



## Do people with food service experience tip better?

Matt Parrett\*

*Economics Department, Bridgewater State University, Hunt Hall Room 113, Bridgewater, MA 02325, United States*

### ARTICLE INFO

#### Article history:

Received 18 October 2009

Received in revised form 19 August 2010

Accepted 5 September 2010

#### JEL classification:

L83

Z13

#### Keywords:

Tip

Food service experience

Interpersonal connection

Interpersonal similarity

### ABSTRACT

To the extent servers can establish an interpersonal connection with the customer, they can earn higher tips. One source of interpersonal connection between the server and the customer is interpersonal similarity, in the form of food service experience. Research by social scientists, combined with casual empiricism, suggests that customers with food service experience tip better than customers without food service experience. Using survey data collected outside of five Richmond, Virginia restaurants, we test this. Our findings, which are robust across a variety of empirical specifications, indicate that the former tip between 4 and 5% more than the latter.

© 2010 Elsevier Inc. All rights reserved.

### 1. Introduction

Restaurant tipping is a significant part of the U.S. economy. For example, in 2008, sales at full-service restaurants totaled approximately \$181 billion (U.S. Census Bureau, 2009). Assuming a tipping norm of between 15 and 20%, America's waiters and waitresses brought home anywhere from \$27 billion to \$36 billion in tip income in 2008.

Restaurant tipping is also puzzling, at least from the standpoint of neoclassical economic theory. Why do people voluntarily give money to their server *after* the service has been rendered? Future service considerations certainly play a role (Bodvarsson and Gibson, 1997; Lynn and McCall, 2000; Conlin et al., 2003) but, interestingly, consumers still leave their server a tip even when they plan never to visit the restaurant again (Kahneman et al., 1986).

The above suggests that social norms and other non-economic factors play a part. For example, Lynn and Grassman (1990) find that tips are used to buy social approval and equitable relationships. According to Bodvarsson and Gibson (1997), diners use rules of thumb (such as 15% or 20%) as starting points in determining how much to tip. Work by Parrett (2006) reveals that concerns about reciprocity and let down aversion drive tipping behavior, while Azar (2007a) suggests that social pressure and fairness considerations play a role. Azar (2007b), in a recent literature review, discusses a variety of other factors that affect tip, including service

quality, the size of the bill, service quantity, group size, food quality, and the degree of interpersonal connection between the server and the customer.

The focus of this paper is on the latter, which refers to actions (usually taken by the server) to establish an interpersonal connection between themselves and the customer. Examples include touching the customer (Crusco and Wetzel, 1984; Stephen and Zweigenhaft, 1986; Hornik, 1992; Lynn et al., 1998), squatting during the initial visit to the table (Lynn and Mynier, 1993; Davis et al., 1998), the server introducing himself or herself (Garry and Degelman, 1990), and the server writing "thank you" (Rind and Bordia, 1995) or a helpful message (Rind and Strohmetz, 1999), or drawing a picture (Gueguen and Legohérel, 2000), on the check. Such actions, according to Azar (2007b), cause customers to feel less comfortable tipping poorly and more willing to tip generously.

A form of interpersonal connection which might increase tips, but which has not been systematically addressed by the literature, is interpersonal similarity between the server and the customer. Interpersonal similarity affects interpersonal liking/rapport (Byrne, 1971), which in turn increases empathy and helping (Bartal, 1976). For example, recent experimental work by Chen and Li (2009) reveals that subjects participating in a series of two-person sequential move games are more altruistic towards ingroup (groups they identify with) than outgroup (groups they do not identify with) matches. An obvious source of interpersonal similarity between the server and the customer is if the customer has food service experience, support for which is provided by Gurnee and Baker (1938), who found that persons engaged in the same occupation have less social distance (more mental nearness) than either

\* Tel.: +1 781 864 5135; fax: +1 508 531 5410.

E-mail address: [mbparrett@gmail.com](mailto:mbparrett@gmail.com).

**Table 1**  
Description of restaurants surveyed.

Restaurant	Appetizers	Salads as meal	Sandwiches	Entrees	Type of rest.
R1	\$3.50–\$10.90	\$8.50–\$9.95	\$6.95–\$11.95	\$13.95–\$24.95	Amer./Seafood
R2	\$2.35–\$4.95	\$6.75–\$7.95	\$4.25–\$7.35	\$8.15–\$17.95	Italian/Amer.
R3	\$3.25–\$5.45	\$6.25–\$7.25	\$5.95–\$7.25	\$6.75–\$14.95	BBQ
R4	\$2.99–\$7.99	\$6.99–\$8.49	\$5.99–\$6.49	\$8.99–\$15.99	BBQ
R5	\$4.95–\$9.95	\$6.25–\$7.25	NA	\$7.95–\$16.95	Greek/Italian

citizens of the same country, members of the same race, members of the same nationality, persons having the same political convictions, people of the same economic level, individuals living in the same neighborhood, or persons associated with the same religious sect.

The above, combined with casual empiricism,<sup>1</sup> suggests that customers with food service experience tip better than customers without food service experience. We test this using survey data collected over two waves from five Richmond, Virginia restaurants. Respondents were asked a variety of questions about their dining experience, their server, and themselves, including whether or not they have ever been employed as a waiter or waitress. Our findings, which are robust across a variety of empirical specifications, indicate that experience matters – customers with food service experience tip between 4 and 5% more than customers without food service experience.

The layout of this paper is as follows. Section 2 describes the survey data, while Section 3 describes the empirical framework used. Section 4 presents the results of the analysis and Section 5 concludes.

## 2. Data

### 2.1. Survey procedure

We surveyed the tipping behavior of approximately 986 bill-paying customers in five restaurants, in two waves – Summer 2002 (the “2002 Survey”) and Summer 2003 (the “2003 Survey”). The 2002 Survey was administered on each of a Friday and Saturday evening, from 6 p.m. until roughly 10 p.m., at each restaurant. The 2003 Survey added Thursday as an additional survey day. Customers were approached post-meal, as they exited the restaurant, and the same two people, both the author and an assistant, administered all of the surveys through both waves. In the interest of obtaining more reliable responses, but at the cost of obtaining fewer completed and unambiguous surveys, survey respondents answered the survey privately (via clipboard, with pen attached) and, to further preserve the privacy of their responses, were asked to fold and place their completed survey in a box located away from the survey administrators. A description of the restaurants at which the surveys were conducted is provided in Table 1 and copies of the surveys used in each wave are provided in Appendices A and B, respectively.

There is a possibility of some sample selectivity bias and some errors in the data gathering process. For example, some customers were either unwilling to complete the survey or left the restaurant before we could ask them to complete a survey.<sup>2</sup> However, due to

the private nature of the data collection, it is unlikely that customers lied about anything on the survey.

### 2.2. Survey content

Question 5 on both surveys asked respondents how much money they tipped their server. Combining this with question 4, which on both surveys asked respondents about the size of their bill, percentage tip was computed. On average, respondents tipped their server 19% of the bill, which is consistent with recent survey work published in Conlin et al. (2003) and Lynn et al. (2008). We focus mostly on percentage tip here, because most customers think about tips in this way (Mills and Riehle, 1987).

Food service experience was measured via question 12 on the 2002 Survey and question 14 on the 2003 Survey. Customers were asked whether they have ever been employed as a waiter or waitress. Approximately 28% indicated they have food service experience.

The remaining questions on the two surveys measured additional server, customer, and dining experience characteristics, including service quality, server gender, payment method, customer gender, customer age, customer marital status, customer religiosity, customer income, the education level of the customer, the customer's belief about the tip norm, table size, number of checks, and dining frequency. In addition, the surveys contained a number of filters. On both surveys, part two of question 4 asked survey respondents whether they received help paying the bill and part two of question 5 asked respondents if they received help paying the tip. Question 6 on both surveys asked respondents if the tip was automatically added to their bill (automatic service charge). A “yes” response to any of these questions suggests that the customer's tip as recorded on the survey may or may not accurately reflect the customer's tipping behavior; thus, such observations were excluded.<sup>3</sup>

## 3. Methods

### 3.1. Empirical specification

The empirical specification used here is as follows:

$$T_i = \alpha_0 + \alpha_E E_i + \alpha_j R_{ij} + \alpha_D D_i + \alpha_Y Y_i + \alpha_m X_{im} + \varepsilon_i \quad (1)$$

where  $i$  indexes a particular server-customer tip transaction and  $T$  is percentage tip. A Cook–Weisberg test (Cook and Weisberg, 1983) revealed heteroskedasticity in the data ( $\chi^2 = 306.14$ ,  $p < 0.001$ ), so the natural log of the percentage tip is used. A follow-up test fails

<sup>1</sup> I am a former restaurant server and based on my own tipping behavior, on discussions with and observations of former servers, and on discussions with and observations of people without food service experience, people with food service experience are without question better tippers on average than those lacking food service experience.

<sup>2</sup> Survey response rates for Summer 2002 and Summer 2003, measured as the total number of surveys completed as a percentage of the total number of customers approached, were 84% and 80%, respectively.

<sup>3</sup> Some readers might object to the exclusion of observations in which the customer received help paying the bill as being overly stringent. Thus, as a robustness check, we also present our results including such observations. However, consider the following example. John and Joe go out to dinner together. John is a 20% tipper, while Joe doesn't tip at all. John and Joe each order the same thing. The total bill is \$20 (\$10 each), but Joe left his wallet at home and asks John to spot him, promising to pay John \$10 at a later date. Does John leave \$22, which makes him look like a 10% tipper, or does he leave \$24, which requires him to subsidize Joe, but makes him look like the 20% tipper that he is?

**Table 2**  
Description of variables.

Variable	Description
% tip	\$ tip as percentage of total bill amount
\$ tip	\$ amount of tip
Bill size	Total bill amount
Bill size squared	Total bill amount squared
Table size	Number of people at survey respondent's table
Table size squared	Number of people at survey respondent's table squared
# checks	Number of checks at survey respondent's table
Credit card	Dummy equal to 1 if survey respondent paid with credit or ATM card; 0 otherwise
Service quality	Survey respondent's rating of service quality on scale from 1 ("poor") to 7 ("excellent")
Male server	Dummy equal to 1 if server male; 0 otherwise
Male customer	Dummy equal to 1 if survey respondent male; 0 otherwise
Customer age	Age of survey respondent
Customer age squared	Age of survey respondent squared
Married customer	Dummy equal to 1 if survey respondent married; 0 otherwise
Religious customer	Dummy equal to 1 if survey respondent regularly attends religious services; 0 otherwise
Rich customer	Dummy equal to 1 if survey respondent reports income as \$52,000+; 0 otherwise
Educated customer	Dummy equal to 1 if survey respondent has a bachelor's or graduate/professional degree; 0 otherwise
Dining frequency	Survey respondent's rating of frequency with which he/she dines at the restaurant, on a scale from 1 ("least frequent") to 7 ("most frequent")
Food service experience	Dummy equal to 1 if survey respondent ever employed as server; 0 otherwise
Customer % tipnorm	Survey respondent's belief regarding percentage tip norm
Customer \$ tipnorm	(Customer % tipnorm) × (bill size)
R1	Dummy equal to 1 if restaurant surveyed was restaurant 1; 0 otherwise
R2	Dummy equal to 1 if restaurant surveyed was restaurant 2; 0 otherwise
R3	Dummy equal to 1 if restaurant surveyed was restaurant 3; 0 otherwise
R4	Dummy equal to 1 if restaurant surveyed was restaurant 4; 0 otherwise
R5	Dummy equal to 1 if restaurant surveyed was restaurant 5; 0 otherwise
Thursday	Dummy equal to 1 if survey completed on a Thursday; 0 otherwise
Summer 2002	Dummy equal to 1 if survey conducted in Summer 2002; 0 otherwise

to reject the null hypothesis of homoskedasticity ( $\chi^2 = 0.05$ ,  $p = 0.823$ ).

$E$  is an indicator variable for a customer who has food service experience,  $R$  is a vector of survey restaurant indicator variables,  $D$  is an indicator variable for the survey day Thursday, and  $Y$  is an indicator variable for the 2002 Survey. The latter fixed effects eliminate any restaurant, day, or year specific heterogeneity that might impact the estimate of  $\alpha_E$ .  $X$  is a vector of customer, server, and dining characteristics thought to influence percentage tip and incorporates most of the remaining shared questions on the two surveys.<sup>4</sup> Finally, the  $\alpha$ 's in Eq. (1) are the coefficients that are estimated and  $\varepsilon$  is a random error term. Eq. (1) is estimated using ordinary least squares (OLS).

### 3.2. Data cleaning

We began with 986 observations. The data cleaning process consisted of several steps. First, thirteen observations from the 2002 Survey were deleted because the first part of question 4 failed to include the language "NOT INCLUDING TIP". For these observations, we were unable to accurately compute bill size and percentage tip. This left a subtotal of 973 observations. Second, all observations for which a "yes", incomplete, or ambiguous response was recorded for the second part of either question 4 or 5 on both surveys (bill and tip help), or for question 6 on both surveys (automatic service charge), were deleted. This resulted in the removal of an additional 205 observations, resulting in a new subtotal of 768 observations. Third, 266 observations in which respondents provided an incomplete or ambiguous response to a survey question used in the analysis were dropped, leaving a new subtotal of

**Table 3**  
Summary statistics ( $N = 495$ ).

Variable	Mean	Standard deviation
% tip	19.11	5.83
\$ tip	6.33	3.67
Bill size	34.85	20.25
Bill size squared	1623.64	3135.16
Table size	2.72	1.21
Table size squared	8.86	10.64
# checks	1.13	0.53
Credit card	0.67	0.47
Service quality	5.76	1.12
Male server	0.29	0.45
Male customer	0.68	0.47
Customer age	45.12	12.11
Customer age squared	2181.99	1125.93
Married customer	0.75	0.43
Religious customer	0.49	0.50
Rich customer	0.83	0.38
Educated customer	0.73	0.44
Dining frequency	3.35	1.80
Food service experience	0.28	0.45
Customer % tipnorm	16.72	2.85
Customer \$ tipnorm	5.82	3.67
R1	0.20	0.40
R2	0.26	0.44
R3	0.20	0.40
R4	0.18	0.39
R5	0.16	0.37
Thursday	0.15	0.36
Summer 2002	0.39	0.49

502 observations. As alluded to earlier, the reason why so many observations were dropped during the cleaning process is because customers completed the survey privately, instead of being asked the questions face-to-face. This allowed for greater anonymity and, thus, a greater likelihood of obtaining truthful responses, but at the cost of obtaining fewer completed/unambiguous surveys. The final step of the data cleaning exercise consisted of the removal of one outlier in which the respondent tipped zero, and six outliers

<sup>4</sup> With two exceptions.  $X$  excludes the number of people paid for (question 3, both surveys) and whether or not the customer is a dependent of their parents for tax purposes (2002 Survey question 13, 2003 Survey question 15), as they were not considered important to the analysis. To provide comfort, we verified that the exclusion of these variables does not alter our conclusions.

**Table 4**

The effect of food service experience on tips.

Uncontrolled results	Uncontrolled results ln(% tip)	Controlled results ln(% tip)	Controlled results significant Vars ln(% tip)	Controlled results no FEs ln(% tip)	Controlled results incl. outliers ln(% tip)	Controlled results incl. bill help ln(% tip)	Controlled results tip ln(\$ tip)	Controlled results \$
Constant	2.900*** (0.015)	2.976*** (0.168)	2.847*** (0.123)	2.996*** (0.163)	3.067*** (0.286)	3.005*** (0.167)	0.900*** (0.167)	
Food service experience	0.047* (0.025)	0.047* (0.025)	0.043* (0.024)	0.045* (0.025)	0.051* (0.031)	0.054** (0.026)	0.047* (0.025)	
Bill size	–	–0.008** (0.001)	–0.009*** (0.001)	–0.007*** (0.001)	–0.018*** (0.005)	–0.007*** (0.001)	0.024*** (0.002)	
Bill size squared	–	0.00003*** (0.00001)	0.00004*** (0.00001)	0.00003*** (0.00001)	0.00008*** (0.00003)	0.00002* (0.00001)	–0.00009*** (0.00001)	
Bill help	–	–	–	–	–	0.206** (0.085)	–	
Table size	–	–0.063* (0.038)	–0.021** (0.009)	–0.075** (0.037)	0.100 (0.101)	–0.067* (0.038)	–0.056 (0.047)	
Table size squared	–	0.005 (0.005)	–	0.006 (0.005)	–0.012 (0.011)	0.008 (0.005)	0.007 (0.006)	
# checks	–	0.035 (0.023)	–	0.035 (0.022)	0.001 (0.035)	0.020 (0.023)	–0.028 (0.032)	
Credit card	–	–0.007 (0.027)	–	–0.006 (0.027)	0.010 (0.036)	–0.019 (0.027)	0.011 (0.027)	
Service quality	–	0.042*** (0.011)	0.046*** (0.011)	0.042*** (0.011)	0.052*** (0.015)	0.040*** (0.011)	0.042*** (0.011)	
Male server	–	0.008 (0.026)	–	–0.023 (0.023)	0.011 (0.042)	0.001 (0.026)	0.002 (0.028)	
Male customer	–	0.071*** (0.026)	0.063** (0.025)	0.068*** (0.026)	0.118*** (0.032)	0.062** (0.026)	0.080*** (0.027)	
Customer age	–	–0.010* (0.005)	–0.004*** (0.001)	–0.010* (0.005)	–0.017* (0.010)	–0.010* (0.005)	–0.010* (0.005)	
Customer age squared	–	0.0001 (0.0001)	–	0.0001 (0.0001)	0.0002 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)	
Married customer	–	–0.015 (0.035)	–	–0.022 (0.037)	–0.039 (0.048)	–0.019 (0.035)	–0.022 (0.034)	
Religious customer	–	–0.030 (0.022)	–	–0.031 (0.022)	–0.041 (0.036)	–0.036 (0.023)	–0.019 (0.022)	
Rich customer	–	0.099** (0.041)	0.075** (0.037)	0.103** (0.042)	0.123** (0.056)	0.098** (0.041)	0.076* (0.041)	
Educated customer	–	–0.014 (0.028)	–	–0.004 (0.027)	–0.024 (0.039)	–0.016 (0.028)	–0.001 (0.028)	
Dining frequency	–	0.008 (0.006)	–	0.011* (0.006)	0.013* (0.008)	0.010* (0.006)	0.003 (0.006)	
Customer % tipnorm	–	0.009* (0.005)	0.010* (0.005)	0.010* (0.005)	0.011* (0.006)	0.010* (0.005)	–	
Customer \$ tipnorm	–	–	–	–	–	–	0.034*** (0.012)	
Restaurant, day, year fixed effects?	No	Yes	Yes	No	Yes	Yes	Yes	
R-squared	0.006	0.291	0.276	0.279	0.277	0.269	0.778	
F-statistic	3.38*	5.46***	7.93***	6.71***	4.59***	5.15***	59.83***	
N	495	495	495	495	501	516	495	

White corrected standard errors reported in parentheses.

\* Significance at 10% levels (two-tailed).

\*\* Significance at 5% levels (two-tailed).

\*\*\* Significance at 1% levels (two-tailed).

in which respondents tipped in excess of 100% of the bill.<sup>5</sup> This resulted in the final data set of 495 observations.

A complete description of the variables used in the analysis and summary statistics are provided, respectively, in Tables 2 and 3.

#### 4. Results

Table 4 summarizes our results. Looking first at differences in the uncontrolled mean tips of customers with and without food service experience, the first column of Table 4 reveals that the former tip their servers approximately 4.7% more than the latter ( $p = 0.067$ , two-tailed  $t$ -test). Turning attention towards the second column of Table 4, it can be seen that similar results obtain even after controlling for a variety of factors thought to influence percentage tip ( $p = 0.057$ , two-tailed  $t$ -test).

Several robustness checks are performed, each relative to the controlled analysis above. In the third column of Table 4, we include just the significant variables (along with the restaurant, survey day, and survey year fixed effects). In addition to the effect of food service experience, percentage tip in the controlled analysis was also affected by bill size (–), bill size squared (+), table size (–), service quality (+), whether the customer was male (+), the customer's age (–), the customer's income (+), and the customer's belief about the percentage tip norm (+).<sup>6</sup> In the fourth column we exclude the

restaurant, survey day, and survey year fixed effects, while in the fifth column, we include the seven dropped outliers.<sup>7</sup> In the sixth column, we include observations in which the customer reported receiving help paying the bill, and control for such observations using an indicator variable (bill help) equal to one if the customer received help paying the bill and zero otherwise. Finally, in the seventh column we replace the natural log of the percentage tip with the natural log of the dollar tip as the dependent variable. In every case, the coefficient on the food service experience variable remains positive, statistically significant, and very close in magnitude to 0.047, thus lending credence to our original findings.

#### 5. Conclusion

Interpersonal similarity, in the form of food service experience, is a source of interpersonal connection between the server and the customer and results in higher tips for the server. More specifically, we found that customers with food service experience tip their servers between 4 and 5% more than customers without food service experience. This finding further challenges the conventional neoclassical worldview on tipping behavior and is consistent with Lynn et al. (2008), who included a food service experience control in their analysis of consumer racial discrimination in tipping and found that tips significantly increase with customer food service experience.

To shed further light on the economic significance of our results, we first computed the predicted percentage tip from our econometric model found in the second column of Table 4. Computed at the

<sup>5</sup> The removal of the zero tip outlier was necessary due to the natural log specification of the dependent variable. Furthermore, all seven of these outliers represent significant discrete jumps in the data – the minimum and maximum percentage tip in the final data set are, respectively, 2.9% and 68.6%.

<sup>6</sup> Looking at the size of the coefficient associated with bill size squared, the effect of bill size squared on tip size, while statistically significant, is not economically significant.

<sup>7</sup> Due to the natural log specification of percentage tip, the zero tip outlier could not be included.

means of the explanatory variables, unless otherwise specified, the predicted percentage tip for customers with food service experience (food service experience = 1) was 19.62% and for customers without food service experience (food service experience = 0) was 18.72%. We then weighted the 2008 sales at full-service restaurants figure of \$181 billion by Table 3 percentages of customers with food service experience (28%) and without food service experience (72%), which yielded, respectively, \$50.7 billion and \$130.3 billion. Finally, we computed the tip income generated by this split of customer types (\$34.3 billion) and compared it to the tip income generated under the assumption that no customer has food service experience (\$33.9 billion). Thus, our findings suggest that customers with food service experience generated close to half a billion dollars in tip income in 2008 alone, a figure roughly equivalent to the amount of tax revenues collected in 2006 by some of America's largest cities, including Albuquerque, Charlotte, Fort Worth, and Portland (U.S. Census Bureau, 2009).

Our results have several implications. First, customers with food service experience might want to signal this early on in the dining experience as a means of ensuring good service quality. Second, as a way to optimally allocate effort among their tables, servers should try and elicit as early on as possible in the dining experience whether or not their customers have food service experience. Finally, to improve the welfare of their employees, as well as to perhaps draw in more customers on slow days, restaurateurs might

want to think about offering incentives to people with food service experience to dine at their establishments. For example, "Waiter and Waitress Wednesdays" could provide diners with food service experience with, say, a 5% discount.

Several avenues exist for future research. On the empirical front, it might be interesting to examine whether the effect of food service experience on tips depends on the amount of food service experience. Presumably an individual with, say, just one summer's worth of food service experience would behave differently from an individual with, say, several years worth of food service experience. It might also be interesting to examine the extent to which customers with food service experience are able to influence their dining companions who lack such experience. For example, does Eric, who has no food service experience, tip more when dining out with Joey, who used to wait tables? Finally, experimental work might look at whether customers who are able to signal that they have food service experience actually receive better service.

### Acknowledgments

Funding for both waves of the survey data collection was provided by the National Science Foundation (SBE-0241935). I want to thank Sissy Parrett for help with conducting the surveys, as well as the Editor and anonymous referees for their insightful comments and suggestions. The usual caveat applies.

**Appendix A. The 2002 survey**

This short survey is for a Ph.D. Dissertation. The information you provide is anonymous. Thank you for both your time and cooperation.

1. How many people were at your table?\_\_\_\_\_
2. How many checks did your table have?\_\_\_\_\_
3. How many people, **including yourself**, did you pay for?\_\_\_\_\_
4. What was the total bill for the people, **including yourself**, who you paid for (**NOT INCLUDING TIP**)?\_\_\_\_\_

Are any of the people you paid for going to give you money toward this amount (*circle one*)?

Yes      No

5. How much money, **in dollars and cents**, did you tip the server?\_\_\_\_\_

Of the people you paid for, did anyone **other than you** leave a tip (*circle one*)?

Yes      No

6. Was the tip automatically added to your bill? (*circle one*)

Yes      No

If you answered yes, what was the percent tip automatically added?\_\_\_\_\_

7. How did you pay for your bill? (*circle your response*)

<b>Cash</b>	<b>Credit Card/ATM Card</b>	<b>Check</b>	<b>Other:</b> _____
-------------	-----------------------------	--------------	---------------------

8. Did anyone at your table have:  
 Appetizers? (includes soups, salads) (*circle your response*)      Yes      No  
 Entrees? (*circle your response*)      Yes      No  
 Desserts? (*circle your response*)      Yes      No  
 Alcohol? (*circle your response*)      Yes      No

9. On a scale from 1 to 7, how would you rate the service you received from your waiter/waitress? (*circle your response*)

<b>Poor</b>	1	2	3	4	5	6	<b>Excellent</b>
-------------	---	---	---	---	---	---	------------------

10. What was your server's sex? **Male**      **Female**

11. On a scale from 1 to 7, how would you rate the frequency with which you dine at this particular restaurant? (*circle your response*)

<b>Least Frequent</b>	1	2	3	4	5	6	<b>Most Frequent</b>
-----------------------	---	---	---	---	---	---	----------------------

12. Have you ever been employed as a waiter or waitress? (*circle your response*)      Yes      No
13. For tax purposes, are you a dependent of your parents? (*circle your response*)      Yes      No
14. What is your sex? (*circle your response*)      **Male**      **Female**
15. What is your age?\_\_\_\_\_
16. What is your marital status? (*circle your response*)

<b>Single</b>	<b>Married</b>	<b>Divorced/Separated</b>	<b>Widowed</b>
---------------	----------------	---------------------------	----------------

17. Do you regularly attend religious services? (*circle your response*)      Yes      No

18. What was your family's (all of the people in your household) approximate total income last year? (*circle your response*)

Less than \$18,000  
 \$18,000 - \$33,000  
 \$33,000 - \$52,000  
 \$52,000 - \$82,000  
 More than \$82,000

19. What is the highest degree you have obtained?\_\_\_\_\_

How many years of post-secondary (beyond high school) education have you completed?\_\_\_\_\_

20. What do you think the norm is regarding percent tip in a restaurant?\_\_\_\_\_

21. If you receive **terrible** service, what percent tip do you normally leave?\_\_\_\_\_

22. If you receive **outstanding** service, what percent tip do you normally leave?\_\_\_\_\_

23. If you receive **standard** service, what percent tip do you normally leave?\_\_\_\_\_

**THANK YOU!! PLEASE FOLD AND PLACE IN BOX**

**Appendix B. The 2003 survey**

This short survey is for a Ph.D. Dissertation. The information you provide is anonymous. Thank you for both your time and cooperation.

1. How many people were at your table?\_\_\_\_\_
2. How many checks did your table have?\_\_\_\_\_
3. How many people, **including yourself**, did you pay for?\_\_\_\_\_
4. What was the total bill for the people, **including yourself**, who you paid for (**NOT INCLUDING TIP**)?\_\_\_\_\_

Are any of the people you paid for going to give you money toward this amount (*circle your response*)?

**Yes**      **No**

5. How much money, **in dollars and cents**, did you tip the server?\_\_\_\_\_

Of the people you paid for, did anyone **other than you** leave a tip (*circle your response*)?

**Yes**      **No**

6. Was the tip automatically added to your bill? (*circle your response*)

**Yes**      **No**

If you answered yes, what was the percent tip automatically added?\_\_\_\_\_

7. How did you pay for your bill? (*circle your response*)

**Cash**      **Credit Card**      **ATM Card**      **Check**      **Other:**\_\_\_\_\_

If you paid by either credit or ATM card, did you leave your tip on the card? (*circle one*)    **Yes**      **No**

8. Did anyone whom you paid for, **including yourself**, have:  
Appetizers? (includes soups, salads) (*circle your response*)      **Yes**      **No**  
Entrees? (*circle your response*)      **Yes**      **No**  
Desserts? (*circle your response*)      **Yes**      **No**  
Alcohol? (*circle your response*)      **Yes**      **No**

9. On a scale from 1 to 7, how would you rate the service you received from your waiter/waitress? (*circle your response*)

<b>Poor</b>	1	2	3	4	5	6	<b>Excellent</b>
							7

10. What was your server's sex? (*circle your response*)    **Male**      **Female**

To the best of your knowledge, your server was: (*circle your response*)    **White**      **Black**      **Other**

11. On a scale from 1 to 5, how would you rate your server's attractiveness? (*circle your response*)

<b>Homely</b>	<b>Below Average</b>	<b>Average</b>	<b>Above Average</b>	<b>Strikingly Handsome/Beautiful</b>
1	2	3	4	5

12. On a scale from 1 to 5, how would you rate your server's weight? (*circle your response*)

<b>Severely Underweight</b>	<b>Underweight</b>	<b>Average</b>	<b>Overweight</b>	<b>Severely Overweight</b>
1	2	3	4	5

13. On a scale from 1 to 7, how would you rate the frequency with which you dine at this particular restaurant? (*circle your response*)

<b>Least Frequent</b>	1	2	3	4	5	6	<b>Most Frequent</b>
							7

14. Have you ever been employed as a waiter or waitress? (*circle your response*)    **Yes**      **No**

Have any of your close friends or family ever been employed as a waiter or waitress? (*circle your response*)

**Yes**      **No**

15. For tax purposes, are you a dependent of your parents? (*circle your response*)    **Yes**      **No**

16. What is your sex? (*circle your response*)    **Male**      **Female**

17. Which of the following categories best describes you? (check appropriate box)

- Black/African-American     White/Caucasian     Asian-American/Oriental     Middle Eastern  
 Hispanic-Black/Spanish-Speaking Black     Hispanic-White/Spanish-Speaking White  
 Native American/American Indian     Other (Please Specify): \_\_\_\_\_

18. What is your age? \_\_\_\_\_

19. What is your marital status? (circle your response)

Single    Married    Divorced/Separated    Widowed

20. Do you regularly attend religious services? (circle your response) Yes    No

21. What was your family's (all of the people in your household) approximate total income last year? (circle your response)

Less Than \$18,000    \$18,000 - \$33,000    \$33,000 - \$52,000    \$52,000 - \$82,000

More Than \$82,000

22. What is the highest level of education that you have completed? (circle your response)

Some High School    Completed High School    Some College    Bachelor's Degree  
Graduate/Professional Degree    Other (Please Specify): \_\_\_\_\_

23. On a scale from 1 to 5, how would you rate your attractiveness? (circle your response)

Homely	Below Average	Average	Above Average	Strikingly Handsome/Beautiful
1	2	3	4	5

24. What do you think the norm is regarding percent tip in a restaurant? (do not give a range) \_\_\_\_\_

THANK YOU!! PLEASE FOLD AND PLACE IN BOX

## References

- Azar, O., 2007a. Why pay extra? Tipping and the importance of social norms and feelings in economic theory. *Journal of Socio-Economics* 36, 250–265.
- Azar, O., 2007b. The social norm of tipping: a review. *Journal of Applied Social Psychology* 37, 380–402.
- Bartal, D., 1976. *Prosocial Behavior: Theory and Research*. John Wiley and Sons, New York.
- Bodvarsson, O., Gibson, W., 1997. Economics and restaurant gratuities: determining tip rates. *American Journal of Economics and Sociology*, 187–204.
- Byrne, D., 1971. *The Attraction Paradigm*. Academic Press, New York.
- Chen, Y., Li, S.X., 2009. Group identity and social preferences. *American Economic Review* 99, 431–457.
- Conlin, M., Lynn, M., O'Donoghue, T., 2003. The norm of restaurant tipping. *Journal of Economic Behavior and Organization* 52, 297–321.
- Cook, D., Weisberg, S., 1983. Diagnostics for heteroscedasticity in regression. *Biometrika* 70, 1–10.
- Crusco, A., Wetzel, C., 1984. The midas touch: the effects of interpersonal touch on restaurant tipping. *Personality and Social Psychology Bulletin* 10, 512–517.
- Davis, S., Schrader, B., Richardson, T., Kring, J., Kieffer, J., 1998. Restaurant servers influence tipping behavior. *Psychological Reports* 83, 223–226.
- Garrity, K., Degelman, D., 1990. Effect of server introduction on restaurant tipping. *Journal of Applied Social Psychology* 20, 168–172.
- Gueguen, N., Legoyerel, P., 2000. Effect on tipping of barman drawing a sun on the bottom of customers' checks. *Psychological Reports* 87, 223–226.
- Gurnee, H., Baker, E., 1938. The social distances of some common social relationships. *The Journal of Abnormal and Social Psychology* 33, 265–269.
- Hornik, J., 1992. Tactile stimulation and consumer response. *Journal of Consumer Research* 19, 449–458.
- Kahneman, D., Knetsch, J., Thaler, R., 1986. Fairness as a constraint on profit seeking: entitlements in the market. *American Economic Review* 76, 728–741.
- Lynn, M., Grassman, A., 1990. Restaurant tipping: an examination of three 'rational' explanations. *Journal of Economic Psychology* 11, 169–181.
- Lynn, M., Mynier, K., 1993. Effect of server posture on restaurant tipping. *Journal of Applied Social Psychology* 23, 678–685.
- Lynn, M., McCall, M., 2000. Gratitude and gratuity: a meta-analysis of research on the service-tipping relationship. *Journal of Socio-Economics* 29, 203–214.
- Lynn, M., Le, J.-M., Sherwyn, D., 1998. Reach out and touch your customers. *Cornell Hotel and Restaurant Administration Quarterly* 39, 60–65.
- Lynn, M., Sturman, M., Ganley, C., Adams, E., Douglas, M., McNeil, J., 2008. Consumer racial discrimination in tipping: a replication and extension. *Journal of Applied Social Psychology* 38, 1045–1060.
- Mills, S., Riehle, H., 1987. What customers think about tips vs service charges. *Restaurants USA* October, 20–22.
- Parrett, M., 2006. An analysis of the determinants of tipping behavior: a laboratory experiment and evidence from restaurant tipping. *Southern Economic Journal* 73, 489–514.
- Rind, B., Strohmetz, D., 1999. Effect on restaurant tipping of a helpful message written on the back of customers' checks. *Journal of Applied Social Psychology* 29, 139–144.
- Rind, B., Bordia, P., 1995. Effect of server's "thank you" and personalization on restaurant tipping. *Journal of Applied Social Psychology* 25, 745–751.
- Stephen, R., Zweigenhaft, R., 1986. The effect on tipping of a waitress touching male and female customers. *Journal of Social Psychology* 126, 141–142.
- U.S. Census Bureau, 2009. *Statistical Abstract of the United States: 2010*. U. S. Government Printing Office, Washington, DC.