = 8.87) in the no-touch condition were not rated differently. In addition, touchers were seen as significantly more warm/expressive than no-touch controls, while recipients were seen as significantly less warm/expressive than no-touch controls. Thus the act of touching enhanced ratings of the toucher while diminishing ratings of the recipient on the dimension of warmth/expressiveness.

A significant interaction also was observed between Touch/No-touch, Target, and Sex of Left Actor. Simple effects tests on this interaction revealed that subjects perceived the female toucher as significantly more warm/expressive (M=10.51) than the male toucher (M=9.51). Ratings of male and female actors did not differ in the no-touch condition.

Two parallel interactions were observed between Touch/Notouch and Sex of Left Actor, F(1,62) = 4.19, P < .05, and Touch/Notouch and Sex of Right Actor, F(1,62) = 4.29, p < .05. Simple effects F tests on these interactions indicated that within the no-touch condition, females were seen as significantly more warm/expressive than males. Ratings of females and males did not differ, however, in the touch condition. For both of these interactions, males involved in touch interactions (either as toucher or recipient) tended to be rated as more warm/expressive than males in no-touch interactions. That is, males in the no-touch slides were seen as lowest on warmth/expressiveness.

A significant Sex of Left Actor \times Sex of Right Actor interaction, F(1,62) = 13.99, p < .001, indicated that actors in malemale pairs were rated lower on warmth/expressiveness than actors in any pair that included a female. This was qualified, however, by a significant Touch/No-touch \times Sex of Left Actor \times Sex of Right Actor interaction, F(1,62) = 6.41, p < .05. Post-hoc analyses indicated that within the touch condition only, actors involved in cross-sex touching were seen as more warm/expressive than actors involved in same-sex touching (see Table 2). Sex of actor did not affect ratings in the No-touch condition.

Attractiveness

As a check to ascertain whether the male and female actors were perceived to be of similar attractiveness, subjects rated both actors in each slide for attractiveness. Results of the analysis of these ratings revealed no main effects for Sex of Left Actor. F < 1, or Sex of Right Actor, F < 1. Thus, male and female actors were perceived as similarly attractive. A significant interaction was obtained, however, between Touch/No-touch, Sex of Left Actor, and Sex of Right Actor, F(1,62) = 4.92, p. < .05. Means for this interaction are presented in Table 2. Simple effects tests indicated that within the touch condition only, pairs of actors engaged in cross-sex touching were rated as more attractive than pairs of actors engaged in same-sex touching. No significant differences occurred with the no-touch condition.

Several interactions also occurred with Sex of Subject. A significant Touch/No-touch \times Sex of Subject interaction, F(1,62) = 4.35, p. < .05, indicated that males rated the actors as significantly more attractive (M = 9.35) than females did (M = 9.07) in the notouch condition, whereas females rated the actors as significantly more attractive (M = 9.93) than males did (M = 9.16) in the touch condition. This finding is consistent with our prediction that females would evaluate nonreciprocal touch more positively than males would. Furthermore, two parallel higher-order interactions were observed: Sex of Subject \times Target \times Sex of Left Actor, F(1,62) = 5.11, p < .05, and Sex of Subject \times Target \times Sex of Right Actor, F(1,62) = 10.20, p < .05. Simple effects F tests on these interactions revealed that both women and men rated actors of the opposite sex significantly more attractive than actors of their own sex.

Sexual Desire

Following predictions derived from Henley (1977), it was hypothesized that pairs where a female was touching a male would be perceived as conveying more sexual desire than pairs where a male was touching a female. Ratings of sexual desire between actors in each slide were analyzed with a 2 (Sex of Subject) \times 2 (Touch/No-touch) \times 2 (Sex of Left Actor) X 2 (Sex of Right Actor) ANOVA. Contrary to predictions, the Touch/No-touch \times Sex of Left Actor \times Sex of Right Actor interaction was not significant, F < 1, indicating that female-touching-male pairs were not seen as more sexual than male-touching-female pairs. Furthermore, the main effect for Touch/No-touch also failed to reach significance, F < 1, indicating that touching pairs were not seen as conveying more sexual desire than non-touching pairs.

The Sex of Left Actor \times Sex of Right Actor interaction, however, was highly significant, F(1,62) = 361.98, p < .0001. Simple effects F tests indicated that considerably more sexual desire was perceived to exist in mixed-sex pairs (Ms = 8.44 and 8.66) than in same-sex pairs (Ms = 2.89 and 3.42). This occurred regardless of whether the actors were touching or not touching. In addition, a significant main effect for Sex of Subject was obtained, F(1,62) = 4.76, p < .05, indicating that males rated the actors higher on sexual desire (M = 6.23) than females did (M = 5.48).

DISCUSSION

Perceptions of touchers and recipients on the dimensions of status/dominance, warmth/expressiveness, and instrumentality/assertiveness (Table 1) might best be summarized with the phrase "It is better to give than to receive." Results of this research suggest that nonreciprocal touch does not benefit both parties involved, at least not in the eyes of observers. Rather, in these nonreciprocal touch interactions, where initial status and attractiveness of participants was equal, the act of touching enhanced the perceived status, warmth, and assertiveness of the toucher relative to persons not touching while it diminished that of the recipient relative to those not touching. These results contrast somewhat with those of Summerhayes and Suchner (1978) who found a similar reduction in perceive dominance of the recipient relative to a no-touch control, but did not find a corresponding gain in the

perceived dominance of the toucher relative to the control. Results of the present research suggest that touch acts not just as a status *reminder* for observers, but can actually affect the perceived balance of power in a relationship by simultaneously enhancing that of the toucher and diminishing that of the recipient. These findings, when combined with results of observational studies that indicate that men are more likely to be the initiators of touch while women are more likely to be the recipients of touch (e.g., Henley; 1973; Major & Williams, Note 1), have disturbing implications for how the nonverbal communication patterns of women vs. men are perceived by others.

Furthermore, this research indicates that nonrecpirocal touch conveys several messages simultaneously to observers—messages of status, assertiveness, and warmth. Consistent with Henley's (1973; 1977) assertions, nonreciprocal touch is perceived as conveying greater status and dominance to the toucher, and lower status and dominance to the recipient. The toucher is also seen as higher than the recipient on dimensions of aggressiveness, confidence, and independence, traits we might expect to be associated with higher status and dominance. Consistent with traditional research and theory on the meaning of touch (cf. Mehrabian, 1972; Montagu, 1971), however, the toucher is also seen as more warm and expressive than those not touching.

Contrary to our hypothesis that female observers would interpret touch more positively than male observers, men and women generally perceived touch similarly. Those differences that were obtained, however, were consistent with our prediction. First, women rated the actors as more attractive when they were touching than not touching, whereas men did the reverse. Secondly, men rated the male recipient of touch lower on instrumentality/assertiveness than they rated the female recipient, while women did not differentiate between male and female recipients. Thus, men see male recipients of nonreciprocal touch as particularly low on dimensions of aggressiveness, independence, and confidence, traits stereotypically associated with masculinity and the male role in our society (cf. Broverman et al., 1972). These findings may account for males' tendency to react more negatively than females to being touched by an equal status stranger (cf. Fisher et al., 1976; Whitcher & Fisher, 1979).

Henley's (1977) hypothesis that touch from a female to a male would be seen as conveying more sexual desire than touch from a

male to a female was not confirmed. Male-female and female-male touch was perceived similarly. Also, contrary to Jourard's (Jourard & Rubin, 1968) assertion that touch is equated with sexual intent, touching pairs were not seen as conveying more sexual desire than nontouching pairs. In part, this may have been due to the modality of touch observed—a hand to the shoulder. In addition, sexual desire was not rated separately for the two actors in each slide, thus we could not compare directly ratings of a female toucher with those of a male toucher. It could be that although the pairs are perceived similarly, the individual actors are not.

A striking finding of this research was the relatively few effects for sex of stimulus person. As in prior research (e.g., Summerhayes & Suchner, 1978), the act of touch appeared to overwhelm the impact of other cues such as gender, age, and initial status. The one exception to this pattern was ratings on the dimension of warmth/expressiveness. The female toucher was seen as significantly warmer than the male toucher. This suggests that the traditional interpretation of touch as a warm and caring gesture might be a more appropriate interpretation of the meaning of females' than males' touch.

The gender composition of the dyad also had an impact on the traits ascribed to the participants. Cross-sex touch was seen as conveying more warmth/expressiveness than same-sex touch. And actors in cross-sex pairs, whether touching or not, were seen as conveying more sexual desire than those in same-sex pairs. In contrast, actors in nontouching same-sex pairs were seen as higher on the instrumental/assertive dimension than actors in cross-sex pairs. These findings probably reflect assumptions of greater closeness and intimacy in heterosexual dyads than same-sex dyads.

The present research illustrates the utility of a more complex model of touch, by indicating that nonreciprocal touch is perceived as conveying warmth, as well as status, to its initiator. Further research on touch is greatly needed to determine when one interpretation will be favored over another. It should be noted, however, that the touch interactions viewed in this research were portrayed in a highly artificial setting, devoid of the usual contextual and relationship cues found in everyday touch interactions. People engaging in naturally occurring touch interactions might not be viewed so extremely. Greater attention needs to be devoted to the context in which touch occurs and the nature of the relationship in which it occurs, as these two factors may be crucial

determinants of the meaning ascribed to touch. In addition, future research should investigate the meaning ascribed to reciprocal, as well as nonreciprocal touch. Finally, it is important for future research to consider how actors themselves, such as the recipient of touch, evaluate themselves and the person who touched them on dimensions such as status, warmth, and assertiveness.

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