

# Personality and Social Psychology Bulletin

<http://psp.sagepub.com/>

---

## The Midas Touch : The Effects of Interpersonal Touch on Restaurant Tipping

April H. Crusco and Christopher G. Wetzel  
*Pers Soc Psychol Bull* 1984 10: 512  
DOI: 10.1177/0146167284104003

The online version of this article can be found at:  
<http://psp.sagepub.com/content/10/4/512>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



Society for Personality and Social Psychology

Additional services and information for *Personality and Social Psychology Bulletin* can be found at:

**Email Alerts:** <http://psp.sagepub.com/cgi/alerts>

**Subscriptions:** <http://psp.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://psp.sagepub.com/content/10/4/512.refs.html>

# **The Midas Touch:**

## **The Effects of Interpersonal Touch on Restaurant Tipping**

April H. Crusco

*University of Mississippi*

Christopher G. Wetzel

*Rhodes College*

*The present study examined the effects of two types of touch in a controlled but natural setting, a restaurant. Waitresses briefly touched customers either on the hand or the shoulder as they were returning change. Customers' reactions were assessed by a restaurant survey and a novel behavioral measure, the tip expressed as a percentage of the bill. The tipping rate for the two types of touch did not differ from each other and did not differ according to the customer's gender. Both tipping rates were significantly larger than a control, no-touch condition. There were no touch effects on ratings of the waitress, the restaurant's atmosphere, or the dining experience. It was concluded that touch effects can occur without awareness, and that males will not react more negatively to touch than females when the touch is unobtrusive or free of status and dependency connotations.*

Interpersonal touch is a form of nonverbal behavior in which meaning is derived from a myriad of environmental and personal cues. Touch as a source of information feedback can be decoded as an expression of affiliation, love, or sexual interest; it can signal dominance or aggression; and it can guide the recipient's attention as part of a greeting/parting process (Knapp, 1978).

Touch research has frequently demonstrated positive effects from the innocuous touch of another. Tactile contact has increased positive affect or liking ratings of another (Alagna, Whitcher and Fisher, 1979; Fisher, Rytting and Heslin, 1976; Florez and Goldman, 1982; Hubble, Noble and Robinson, 1981; Jourard and Friedman, 1970; Silverthorne, Noreen, Hunt and Rota, 1972; Whitcher and Fisher, 1979); it has influenced the purchasing behavior of shoppers (Smith, Gier and Willis, 1982); and it has increased compliance to legitimate requests (Kleinke, 1977).

Research has also revealed sex differences in touch interactions and reactions to touch. Females are touched more than males; males touch females twice as

---

**AUTHORS' NOTE:** We would like to thank Nancy Fleming and Jennifer Dunlap for serving as waitress/confederates and Mike Seligman and Allen LeBlanc for letting us conduct the research in their restaurants. Thanks are also due to Dave Hansen, Bill

*Personality and Social Psychology Bulletin*, Vol. 10 No. 4, December 1984 512-517

© 1984 by the Society for Personality and Social Psychology, Inc.

much as females touch males; and males generally respond less positively to being touched than do females (Fisher et al., 1976; Goldberg and Lewis, 1969; Henley, 1973; Sussman and Rosenfeld, 1978; Cowen, Weissberg and Lotyczewski, 1983; Whitcher and Fisher, 1979). Touching generally flows from a high status toucher to a lower status touchee, and being touched can signify inferiority or dependency. Sex effects have thus been interpreted as males' expression of dominance over females (Henley, 1973). For example, Whitcher and Fisher (1979) examined whether therapeutic touch could reduce patient anxiety. Nurses, during the course of a routine preoperative instruction, touched some of their patients on the arm for one minute while they examined a pamphlet with them. Females who were touched reacted more favorably than did control patients on affective, behavioral, and physiological (blood pressure) measures, whereas touched males reacted more negatively than controls. Whitcher and Fisher hypothesized that the nurse-patient relationship led males to interpret the touch as conveying a message of relative inferiority and dependency.

The purpose of this study was to determine the effects of touch in a previously unexamined, nonreactive, natural setting where experimental control could be exercised. Diners in a restaurant were administered one of two types of touch by a waitress just before the diners left their tips. A brief touch on the hand was expected to produce positive affect towards the waitress for both male and female customers and hence increase the amount of tip. However, a touch on the shoulder, often used as sign of dominance by high status individuals, might not be viewed as positively, especially by males. Servants, after all, are not expected to dominate their employers. Hence, the shoulder touch condition may reduce tipping compared to the hand touch condition, and more so for male than for female customers.

## METHOD

### Subject Selection

Subjects were 114 diners, 79 males and 35 females, from two restaurants. Any customer who was a friend of the waitress/confederate was eliminated. Teen-aged males and college-aged females dining in groups greater than two were not selected as subjects because they generally do not tip. Approximately 25% of the participants were excluded because they either tipped before the touch manipulation was executed, or because the tip left on the table could not be definitely linked to them.

---

Kulick, and Marsha Walton for their advice and assistance in data and manuscript preparation. Manuscript preparation was partially supported by an Andrew W. Mellon Faculty Development grant to the second author. Reprint requests should be addressed to Chris Wetzel, Rhodes College, 2000 N. Parkway, Memphis, TN, 38112.

## Procedure and Setting

A majority of the data (79 subjects) was collected in one restaurant by one waitress who was blind to the experimental hypotheses. A second waitress collected data on an additional 17 diners. A third waitress collected 18 observations in a second restaurant. All three waitresses were in their early to mid-twenties. Both restaurants were located in a small college community; they served lunch, dinner and cocktails; and they were frequented by business people, college students, and permanent residents of Oxford, Mississippi. A large majority of the participants were college students.

In both restaurants, the waitress was responsible for collecting the bill, and she randomly assigned diners to the experimental condition after she had collected the customer's money but before she returned with change. The touch manipulation was carried out during the change-returning transaction. Thus the waitress was blind to the touch manipulation when she was serving her customer. After returning change, the waitress asked the subjects to fill out a restaurant survey, seal it in an envelope, and leave it on the table.

## Touch Manipulation

Participants were randomly assigned to one of three levels of touch. In the Fleeting Touch condition, the waitress twice touched the diner's palm with her fingers for one-half second as she returned the diner's change. In the Shoulder Touch condition, she placed her hand on the diner's shoulder for one to one and one-half seconds. In the No Touch condition, there was no physical contact with the customer. The waitresses were carefully trained to behave consistently during the change-returning transaction. The waitress approached the customers from their sides or from slightly behind them, made contact but did not smile as they spoke "Here's your change" in a friendly but firm tone, bent their bodies at an approximately 10 degree angle as they returned the change, and did not make eye contact during the touch manipulation.

## Dependent Variables

The percentage of bill gratuity (tip%) left for the waitress served as a behavioral measure of the diners' reactions to being touched; a restaurant attitude survey assessed the diner's affective reactions. The survey consisted of nine, seven-point semantic differentials that assessed the goodness, pleasantness and comfortableness of the dining experience, the helpfulness, friendliness, and quality of the waitressing, and the positivity, attractiveness, and comfortable-ness of the restaurant's atmosphere. Because all nine items intercorrelated .50 or higher (with many in the .90's), they were summed to form a single attitudinal measure.

## RESULTS

An initial three factorial ANOVA (Sex of subject by Touch by Waitress) yielded no interactions involving the waitress identity, so the data were collapsed

across waitresses to yield a  $2 (\text{Sex}) \times 3 (\text{Touch})$  ANOVA. In addition, analyses conducted on only the data collected by the blind waitress yielded the same pattern of results as did the data collapsed across waitresses.

Because variables such as weather, number of people in the dining party, day of week, and amount of alcohol consumption could have or have been shown to influence altruism or tipping (Cunningham, 1979, Freedman, Walker, Borden, and Latane, 1975), these variables were assessed and initially employed as covariates. Weather was classified as being either sunny, cloudy or rainy; day of the week was coded as one for Monday and seven for Sunday, and alcohol consumption was measured as the percentage of the bill that was due to cocktails. Tipping was significantly higher the more sunny it was,  $F(1, 107) = 4.20, p < .04$ ; the later in the week it was,  $F(1, 107) = 5.66, p < .01$ ; and the more people there were in the dining party,  $F(1, 107) = 6.77, p < .01$ .<sup>1</sup> Because including these three variables as covariates did not appreciably alter the significance levels or the statistical decisions associated with the analyses, the results presented below are from a simple  $2 \times 3$  ANOVA. For the ANOVA analysis, the Touch factor was partitioned into two orthogonal, preplanned contrasts that compared the two touch conditions to each other and the two touch conditions to the No Touch condition.

The analysis of the tip% yielded a significant Touch main effect,  $F(2, 108) = 3.45, p < .04$ ; a significant Sex main effect,  $F(1, 108) = 3.93, p < .05$ ; and no interaction ( $F < 1$ ). Contrasts indicated that the Shoulder Touch condition ( $M = 14.4$ ) did not significantly reduce tipping compared to the Fleeting Touch condition ( $M = 16.7$ ), ( $p < .12$ ), but both types of touch did increase tipping compared to the No Touch condition ( $M = 12.2$ ),  $F(1, 108) = 4.25, p < .04$ . The Sex main effect indicated that males ( $M = 15.3$ ) tipped more than did females ( $M = 12.6$ ).

The analysis of the restaurant survey sum yielded only a significant sex main effect,  $F(1, 108) = 12.24, p < .001$ , and indicated that males made more positive ratings than did females. The survey sum did not correlate significantly with tip% (within cells  $r = .13$ ).

## DISCUSSION

This study employed a novel behavioral measure (tip%) to assess the effects of two types of touch in a field setting, something not previously done in the literature. We found that males did not significantly differ from females in their reactions to both types of touches, and in fact showed a tendency to be less negatively influenced by the shoulder touch than did females. (As all the touchers were female, any sex differences would have been difficult to interpret). Our failure to find males reacting more negatively to being touched than did the females may have occurred because male diners felt secure enough about their role and status that they benevolently viewed the waitress' innocuous touch as playful endearment or affiliation. Males' status may have been secure because (1) in a restaurant there are few contextual cues present that signal lowered

status or dependency, or (2) the waitress-diner relationship may have the status lines clearly drawn. Whether similar results would occur with male waiters needs to be addressed by future research.

Although there was a trend in that direction, the shoulder touch did not significantly decrease tipping compared to the hand touch. It may be that the shoulder touch, preceded as it was in this experiment by a notification that change was coming, was justified and unambiguous; both factors have been shown to facilitate positive reactions to touch (Kleinke, 1977; Sussman and Rosenfeld, 1978).

Our failure to find touch effects on the restaurant attitude survey is not terribly disturbing given that other researchers have frequently obtained significant behavioral effects without obtaining significant effects on cognitive, evaluative, or self-report ratings (Pattison, 1973; Smith et al., 1982; Whitcher and Fisher, 1979). Pattison's hypothesis, that survey and self-report data are unreliable, seems unlikely because we obtained a much larger sex main effect on our survey than on the tip%. Thus the survey was sensitive enough to detect sex differences and apparently was more sensitive than our behavioral measure. A second explanation, that innocuous touches like ours have short-term effects, seems unlikely given the contiguity of the tipping and the survey. Most customers filled out the survey immediately after leaving the tip, and a few may have completed the survey before placing their tip. A third possibility is that the customers were unaware of the touch or, even if aware, it did not affect their conscious, verbal explanatory system (Nisbett and Wilson, 1977; Wilson, 1983). Although the unobtrusive nature of our experiment precluded our asking our subjects if they were aware of being touched by the waitress, Fisher et al. (1976) and Silverthorne et al. (1972) have found that many of their subjects were unaware that they had been touched. Thus brief, fleeting, unobtrusive touches like ours may have subliminal effects.

#### NOTE

1. The latter finding is inconsistent with Freeman et al.'s (1975) study, which demonstrated that tip% declined with diner party size. Given the myriad possible differences between their field setting and ours (for example they used waiters and we waitresses), no convincing explanation for the discrepancy can be offered.

#### REFERENCES

- Alagna, F. J., Whitcher, S. J., & Fisher, J. D. (1979). Evaluative reaction to interpersonal touch in a counseling interview. *Journal of Counseling Psychology*, 26, 465-472.
- Cowen, E. L., Weissberg, R. P., & Lotyczewski, B. S. (1983). Physical contacts in interactions between clinicians and young children. *Journal of Consulting and Clinical Psychology*, 51, 132-138.
- Cunningham, M. R. (1979). Weather, mood, and helping behavior: Quasiexperiments with the Sunshine Samaritan. *Journal of Personality and Social Psychology*, 37, 1947-1956.

- Fisher, J. D., Rytting, M., & Heslin, R. (1976). Hands touching hands: Affective and evaluative effects of an interpersonal touch. *Sociometry*, 39, 416-421.
- Florez, C. A., & Goldman, M. (1982). Evaluation of interpersonal touch by the sighted and blind. *Journal of Social Psychology*, 116, 229-234.
- Freeman, S., Walker, M. R., Borden, R., & Latane, B. (1975). Diffusion of responsibility and restaurant tipping: Cheaper by the bunch. *Personality and Social Psychology Bulletin*, 1, 584-587.
- Goldberg, S., & Lewis, M. (1969). Play behavior in the year-old infant: Early sex differences. *Child Development*, 40, 21-31.
- Henley, N. M. (1973). The politics of touch. In P. Brown (Ed.), *Radical Psychology*. New York: Harper & Row.
- Hubble, M. A., Noble, F. C., & Robinson, E. F. (1981). The effect of counselor touch in an initial counseling session. *Journal of Counseling Psychology*, 28, 533-535.
- Jourard, S. M., & Friedman, R. (1970). Experimenter-subject distance and self-disclosure. *Journal of Personality and Social Psychology* 15(3), 278-282.
- Kleinke, C. L. (1977). Compliance to requests made by gazing and touching experimenters in field settings. *Journal of Experimental Social Psychology*, 13, 218-223.
- Knapp, M. L. (1978). *Nonverbal communication in human interaction* (2nd ed.). New York: Holt, Rinehart & Winston.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.
- Pattison, J. E., (1973). Effects of touch on self-exploration and the therapeutic relationship. *Journal of Consulting and Clinical Psychology*; 40(2), 170-175.
- Silverthorne, C., Noreen, C., Hunt, T., & Rota, L. (1972). The effects of tactile stimulation on visual experience. *Journal of Social Psychology*, 88, 153-154.
- Smith, D. E., Gier, J. A., & Willis, F. N. (1982). Interpersonal touch and compliance with a marketing request. *Basic and Applied Social Psychology*, 3(1), 35-38.
- Sussman, N. M., & Rosenfeld, H. M. (1978). Touch, justification and sex: Influences on the aversiveness of spatial violations. *Journal of Social Psychology*, 106, 215-225.
- Whitcher, S. J., & Fisher, J. D. (1979). Multidimensional reaction to therapeutic touch in a hospital setting. *Journal of Personality and Social Psychology*, 37, 87-96.
- Wilson, T. D. (1983). Strangers to ourselves: The origins and accuracy of beliefs about one's own mental states. Unpublished manuscript, University of Virginia.

April Crusco is a doctoral candidate in clinical psychology at the University of Mississippi. She is currently Research Associate in the Department of Psychiatry, at the University of Mississippi Medical School. Her research interests are in nonverbal communication and bulimia.

Chris Wetzel is Assistant Professor of Psychology at Rhodes College. His research interests are in social cognition and decision making.