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Abstract
The effect of server posture (standing vs. squatting) on the size of tip left by restaurant customers was examined in two naturalistic experiments. In these studies, squatting down next to the tables increased servers' tips from those tables. Both the practical implications of this effect and its similarity to other nonverbal effects on tipping are discussed.

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Effect of Server Posture on Restaurant Tipping

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The effect of server posture (standing vs. squatting) on the size of tip left by restaurant customers was examined in two naturalistic experiments. In these studies, squatting down next to the tables increased servers' tips from those tables. Both the practical implications of this effect and its similarity to other nonverbal effects on tipping are discussed.

Restaurant tipping is a widespread form of social behavior with enormous economic implications for tip recipients. There are approximately 1.3 million waiters and waitresses in the United States (Statistical Abstracts, 1990) and these servers rely on tips as a major source of income (Schmidt, 1985). Knowledge about the factors that influence the size of consumers' tips would help these people develop more effective and efficient ways of increasing that income.

Social psychologists can and have contributed to such knowledge. Social psychological research has found that people tip more the larger their bills (Freeman, Walker, Borden, & Latane, 1975; Lynn, 1988; Lynn & Latane, 1984) and the more favorably they evaluate the service they receive (Lynn & Grassman, 1990). This suggests that servers can increase their incomes by selling more food and drink and by providing more attentive, courteous, and speedy service.

In addition to these general strategic suggestions, social psychological research suggests several specific tactical actions servers can take to increase their tip incomes. Experimental studies have found that waitresses receive larger tips when they: a) introduce themselves by name (Garrity & Degelman, 1990); b) give customers large smiles (Tidd & Lockard, 1978); c) touch customers on the hand or shoulder (Crusco & Wetzel, 1984; Stephen & Zweigenhaft, 1986); and d) wear flowers in their hair
These research findings are of particular value to servers because they involve nonobvious, concrete, and easy-to-implement ways of increasing tips.

The present paper examines the effectiveness of another tactic servers may employ to increase their tips. Specifically, it tests the effects on tipping of server posture during initial contact with the customer. Servers typically stand up when waiting on tables. However, occasionally some servers will squat down next to a table when interacting with customers at that table. Squatting down next to a table increases the congruence between the server’s and customers’ postures, brings the server’s eye level down to the customers’ eye levels (which facilitates eye contact), and brings the server’s face closer to the customers’ faces. Research on nonverbal communication has found that postural congruence, more eye contact, and greater proximity are associated with rapport and liking (Argyle, 1988; Bull, 1987; LaFrance & May, 1981). Furthermore, research on tipping has found that consumers tip friendly servers more than less friendly servers (Adelman, 1985; Lynn & Grassman, 1990). Thus, it seems likely that squatting down will increase a server’s tips because it makes the server seem friendlier.

**Study 1:**

**Method**

A Caucasian waiter at a Mexican restaurant in Houston, Texas, collected data about 270 of his customers (tables) from March 7 to April 27, 1991. When a customer was seated at his station, the waiter flipped a coin to randomly determine whether he would squat down or stand during his initial interaction with that customer. The waiter’s initial approach to tables generally involved welcoming the guest, suggesting and taking drink orders, giving a concise description of the daily specials, and telling the guest his name. The only time the experimenter would squat down (in the experimental condition) was during this initial visit to the table. Every effort was made to treat the customers similarly in all
other aspects of their dining experience. Each customer’s experimental condition, bill size, and tip amount was recorded for later analysis.

**Results**

**Effects of Server Posture**

The effects of server posture on bill size and tipping were assessed with t tests. Server posture did not affect bill size ($t(268) = .80$, n.s.), but it did affect tipping. The waiter received an average tip of $5.18$ when he remained standing throughout the service encounter and received an average tip of $6.40$ when he squatted down during his first visit to the table ($t(268) = 3.10, p < .003$). This posture effect on tipping was even more significant when tipping was measured as bill-adjusted, residual tip amounts ($M = -.49$ vs. $-.43$, $t(268) = 7.52, < .0001$) and when tips were measured as a percentage of bill size ($M = 14.9\%$ vs. $17.5\%$, $t(268) = 7.41, p < .0001$). Thus, squatting down during the initial visit to a table had a positive effect on several different measures of tipping.

**Interaction with Bill Size**

The interaction of server posture with bill size was assessed in a hierarchical regression of tip amount on bill size, server posture, and their product. This analysis produced a significant posture by bill-size interaction ($F(1, 266) = 19.07, p < .0001$). When the server remained standing during the service encounter, the least-squares equation predicting tip amount from bill size was: $\text{tip} = .38 + .13 \times \text{bill}$ ($R^2 = .92$). When the server squatted down, this equation was: $\text{tip} = .37 + .16 \times \text{bill}$ ($R^2 = .90$). Thus, squatting down increased tips more the larger the customer’s bill size.

**Discussion**

The waiter in Study 1 received larger tips when he squatted down during his initial visit to a table than when he remained standing during this visit. This finding demonstrates that squatting down can increase a server’s income. However, there are at least three limitations to this finding. First, the
server in this study believed that squatting down would increase his tip income. Although the server tried to treat the customers in different conditions similarly, it is possible that his expectations caused him to unconsciously favor customers in the experimental condition resulting in a self-fulfilling prophecy (Rosenthal, 1976). Second, the server recorded no additional information about his customers. Thus, it is was not possible to determine if squatting down interacts with other variables such as patronage frequency, group size, or payment method. Finally, only one server at one restaurant was employed in this study. This raises questions about whether the results of the study generalize to other servers and restaurants.

Study 2:

A second study was conducted to address the limitations of Study 1’s results. This second study differed from the first in several ways. First, the server in this study was told that squatting down could have positive, negative, or mixed effects on tipping. In a post-study interview, this server said she doubted that squatting down affected her tips, so the pre-study information she was given appeared to be successful at preventing any experimenter expectations. Second, the server in this study collected additional information about her customers so that potential interactions with server posture could be examined. Finally, the server in this study was an Asian female working at a Chinese restaurant as compared to the Caucasian male working at a Mexican restaurant in Study I. Thus, it was possible to assess the generalizability of the server-posture effect across two very different servers and restaurants.

Method

Source of Data

An Asian-American waitress at a small family-owned Chinese restaurant in Houston, Texas, collected data about all of her customers (tables) during dinner shifts for a 2-week period between July
3 and July 20, 1992. Customers who dined at the restaurant two or more times during this period were included in the study only once. A total of 148 observations were obtained for analysis.

Procedure

As customers entered the restaurant, they were greeted by a hostess who seated them at a table and gave them menus. When the server conducting this study was assigned a table, she flipped a coin to randomly determine whether she would stand or squat during her initial visit to the table. When visiting a table for the first time, the waitress would greet her customers, introduce herself by name, ask how the customers were doing, and take the customers’ drink orders. These tasks were performed either in a standing or squatting position depending on the outcome of the coin toss. From that point on, the service encounter proceeded normally with the server maintaining a standing position. The server recorded information about each of her customers after they left the restaurant.

Variables

The following variables were recorded for each dining party the waitress served.

- **Date:** The date of each data collection was recorded and used to classify the relevant service encounters as weekday or weekend encounters.

- **Posture:** The outcome of the coin toss used to assign customers to the experimental and control conditions was recorded.

- **Patronage frequency:** The customers were categorized as either regular or nonregular patrons of the restaurant.

- **Sex of patron:** The sex of the customer who paid the bill was recorded. This variable was dropped from analysis because only 10 women were observed paying the bill.

- **Dining party size:** The number of people (excluding infants and small children) in the dining party was recorded.

- **Service:** The waitress rated her own service as below average, average, or above average. This variable was also dropped from analysis because only eight dining parties were recorded as receiving nonaverage service.
• **Payment method:** The method used to pay the tip was recorded as cash or credit.

• **Bill:** The bill size from each table was recorded.

• **Tip:** The tip amount left by each table was recorded.

**Results**

**Effects of Server Posture**

The effects of server posture on bill size and tipping were assessed with t tests. Server posture did not affect bill size ($t(146) = .46, n.s.$) but it did affect tipping. The waitress received an average tip of $2.56 when she remained standing throughout the service encounter and received an average tip of $3.28 when she squatted down during her first visit to a table ($t(146) = 2.85, p < .005$). This posture effect on tipping was even more significant when tipping was measured as bill-adjusted, residual tip amounts ($M = -.29$ vs. $.33$, $t(146) = 4.71, < .0001$) and when tips were measured as a percentage of bill size ($M= 12\%$ vs. $15\%$, $t(146) = 4.81, p < .0001$). Thus, squatting down during the initial visit to a table had a positive effect on several different measures of tipping.

**Interactions With Other Variables**

The interactions of server posture with bill size, group size, patronage frequency, payment method and weekday versus weekend were assessed in separate multiple regression analyses using tip amount as the dependent measure. The analyses involving group size, patronage frequency, payment method, and weekday versus weekend also used bill size as a covariate. These analyses produced a significant interaction between server posture and weekday versus weekend ($F(1, 143) = 5.65, p < .02$); the posture manipulation had a larger effect on weekdays ($x = .45$ vs. $-.47$, $F(1, 74) = 24.62, p < .0001$) than on weekends ($x = .15$ vs. $-.11$, $F(1, 68) = 2.43, < .13$). None of the other interactions were significant (all Fs < 1.00). These analyses also produced significant main effects for bill size ($F(1, 144) =$
386.83, < .0001) and payment method (F(1, 143) = 20.57, < .0001); the restaurant’s patrons tipped more when their bills were larger and when they paid the tip with credit rather than cash. The main effects of group size, patronage frequency and weekday versus weekend were not significant (all Fs < 1.02).

Discussion

The waitress in this study received larger tips when she squatted down during her initial visit to a table than when she remained standing. This result replicates the server posture effect observed in Study 1 and demonstrates that the effect is generalizable across different servers and restaurants. Moreover, this replication rules out self-fulfilling prophecies as an explanation for the server posture effect because the waitress in this study did not believe that the posture manipulation had any effect on tipping.

This study produced a significant interaction between server posture and weekend versus weekday service encounter. Squatting down had a larger effect when it occurred on a weekday than when it occurred on a weekend. It is not clear why this interaction was obtained. Perhaps restaurant customers are more interested in the friendliness of servers on weekdays than they are on weekends.

In Study 1, squatting down next to a table increased tips more the larger the table’s bill size. This server posture by bill size interaction was not observed in Study 2. However, bill size varied much less in Study 2 than in Study 1 (SD= 11.20 vs. 20.51; F(269, 147) = 3.35, < .001), so the failure to replicate this interaction may be due to a restriction of variance in bill size.

General Discussion

The results of Studies 1 and 2 indicate that restaurant patrons leave larger tips when their servers squat down next to the table than when their servers maintain an erect posture throughout the service encounter. This effect generalizes across different servers and restaurants, though it appears to
be stronger on weekdays and for tables with larger bills. These findings are of value to the 1.3 million waiters and waitresses in the country because they suggest a nonobvious, concrete, and easy to implement way these servers can increase their tip incomes.

Studies 1 and 2 demonstrate that server posture has a causal effect on tip size, but they do not indicate what psychological processes underlie this effect. Having a server squat down may physiologically arouse customers and this arousal may facilitate tipping. Alternatively, having a server squat down may elevate customers' moods and this positive affect may increase tipping. However, a more plausible possibility is that servers seem friendlier when they squat down and this enhanced friendliness leads customers to tip the server more. This latter explanation is the more plausible because squatting down increases the postural congruence between server and customer, facilitates eye contact between server and customer, and brings the server's face closer to that of the customer. Research has found that postural congruence, more eye contact, and greater proximity are all associated with rapport and liking (Argyle, 1988; Bull, 1987; LaFrance & May, 1981) and that consumers tip friendly servers more than less friendly servers (Adelman, 1985; Lynn & Grassman, 1990).

The perceived friendliness explanation for the server posture effect on tipping also provides a parsimonious explanation for previous findings that servers receive larger tips when they touch their customers (Crusco & Wetzel, 1984; Stephen & Zweigenhaft, 1986) and give their customers large smiles (Tidd & Lockard, 1978). Squatting down, touching and smiling all nonverbally communicate liking and rapport (Argyle, 1988; Bull, 1987; LaFrance & May, 1981) and all increase tipping. Thus, these studies may be viewed as conceptual replications of one another. Together, they provide persuasive evidence

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1 One reviewer suggested that the unusualness of squatting down may have made the servers feel uncomfortable. This discomfort may then have led the servers to compensate unintentionally for their unusual posture by providing better services. According to the reviewer, this compensatory service may mediate the server posture effect on tipping. If this explanation is correct, then the server posture effect should have been stronger for the waitress in Study 2 than for the waiter in Study 1 because the waitress had less prior experience with squatting down at tables than did the waiter. Contrary to this hypothesis, squatting down did not have a bigger effect on bill adjusted tip income for the waitress ($r = .36$) than for the waiter ($r = .42$). Also, inconsistent with this explanation is the fact that squatting down did not lose effectiveness for the waitress over time as she became more used to squatting down (posture by date interaction $F(1, 143) = .03$ n.s.).
that tipping is affected by nonverbal cues that the server likes and feels close to his or her customers. Other researchers may want to test directly the mediating role of perceived friendliness in producing these nonverbal behavior effects on tipping, but the existing evidence is compelling enough to recommend that servers learn the nonverbal cues to liking and then direct these cues at their customers. Doing this should increase servers’ tip incomes.

References


