

THE EFFECT OF TOUCHING DIFFERENT BODY
AREAS ON PROSOCIAL BEHAVIOR*

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SUMMARY

The influence of touching different locations of the body on helping behavior was examined. One hundred females and 100 males walking in shopping malls were interviewed by either a female or male confederate (C). At the end of the interview, the C touched the S on either the shoulder, the upper arm, the lower arm, the hand, or did not touch the S, and immediately after dropped several survey forms. The greatest helping behavior was received when the female C touched male and female Ss on the upper arm, with almost all males helping when touched on this area. However, the male C received about the same level of help regardless of where he touched the Ss, or if he did not touch them. The female C received greater help than the male C, and more help from male Ss than female Ss.

A. INTRODUCTION

Researchers have begun to recognize the important part that touch plays in human relationships. The early literature examining touch was mainly descriptive, but more recently studies have treated touch as an independent variable which affects many aspects of social behavior. Agulera (1) has shown that touch behavior by nurses will increase psychiatric patients' verbalizations and improve their attitude towards the nurses; Pattison (10) found that touching clients helps to precipitate self-disclosure in counseling sessions; Fisher, Rytting, and Heslin (2) reported that female students who were "accidentally" touched by library clerks when their library cards were being returned gave higher ratings to the clerks and the library; and both Kleinke (6) and Willis and Hamm (11) have obtained evidence that touch

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would lead to higher levels of compliance, the latter study showing that touch was particularly important in obtaining same gender compliance.

Assuming that touch increased feelings of intimacy and that one would be more apt to help another person if one felt closer to him, Goldman and Fordyce (3) reasoned that a *C* touching a target person would be more likely to receive help from that individual. They demonstrated that touch interacted with eye contact and influenced prosocial behavior.

The studies examining the effects of touch generally employ two conditions, a touch condition and a nontouch control condition. The area of the body on which the *Ss* were touched was usually the arm (6, 11), although the shoulder has been used (3), as well as the hand (2). Jourard (5) has reported that different body regions receive highly variable amounts of touch; and Nguyen, Heslin, and Nguyen (9) have found that the location of the touch induced different meanings for the *Ss*. However the effects resulting from being touched on different locations of the body appear not to have been systematically investigated. The current study attempted to show the importance of this factor by examining the level of prosocial behavior resulting from *Ss* being touched on different locations of their bodies (shoulder, upper arm, lower arm, and hand). In addition, since it has been shown that males and females give distinct meaning and tend to respond in dissimilar ways when touched by either males or females (4, 5, 8), the present study utilized male and female *Ss* who were touched by male and female *Cs*.

B. METHOD

1. *Subjects*

One hundred female and 100 male shoppers walking alone at three suburban shopping malls in the Kansas City area served as *Ss*. Since the helping behavior involved bending down to pick up items, individuals who would have difficulty helping (physically handicapped or shoppers carrying packages) were not approached.

2. *Experimental Design*

Two levels of sex for the *C* (male and female), two levels of sex for the *Ss* (male and female), and five levels of touch (shoulder, upper arm, lower arm, hand, and no touch control) were manipulated using a $2 \times 2 \times 5$ between *S* factorial design.

3. Procedure

The male and female *C*s, young adults who were casually and neatly dressed, each approached 50 male and 50 female shoppers. The *C* identified himself or herself as being with the Library Guild of Kansas City (a fictitious organization) and then asked four questions about literary issues. After receiving the response to the last question, the *C* thanked the *S* for his or her cooperation and instituted one of the five experimental touch conditions. Each *C* completed one rotation of the five touch conditions with male and female *S*s before the next rotation was begun. The touch conditions were carried out in a randomized order within each rotation.

4. Dependent Measure

Immediately after instigating the touch variable, the *C* "accidentally" dropped 10 of the survey forms which he or she had been holding beneath a clip board. The dependent variable measure was whether the *S*s helped retrieve the fallen survey forms.

C. RESULTS

*S*s who helped the *C*s pick up the dropped survey forms were assigned a score of 1 and *S*s who did not help were assigned a score of 0. Mean helping scores of .28, .45, .35, .28, and .28 were obtained for the touch conditions, shoulder, upper arm, lower arm, hand, and control (no touch), respectively; mean scores of .49 and .16 were obtained for the female *C* and male *C* conditions; and mean scores of .28 and .38 were obtained for the female *S* and male *S* conditions. Analysis of variance procedures have been shown to be appropriate for dichotomized data when the degrees of freedom are sufficiently large ($df > 20$) (7), a condition here satisfied. Significantly greater help was obtained in the female *C* condition than the male *C* condition, $F(1, 180) = 30.30, p < .0001$; the interaction for the touch conditions and sex of the *C*s was significant, $F(4, 180) = 3.52, p < .01$; and the interaction for the sex of the *C* and sex of the *S* was significant, $F(1, 180) = 4.71, p < .05$. All other differences and interactions examined by the analysis of variance test were nonsignificant.

The significant interaction for the touch conditions and sex of the *C*s was due to the differential helping behavior when the female *C* touched *S*s on different areas of the body in comparison to the helping behavior that occurred when the male *C* touched *S*s on different areas. For the male *C* helping behavior was similar regardless of the area of the body of the *S*s

that he touched; mean helping behavior ranged from .0 to .25 across the areas of the body that were touched, $F(4, 180) = 1.33, p > .25$. However for the female *C*, helping behavior differed significantly depending on where she touched the *Ss*, $F(4, 180) = 3.56, p < .01$. The greatest help was given to the female *C* when she touched the *Ss* on the lower arm ($M = .70$) and on the upper arm ($M = .65$).

The significant interaction for the sex of the *Cs* and sex of the *Ss* was due to the differential helping behavior given to the female *C* by the male and female *Ss* in comparison to helping behavior given to the male *C* by the male and female *Ss*. The male *C* received approximately the same help from the male *Ss* ($M = .14$) and the female *Ss* ($M = .18$). However, while the female *C*, overall, received greater help than the male *C*, she received more help from the male *Ss* ($M = .60$) than the female *Ss* ($M = .38$), $p < .01$.

Additional analysis showed that, in general, most help was obtained when the *Ss* were touched on the upper arm ($M = .45$) and lower arm ($M = .35$), but only the touch on the upper arm was significantly greater than the control no touch condition ($M = .28$), $p < .05$. The highest level of help was given to the female *C* when she touched male *Ss* on the upper arm ($M = .90$) and on the lower arm ($M = .80$).

D. DISCUSSION

The main finding of the study was that a female touching individuals on different locations of the body obtained dissimilar helping responses. In contrast a male obtained similar help from individuals regardless of what areas of their bodies he touched. In fact, for the male little variation in help occurred whether the *Ss* were, or were not, touched.

In general, the highest level of helping behavior was obtained when the *Ss* were touched on the arm, with somewhat more help being given when *Ss* were touched on the upper arm than the lower arm. Almost all the male *Ss* helped (90 percent) when they were touched by the female on the upper arm. The results indicate that researchers utilizing touch as an independent variable would be wise to control for the sex of the *Ss* being touched and the sex of the *C* who was doing the touching, as well as the part of the body that is to be touched. To the extent that the findings presented here can be generalized, less than optimum results would be procured if *Ss* were, or were not, touched by a male *C*, or were touched by a female *C* on either the hand or the shoulder.

The study also found that the female C received greater help than the male C, and more help from male Ss than female Ss.

It has been observed that touching behavior varies in different countries, as well as among different cultural groups within one country (5). The present study was conducted in an American midwestern shopping area. The cultural background of the shoppers used in the study was not readily obtainable. In general, they appeared to be middle class and were predominantly white.

Only acceptable innocuous parts of the body were touched by the Cs. A patronizing touch on the head was not used and the touching of more private parts of the body was not explored, for obvious reasons. Also it should be noted that the touching by the Cs was intentional, not accidental, occurring in nonintimate circumstances, and would probably be seen by the Ss as falling within proper norms of behavior.

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