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# Racial and Ethnic Differences in Tipping: The Role of Perceived Descriptive and Injunctive Tipping Norms

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service, tipping, social norms, race differences

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# Racial and Ethnic Differences in Tipping: The Role of Perceived Descriptive and Injunctive Tipping Norms

**Michael Lynn[1] and Zachary W. Brewster[2]**

**Abstract**

In U.S. restaurants, racial and ethnic minorities often tip less than whites. These differences in tipping create numerous problems ranging from discriminatory service to restaurant executives' reluctance to open restaurants in minority communities. Thus, racial differences in tipping need to be sizably reduced, which requires an understanding of their underlying causes. In this paper, we ask a racially and ethnically diverse sample of respondents in an online survey about how much they would tip in a hypothetical dining scenario, how much their best friend would tip, and how much the average person in their area would tip, as well as what the smallest tip a server in their area would consider satisfactory. Analyses of these data indicate that perceived injunctive and descriptive tipping norms independently mediate racial and ethnic differences in tipping. This finding suggests that racial differences in tipping can be reduced with marketing campaigns that promote the dominant 15 to 20 percent injunctive tipping norm and that inform consumers about widespread compliance with that norm.

**Keywords**

services; tipping; social norms; race differences

Asians, blacks, and Hispanics are widely perceived within the U.S. restaurant industry to be poor tippers (McCall and Lynn 2009), and these perceptions are largely consistent with empirical evidence (see Lynn 2006b, 2013 for reviews). The data on Asian–white differences in tipping is equivocal, but on average, blacks and Hispanics do, indeed, tip less than whites in U.S. restaurants (Lynn 2013). Furthermore, these racial and ethnic differences in tipping remain both sizable and statistically significant after controlling for the tippers' perceptions of service quality, as well as for the tippers' education and income (Lynn 2006b). Thus, the race differences in tipping cannot be dismissed simply as reflecting socioeconomic differences across racial and ethnic groups, or as self-fulfilling prophecies stemming from service discrimination.

These race differences in tipping create numerous difficulties for restaurant managers and executives, as well as for members of the ethnic minority groups themselves. First, servers vary their service efforts with their expectations about how much a customer will tip (Barkan and Israeli 2004; Bodvarsson, Luksetich, and McDermott 2003; Brewster 2013;), so servers who perceive ethnic minorities as poor tippers may deliver inferior service to members of those groups (Brewster 2012a, 2012b; Brewster and Mallinson 2009; Brewster and Rusche 2012; Dirks and Rice 2004; Lynn 2004; Rusche and Brewster 2008). Such service discrimination not only reduces patronage from ethnic minority consumers but also increases the risk of costly consumer lawsuits (Lynn 2004).

Second, servers' interest and longevity in tipped jobs increases with the size of tips they anticipate and receive (Lynn, Kwortnik and Sturman 2011), so restaurants with a large ethnic minority clientele have difficulty attracting and retaining wait staff (Amer 2002). This tipping-related difficulty in attracting and retaining a wait staff increases costs and lowers profits, which impedes business expansion by making ethnic minority communities less attractive places to locate full-service restaurants (Amer 2002; Lynn 2004).

To adequately address these problems, the racial and ethnic differences in tipping that give rise to the problems need to be reduced, which requires an understanding of the causes underlying such differences (Lynn 2004). Tipping is a norm-driven behavior. In that regard, a series of articles by coauthor Lynn (2004, 2006a, 2011, and 2014) has argued that black–white and Hispanic–white differences in tipping

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are largely attributable to differences in awareness of the appropriate injunctive tipping norms. Providing some support for this explanation, Lynn has found that blacks and Hispanics are indeed less familiar than whites with the injunctive norm of tipping 15 to 20 percent of the bill in restaurants (Lynn 2004, 2006a), and that this norm awareness partially mediates black–white and Hispanic–white differences in restaurant tipping (Lynn 2011, 2014). However, Lynn's empirical assessments of this explanation indicate that norm familiarity accounts for only a small portion of the interracial and interethnic tipping differences. He found, for instance, that differences in familiarity with the injunctive restaurant-tipping norm could account for only 30 percent of the black–white difference in restaurant tipping and only 10 percent of the Hispanic–white difference (Lynn 2011, 2014).

In this paper, we conceptually replicate and extend Lynn's (2004, 2006a, 2011, and 2014) work on a normative explanation for racial and ethnic differences in tipping. The conceptual replication involves reexamining the role of injunctive tipping norms as a mediator of race differences in tipping, after making some theoretical and methodological refinements to Lynn's earlier work on this issue. Lynn conceptualized the injunctive restaurant tipping norm as a single, national-level construct. As a result, he thought of consumers as either knowing or not knowing that norm and operationalized tipping norm awareness as a binomial variable. The problem with this conceptualization and operationalization of injunctive tipping norms is that it glosses over a diversity of expectations regarding tipping that have been shown to exist within the United States (Lynn 2006a). Furthermore, the segregated nature of our society (Massey and Denton 1993; Miller, Smith-Lovin, and Cook 2001) suggests that the tipping behaviors of black, Hispanic, Asian, and white Americans may be governed by overlapping and yet distinctive tipping norms. Thus, it is possible that rather than reflecting differential familiarity with a single, national norm, as Lynn has argued, racial differences in tipping might be better explained as the product of different, local tipping norms.

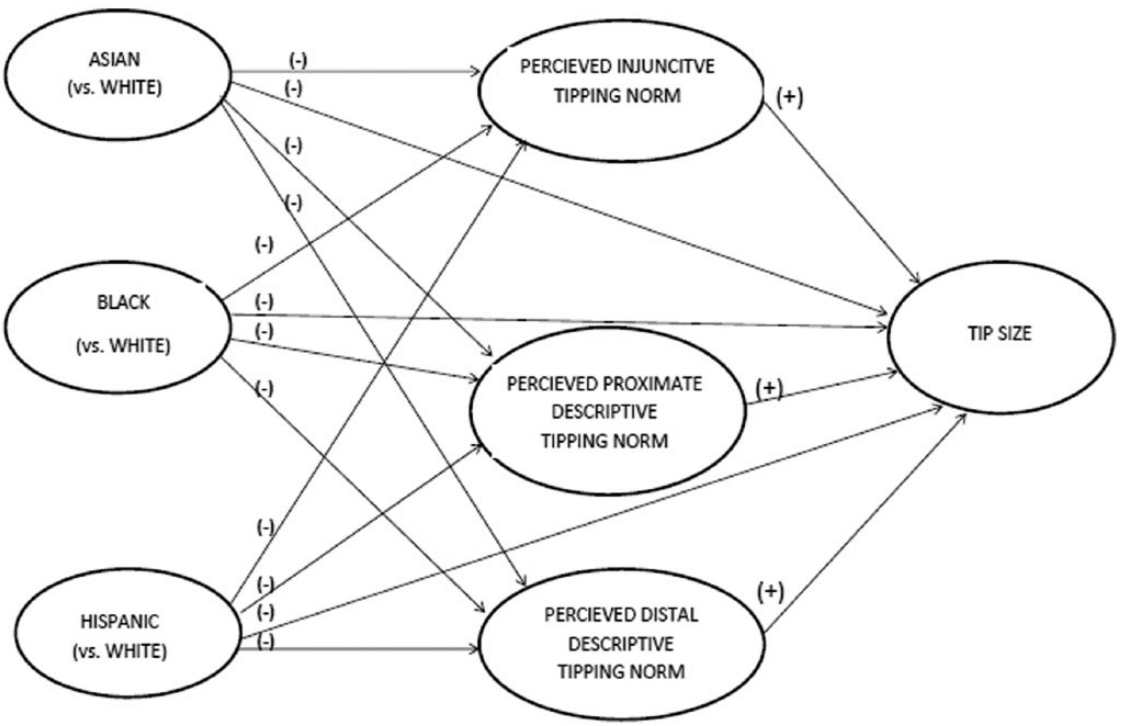
In short, there are reasons to suspect that Lynn's binomially coded measure of injunctive-norm awareness is unlikely to have fully captured the ethnic differences in beliefs about the expected restaurant tip size. We addressed these shortcomings by using a continuous measure of perceptions about the smallest tip that local waiters and waitresses would find acceptable to reflect injunctive restaurant-tipping norms. We focused on servers' expectations because injunctive norms are enforced through social sanctions (Cialdini, Reno, and Kallgren 1990), which depend on the visibility of the normative behavior (Fisher and Price 1992). In restaurant settings, it is typically only the tipper and the waiter or waitress who know precisely the check and tip total. Thus, it is the expectations of local servers that define the most potent injunctive tipping norms.

The extension of Lynn's (2004, 2006a, 2011, and 2014) work involves examining the role of descriptive, as well as injunctive, tipping norms as a mediator of race differences in tipping. Lynn focused on injunctive norms, which specify the attitudes and behaviors that are perceived to be acceptable, expected, correct, or otherwise socially approved, and overlooked descriptive norms, which specify how people are perceived to actually behave. This oversight is important because injunctive and descriptive norms, though positively correlated with one another, have been shown to independently predict behaviors such as drinking, gambling, and littering (Cialdini, Reno, and Kallgren 1990; Larimer and Neighbors 2003; Neighbors et al. 2008; Park et al. 2009). Furthermore, researchers have found that different descriptive norms for different reference groups exert independent effects on behavior, with the norms of more proximate reference groups (such as close friends or same-sex peers) having stronger effects than those of more distal reference groups (such as typical students on campus), in some cases, and vice versa in other cases (Cho 2006; Neighbors et al. 2008). Given the already demonstrated racial and ethnic differences in tipping behavior and in perceived injunctive tipping norms, it is plausible that Asians, blacks, and Hispanics would perceive descriptive tipping norms as lower than do whites, and that these differences in perceived descriptive norms partially mediate the racial and ethnic differences in tip size.

We address the oversight of descriptive tipping norms in the current literature by assessing subjects' perceptions of the amounts their best friend and an average person in their town would tip. To our knowledge, descriptive tipping norms have not been studied before, so our measures are new and have not been previously used. However, they are similar to published measures of descriptive drinking norms that ask subjects to estimate how many drinks that members of different reference groups (e.g., typical students, same-sex students, close friends) drank on each day of the week (Lee et al. 2007; Neighbors et al. 2008).

Our extension of Lynn's work to include descriptive, as well as injunctive, tipping norms is meaningful not only because descriptive tipping norms might be a new mediator of racial and ethnic differences in tipping, but also because the simultaneous inclusion of both types of norms into our regression models helps to rule out alternative explanations for their relationships to tipping. Common method variance, anchoring and adjustment biases, consistency pressures, and impression management demands could explain a positive relationship between measures of tipping behavior and perceived tipping norms. However, these biases should affect the relationships of tipping to both descriptive and injunctive norms alike. The fact that we model multiple perceived norms simultaneously to test their independent effects controls for these validity issues (see Lynn, Kwortnik, and Sturman 2011, for a similar argument) and,

**Exhibit 1:**
**Model of Relationships Examined in This Study and Expected Effects.**




thus, increases our confidence that perceived injunctive and descriptive tipping norms really do affect tipping and mediate race differences in tipping.

In summary, we contribute to the tipping literature by examining the potential roles of perceived distal and proximate descriptive tipping norms, as well as local injunctive tipping norms, as mediators of racial and ethnic differences in tip size. The relationships tested, and the expected results are summarized in Exhibit 1. Data on these variables come from an online survey of a diverse sample of Asians, blacks, Hispanics, and whites.

## Method

### *Sample*

Members of Survey Sampling International's consumer panel were invited to participate in a short, online survey about tipping. Stratified sampling was used in an effort to get approximately 200 Asian, 200 black, 200 Hispanic, and 200 white respondents. A total of 928 people started the survey, but many were dropped from analysis because they failed to answer one or more of the key dependent, independent, moderator and control variables ($n$ = 70), or reported their ethnicity as something other than Asian, black, Hispanic, or white ($n$ = 8). In addition, sixty-two observations for which one or more of the tipping variables exceeded 50 percent of the bill size were dropped as *prima facie* entry errors, non-serious responses, or exaggerated responses. The remaining observations contained many more than the expected number of values over three standard deviations from the mean, so an additional twenty-five observations for which one or more of the tipping variables exceeded 35 percent of the bill (which was more than three standard deviations from its mean) were dropped as significant outliers. That left a sample of 763 participants providing useable data. The final sample was not representative of the U.S. population, but it was demographically diverse (see Exhibit 2).

### *Stimuli and Counterbalancing*

Respondents were shown pictures of four casual dining restaurant settings and asked about (1) their own tipping behavior, (2) the average person's tipping behavior, (3) their best friends' tipping behavior, and (4) the server's tipping expectations at those restaurants, assuming bill sizes of $23.80, $28.25, $30.00, and $33.12, along with service that was "good but not exceptional." The four bill sizes were linked to pictured restaurant interiors so that the bill size for a particular pictured restaurant was both different from that of the other restaurants and the same for every

**Exhibit 2:**
**Descriptive Statistics for All Participants and by Racial/Ethnic Group.**

| | *N* | Minimum | Maximum | *M* | *SD* |
|---|---|---|---|---|---|
| All participants | | | | | |
| Tip amount | 763 | 0.00 | 33.61 | 14.8512 | 5.24256 |
| Friend Tip | 763 | 0.00 | 33.61 | 14.1525 | 5.41595 |
| Average Person Tip | 763 | 0.00 | 33.61 | 14.1627 | 5.12081 |
| Expected Tip | 763 | 0.00 | 33.61 | 13.7033 | 5.48846 |
| Counterbalance 1 | 763 | 0 | 1 | 0.2556 | 0.43647 |
| Counterbalance 2 | 763 | 0 | 1 | 0.2569 | 0.43720 |
| Counterbalance 3 | 763 | 0 | 1 | 0.2503 | 0.43349 |
| Worked for tips (1 = *yes*, 0 = *no*) | 763 | 0 | 1 | 0.30 | 0.458 |
| Age | 763 | 18.00 | 90.00 | 43.1402 | 15.95622 |
| Sex (1 = *male*, 2 = *female*) | 763 | 1 | 2 | 1.58 | 0.494 |
| Education | 763 | 1 | 6 | 2.71 | 1.413 |
| Income | 763 | 1 | 8 | 3.79 | 2.406 |
| Asian (1 = *yes*, 0 = *no*) | 763 | 0 | 1 | 0.2163 | 0.41196 |
| Black (1 = *yes*, 0 = *no*) | 763 | 0 | 1 | 0.2254 | 0.41814 |
| Hispanic (1 = *yes*, 0 = *no*) | 763 | 0 | 1 | 0.21 | 0.405 |
| White (1 = *yes*, 0 = *no*) | 763 | 0 | 1 | 0.3526 | 0.47808 |
| Asian participants | | | | | |
| Tip amount | 165 | 0.00 | 30.19 | 14.0797 | 4.94344 |
| Friend Tip | 165 | 0.00 | 31.86 | 13.3006 | 5.26174 |
| Average Person Tip | 165 | 0.00 | 33.33 | 13.6066 | 5.28461 |
| Expected Tip | 165 | 0.00 | 33.61 | 13.1627 | 4.83380 |
| Counterbalance 1 | 165 | 0.00 | 1.00 | 0.2727 | 0.44672 |
| Counterbalance 2 | 165 | 0.00 | 1.00 | 0.2545 | 0.43693 |
| Counterbalance 3 | 165 | 0.00 | 1.00 | 0.2545 | 0.43693 |
| Worked for tips (1 = *yes*, 0 = *no*) | 165 | 0 | 1 | 0.21 | 0.410 |
| Age | 165 | 18.00 | 77.00 | 36.8061 | 13.67698 |
| Sex (1 = *male*, 2 = *female*) | 165 | 1 | 2 | 1.46 | 0.500 |
| Education | 165 | 1 | 6 | 3.47 | 1.442 |
| Income | 165 | 1 | 8 | 4.21 | 2.507 |
| Black participants | | | | | |
| Tip amount | 172 | 0.00 | 33.33 | 13.6804 | 5.49648 |
| Friend Tip | 172 | 0.00 | 33.61 | 13.5238 | 5.87706 |
| Average Person Tip | 172 | 3.33 | 30.19 | 13.3619 | 4.90298 |
| Expected Tip | 172 | 0.88 | 33.33 | 13.0897 | 5.95939 |
| Counterbalance 1 | 172 | 0.00 | 1.00 | 0.2326 | 0.42370 |
| Counterbalance 2 | 172 | 0.00 | 1.00 | 0.2965 | 0.45805 |
| Counterbalance 3 | 172 | 0.00 | 1.00 | 0.2209 | 0.41608 |
| Worked for tips (1 = *yes*, 0 = *no*) | 172 | 0 | 1 | 0.26 | 0.441 |
| Age | 172 | 19.00 | 76.00 | 45.8081 | 14.92568 |
| Sex (1 = *male*, 2 = *female*) | 172 | 1 | 2 | 1.56 | 0.498 |
| Education | 172 | 1 | 6 | 2.51 | 1.207 |
| Income | 172 | 1 | 8 | 3.48 | 2.280 |
| Hispanic participants | | | | | |
| Tip amount | 157 | 3.02 | 33.61 | 15.3305 | 5.30425 |
| Friend Tip | 157 | 0.00 | 30.19 | 14.2805 | 5.13570 |
| Average Person Tip | 157 | 0.00 | 33.61 | 15.0130 | 5.88748 |
| Expected Tip | 157 | 0.00 | 33.61 | 14.0452 | 6.30161 |
| Counterbalance 1 | 157 | 0.00 | 1.00 | 0.2611 | 0.44067 |
| Counterbalance 2 | 157 | 0.00 | 1.00 | 0.2229 | 0.41754 |

*(continued)*

**Exhibit 2: (continued)**

| | *N* | Minimum | Maximum | *M* | *SD* |
|---|---|---|---|---|---|
| Counterbalance 3 | 157 | 0.00 | 1.00 | 0.2484 | 0.43347 |
| Worked for tips (1 = *yes*, 0 = *no*) | 157 | 0 | 1 | 0.31 | 0.462 |
| Age | 157 | 18.00 | 77.00 | 37.4522 | 13.42379 |
| Sex (1 = *male*, 2 = *female*) | 157 | 1 | 2 | 1.59 | 0.493 |
| Education | 157 | 1 | 6 | 2.50 | 1.371 |
| Income | 157 | 1 | 8 | 3.66 | 2.406 |
| White participants | | | | | |
| Tip amount | 269 | 3.02 | 33.61 | 15.7931 | 5.02659 |
| Friend Tip | 269 | 0.00 | 33.61 | 15.0022 | 5.25665 |
| Average Person Tip | 269 | 3.02 | 33.61 | 14.5198 | 4.56073 |
| Expected Tip | 269 | 1.77 | 33.33 | 14.2276 | 4.98090 |
| Counterbalance 1 | 269 | 0.00 | 1.00 | 0.2565 | 0.43752 |
| Counterbalance 2 | 269 | 0.00 | 1.00 | 0.2528 | 0.43542 |
| Counterbalance 3 | 269 | 0.00 | 1.00 | 0.2677 | 0.44356 |
| Worked for tips (1 = *yes*, 0 = *no*) | 269 | 0 | 1 | 0.37 | 0.484 |
| Age | 269 | 19.00 | 90.00 | 48.6394 | 16.84699 |
| Sex (1 = *male*, 2 = *female*) | 269 | 1 | 2 | 1.65 | 0.476 |
| Education | 269 | 1 | 6 | 2.49 | 1.389 |
| Income | 269 | 1 | 8 | 3.80 | 2.396 |

participant. In addition, the order of presentation of the pictured restaurants (each with its own particular bill size) was constant across participants. The four tipping questions were counterbalanced in a Latin-Square design across the four sets of picture, bill, and presentation-order. By varying the stimuli associated with each of our four tipping questions in this manner, we hoped to (1) reduce participants' likelihood of adopting a rote, or unthinking response set, and (2) obscure the purpose of the study (and thereby reduce demand characteristics). Some evidence for the effectiveness of these stimulus variations is provided by significant counterbalance main effects for all four tipping measures, all $F$s (3, 759) > 4.40, all $p$s < .005, indicating that participants did respond differently to the four different restaurant-interior and bill-size pairings. These counterbalance main effects do not bias our analyses, however, because we effectively control for them by using counterbalance-condition dummy variables as covariates in our regression models.

### *Tip Amount (Dependent Variable)*

Respondents were asked, "How much would YOU tip (in dollars and cents) at the pictured table service restaurant if your bill was $XX.XX, and the service was good but not exceptional?" The answers to this question were converted to a percentage of the bill to control for different bill sizes across counterbalance conditions, and that percentage was used as the dependent variable.

### *Friend Tip (Proximate Descriptive Norm)*

Sensitive to the racially homogeneous nature of interpersonal networks and the salience of the perceived attitudes and actions of proximate referents, we asked respondents, "How much would YOUR BEST FRIEND tip (in dollars and cents) at the pictured table service restaurant if the bill was $XX.XX, and the service was good but not exceptional?" The answers to this question were again converted to a percentage of the bill, and that percentage was used as the measure of proximate descriptive tipping norms.

### *Average Person Tip (Distal Descriptive Norm)*

Respondents were also asked, "How much do you think the AVERAGE PERSON IN YOUR TOWN or CITY would tip (in dollars and cents) at the pictured table service restaurant if the bill was $XX.XX, and the service was good but not exceptional?" Once again, the answers to this question were converted to a percentage of the bill, and that percentage was used as the measure of distal descriptive tipping norms.

### *Expected Tip (Local Injunctive Norm)*

Finally, subjects' perception of the local injunctive tipping norm was measured with the following question:

> What do you think is the smallest tip (in dollars and cents) that a waiter or waitress in your town or city and working in a table service restaurant like the one pictured would find acceptable

or satisfactory if the bill was $XX.XX, and the service he or she provided was good but not exceptional?

The percentages resulting from the answers to this question were used as the measure of local injunctive tipping norms.

### Race or Ethnicity

Respondents were asked, "Which race do you associate yourself most closely with?" and "Are you of Hispanic, Latino, or Spanish origin?" Responses to these questions were used to dummy code (*yes* = 1, *no* = 0) variables for Asian, black, Hispanic, and white. Respondents who reported being Hispanic were coded as Hispanic and not Asian, black, or white. In other words, ethnicity superseded race in this study. As previously mentioned, eight respondents reporting their race or ethnicity as something other than Asian, black, Hispanic, or white were dropped from the analyses.

### Covariates

Respondents were also asked to answer a number of personal questions. The answers to these questions were included in this study as covariates, because each has been shown to affect tipping behaviors. Those covariates were as follows:

1. Experience working for tips (*yes* = 1, *no* = 0),
2. Age (in years),
3. Sex (*males* =1, *females* = 2),
4. Education (*high school/GED or less* = 1, *some college* = 2, *two-year college degree* = 3, *four-year college degree* = 4, *master's degree* = 5, and *professional or doctoral degree [JD, MD, PhD]* = 6), and
5. Income (*below $20,000* = 1; *$20,000-$29,999* = 2; *$30,000-$39,999* = 3; *$40,000-$49,999* = 4; *$50,000-$59,999* = 5; *$60,000-$69,999* = 6; *$70,000-$79,999* = 7; *$80,000 or more* = 8).

## Results

Descriptive statistics for the measures in this study are presented in Exhibit 2. These data were used to assess the effects of race or ethnicity on tipping (after statistically controlling for age, sex, education, income, experience working for tips, and counterbalance order), as well as the role of perceived local injunctive, proximate descriptive, and distal descriptive tipping norms as mediators of the race or ethnicity effects. The findings are summarized in Exhibit 3 and briefly described below.

### Race and Ethnicity Differences in Tipping

First, we sought to replicate the racial and ethnic differences in tipping observed in previous studies. A multiple regression analysis indicated that Asians and blacks, but not Hispanics, claimed they would tip smaller amounts than did whites, after statistically controlling for age, sex, education, income, experience working for tips, and counterbalance order (see Exhibit 3, Model 4). Compared with the average white's tip percentage, the average Asian's tip percentage was lower by 1.63 percentage points, $t(751) = -2.90$, one-tailed $p < .003$, and the average black's tip percentage was lower by 2.00 percentage points, $t(751) = -3.93$, one-tailed $p < .001$, while the average Hispanic's tip percentage was lower by only 0.43 percentage points, $t(751) = -0.80$, n.s. These findings partially replicate previously observed racial and ethnic differences in tipping.

### Effects of Perceived Tipping Norms on Tip Size

A mediator of an independent variables' effect on a dependent variable must be related to the dependent variable after controlling for the independent variable. This is a necessary, but not sufficient condition for mediation (Baron and Kenny 1986). Therefore, we next sought to see if our proposed mediators—perceived injunctive, proximate descriptive, and distal descriptive tipping norms—were predictive of tipping after controlling for race or ethnicity. Multiple regression analyses indicated that the perceived injunctive (Expected Tip), $B = .16$, $t(748) = 4.96$, one-tailed $p < .001$; proximate descriptive (Friend Tip), $B = .36$, $t(748) = 11.11$, one-tailed $p < .001$; and distal descriptive (Average Person Tip), $B = .30$, $t(748) = 8.77$, one-tailed $p < .001$, tipping norms were all significantly, positively related to tip amount after controlling for ethnicity and the other covariates in this study (see Exhibit 3, Model 5). Thus, one requirement for the mediation of racial and ethnic differences in tipping by perceived injunctive and descriptive tipping norms is met in the current data.

### Race and Ethnicity Differences in Perceived Tipping Norms

Mediators must also be related to the independent variable whose effects on the dependent variable they mediate (Baron and Kenny 1986). To test this requirement of mediation, we ran separate regression analyses predicting the injunctive tipping norm (Expected Tip), the proximate descriptive tipping norm (Friend Tip), and the distal descriptive tipping norm (Average Person Tip) from race or ethnicity and the other covariates in this study (see Exhibit 3, Models 1-3). These analyses indicated that when compared with whites, Asians and blacks believed the following:

1. Their best friends would tip less—Asians: $B = -1.34$, $t(751) = -2.32$, one-tailed $p < .02$; blacks: $B = -1.23$, $t(751) = -2.35$, one-tailed $p < .01$;

**Exhibit 3:**
**Coefficients (and Standard Errors) from Regression Analyses Predicting Friend Tip, Expected Tip, Average Tip, and Tip Amount.**

| | Model 1 Friend Tip | Model 2 Average Person Tip | Model 3 Expected Tip | Model 4 Tip Amount | Model 5 Tip Amount |
|---|---|---|---|---|---|
| Constant | 12.47*** (1.18) | 12.49*** (1.11) | 12.47*** (1.21) | 15.03*** (1.15) | 4.86*** (.92) |
| Counterbalance 1 | −0.25 (0.55) | 1.93*** (0.51) | 1.57** (0.56) | −1.68** (0.53) | −2.42*** (.39) |
| Counterbalance 2 | −0.07 (0.55) | 3.24*** (0.51) | 1.76** (0.56) | −0.78 (0.53) | −2.00*** (.40) |
| Counterbalance 3 | 1.60** (0.55) | 1.38** (0.52) | −0.19 (0.56) | −0.17 (0.53) | −1.13** (.39) |
| Worked for tips | −0.18 (0.43) | −0.01 (0.40) | 0.06 (0.44) | 0.16 (0.41) | 0.21 (.30) |
| Age | 0.01 (0.01) | −0.01 (0.01) | −0.003 (0.01) | −0.002 (0.01) | −0.001 (.01) |
| Sex | 0.77 (0.40) | 0.39 (0.37) | 0.45 (0.41) | 0.46 (0.39) | −0.01 (.28) |
| Education | −0.21 (0.15) | −0.13 (0.14) | −0.12 (0.16) | −0.06 (0.15) | 0.06 (.11) |
| Income | 0.27** (0.09) | 0.18* (0.08) | 0.16 (0.09) | 0.23** (0.08) | 0.05 (.06) |
| Asian | −1.34* (0.58) | −0.97 (0.54) | −0.98 (0.59) | −1.63** (0.56) | −0.70 (.41) |
| Black | −1.23* (0.53) | −1.13* (0.49) | −1.09* (0.54) | −2.00*** (0.51) | −1.05** (.37) |
| Hispanic | −0.51 (0.56) | 0.50 (0.52) | −0.11 (0.57) | −0.43 (0.54) | −0.38 (.39) |
| Friend Tip | | | | | 0.36*** (.03) |
| Average Person Tip | | | | | 0.30*** (.03) |
| Expected Tip | | | | | 0.16*** (.03) |
| $R^2$ | .06 | .08 | .04 | .06 | .51 |

*$p$ < .05. **$p$ < .01. ***$p$ < .001.

2. The average person would tip less—Asians: $B = -0.97$, $t(751) = -1.80$, one-tailed $p < .05$; blacks: $B = -1.13$, $t(751) = -2.30$, one-tailed $p < .02$; and
3. The minimum tip acceptable to waiters and waitresses was less—Asians: $B = -0.98$, $t(751) = -1.66$, one-tailed $p < .05$; blacks: $B = -1.09$, $t(751) = -2.03$, one-tailed $p < .03$.

These Asian–white and the black–white differences meet the second criterion for establishing perceived injunctive and descriptive tipping norms as mediators of the Asian–white and the black–white differences in tipping observed in this study. In contrast, Hispanics and whites did not significantly differ in perceptions of how much their best friend would tip, $B = -0.51$, $t(751) = -0.91$, n.s., how much the average person in their area would tip, $B = .50$, $t(751) = 0.97$, n.s., or what the minimum tip acceptable to waiters and waitresses would be, $B = -0.11$, $t(751) = -0.20$, n.s. These null results may explain why no reliable Hispanic–white difference in tipping was observed in this study.

## *Significance Tests for Indirect and Direct Race and Ethnicity Effects*

The analyses reported above indicate that perceived injunctive, proximate descriptive, and distal descriptive tipping norms meet Baron and Kenny's (1986) criteria for mediation of Asian–white and black–white (but not Hispanic–white) differences in tipping. However, those analyses do not directly assess the statistical significance of the indirect or mediated effects. Hayes's (2012) PROCESS macro for SPSS uses bootstrapping to generate confidence intervals for indirect (or mediated) effects, and this approach has greater statistical power than do Sobel tests (Zhao, Lynch, and Chen 2010). Analyzing the indirect effects of Asian and black ethnicity on tipping with this program, and using 5,000 bootstrap samples, produced the following results:

1. Asian ethnicity had significant indirect (mediated) effects on tipping through injunctive tipping norms ($B = -0.15$, $CI_{95\%}$ [−.39, −.01]) and proximate descriptive tipping norms ($B = -0.48$, $CI_{95\%}$ [−.92, −.10]), but not distal descriptive tipping norms ($B = -0.29$, $CI_{95\%}$ [−.67, .01]); and
2. Black ethnicity has significant indirect (mediated) effects on tipping through injunctive tipping norms ($B = -0.17$, $CI_{95\%}$ [−.43, −.01]), proximate descriptive tipping norms ($B = -0.44$, $CI_{95\%}$ [−.88, −.05]), and distal descriptive tipping norms ($B = -0.34$, $CI_{95\%}$ [−.68, −.07]).

Additional analyses (see Exhibit 3, Model 5) indicated that the direct effect of Asian ethnicity on tip amount (after controlling for perceived injunctive and descriptive tipping norms, as well as the other covariates in this study) was statistically reliable, $B = -0.70$, $t(748) = -1.72$, one-tailed p < .05. Furthermore, the direct effect of black ethnicity on tip amount (after controlling for perceived injunctive and descriptive tipping norms, as well as the other control

variables in this study) was statistically reliable, $B = -1.05$, $t(748) = -2.83$, one-tailed $p < .006$. This indicates that the Asian-white and black–white differences in tipping are only partially mediated by perceived tipping norms.

## Discussion

### Summary and Contribution of Findings

The results of this study make several contributions to our understanding of racial and ethnic differences in tipping. Most important, the results of this study provide evidence for the first time that perceived proximate and distal descriptive tipping norms have distinctive effects (above those of perceived injunctive tipping norms) as predictors of tipping behavior and mediators of race and ethnic differences in tipping. In fact, perceived descriptive tipping norms proved more important than perceived injunctive norms in explaining both Asian–white and black–white differences in tipping.

Second, the results of this study conceptually replicate two previous studies finding that perceived injunctive tipping norms mediate black–white differences in tipping using different measures of perceived injunctive tipping norms (Lynn 2011, 2014). They also extend that mediation effect to Asian–white differences in tipping for the first time. The conceptual replication is important because it indicates that the effects of perceived injunctive tipping norms are not artifacts of the measures used in the original studies. In addition, it helps to rule out common method variance, anchoring and adjustment biases, consistency pressures, and other impression management demands as alternative explanations for the positive relationship between measures of tipping behavior and perceived tipping norms. All these biases should have affected the relationships of tipping to perceived local injunctive, proximate descriptive, and distal descriptive tipping norms alike, so our modeling of multiple perceived norms simultaneously to test their independent effects effectively controlled for these validity threats (see Lynn, Kwortnik, and Sturman 2011, for a similar argument).

Finally, the results replicate one previous study that found an Asian–white difference in tipping (Lynn and Thomas-Haysbert 2003) and numerous other studies that found black–white differences in tipping (see Lynn 2006b for a review). The replication of the Asian–white difference in tipping provides important evidence that the one previous finding was not just a Type 1 error. The replication of the black–white difference in tipping adds little to our confidence in the validity of that difference but does provide some evidence for the validity of the hypothetical, self-report data used in this study.

The results of this study did not replicate previous studies finding that Hispanics perceive injunctive tipping norms differently than do whites and tip less than whites (Lynn 2006a, 2013, 2014). This discrepancy might reflect the fact that Hispanic ethnicity was allowed to supersede racial affiliation in this study, but not in those previous studies. In other words, the Hispanic–white tipping difference might have been diluted in this study by including as Hispanic all those who reported to be of Hispanic origin, regardless of whether they also reported being white or nonwhite. Separating the tips of white–Hispanics and nonwhite–Hispanics in this study did not support this possibility—neither group differed significantly from their non-Hispanic, white counterparts in self-reported tipping behavior. However, there were only sixty-one nonwhite–Hispanic respondents in this analysis, so we cannot rule out the possibility of a type II error. Thus, future researchers should further explore possible differences between white– and nonwhite–Hispanics' in perceptions of tipping norms and in tipping behaviors.

### Managerial Implications

The results of our study also have important implications for hospitality management. In particular, these findings suggest that many of the managerial problems stemming from race and ethnic differences in tipping (e.g., service discrimination, staffing difficulties in restaurants with large minority clientele, and reluctance to open restaurants in ethnic minority neighborhoods) could be alleviated by reducing and eventually eliminating race and ethnic differences in perceived injunctive and descriptive tipping norms. This latter goal is potentially achievable with marketing campaigns that promote the national 15 to 20 percent injunctive tipping norm and that inform consumers about widespread compliance with that norm. Such campaigns can and should be undertaken by restaurant managers and executives, as well as by restaurant industry organizations as detailed below.

Individual restaurateurs and restaurant chains can include tipping guidelines on menus, table tents, and checks. This approach, which has been demonstrated to be an effective way to increase tips more generally (Seiter, Brownlee, and Sanders 2011), would likely reduce ethnic differences in perceptions of the injunctive restaurant tipping norm, which our data suggest partially underlie Asian–white and black–white differences in tipping. In addition, restaurateurs should try to increase consumers' internalization of the promoted injunctive tipping norm by letting their customers know that servers make less than the regular minimum wage and depend on tips to make a living. This information could be included as part of interesting and fun tipping quizzes (with the answers in small print on the back) placed on table tents or menu inserts (Lynn 2011).

Of course, injunctive tipping norms are only half the story. In fact, in this study, injunctive tipping norms were

shown to be secondary in importance to perceptions of descriptive tipping norms. Thus, restaurant managers should also inform their customers about descriptive tipping norms. However, since ethnic minorities tip less than whites, it would probably be more effective to describe cross-racial rather than within-racial descriptive tipping norms. This information could be included as part of the interesting and fun tipping quizzes that we mentioned earlier.

Restaurant executives can also encourage and (through donations) help industry organizations, such as the National Restaurant Association and the Multi-Cultural Foodservice and Hospitality Alliance, to run public service announcements (PSAs) educating the people about (1) servers' substandard wages and dependence on tips, (2) servers' expectations about how much consumers should tip, and (3) the general public's compliance with those expectations. The PSAs should not mention ethnic differences in tipping behavior, because doing so would only reinforce separate and different descriptive tipping norms across racial groups. Furthermore, these PSAs should be targeted at the general public (not just ethnic minorities) and should identify maximum and minimum normative tip amounts. The desire to show off or to appear generous has led to a steady increase in the white normative tip percentage over time (Azar 2004). Reversing or capping that escalation in normative tip size among whites would help to reduce ethnic differences in perceived tipping norms no less than would increasing the size of the perceived injunctive and descriptive tipping norms among ethnic minorities.

None of the above ideas are new; all have been previously advocated by coauthor Lynn (2004, 2006a, 2011, and 2014). The contribution of this study is not in suggesting new ideas for managerial action, but in strengthening the empirical basis for believing that some of the existing ideas will work. As previously discussed, this study provides the first evidence that descriptive tipping norms mediate race or ethnic differences in tipping, and it provides stronger evidence than previous studies that injunctive norms mediate those differences. The practical importance of these findings is that they support the contention that one way to reduce race or ethnic differences in tipping is by reducing ethnic differences in perceived injunctive and descriptive tipping norms.

Readers of this paper may question (as one reviewer did) the practical value of our findings on the grounds that more than ten years of calling for efforts to reduce racial and ethnic differences in perceived tipping norms have gone unheeded by the industry (see Amer 2002; Lynn, 2004, 2006b, 2014). It could be argued that information is only as useful as people's willingness to act on it, and the industry has clearly indicated that it is unwilling to act on information about the causes of racial and ethnic differences in tipping. We have three responses to this argument. First, there is a difference between use and usefulness. While the use of information depends on people's willingness to act on it, the usefulness of information does not. Our findings are useful whether or not people choose to use them at this time because they have clear implications about how to solve a real industry challenge, namely, racial and ethnic differences in tipping. We believe this useful research should be published so that it is available for use if and when the industry is finally ready to actively respond.

Second, although a national public relations campaign promoting the 15 to 20 percent restaurant tipping norm has yet to materialize, that does not mean the research on race differences in tipping used to justify such a campaign has had no impact. In fact, this research has been used by several black newspapers in at least one regional education campaign intended to increase tipping in black communities (Wallace 2008). That "Tipping Education Campaign" won the *Tri-State Defender* a Chrysler Financial/NNPA award (Ajanaku 2008). Furthermore, research on race differences in tipping has been used and discussed by members of the restaurant industry in featured sessions on ethnicity and tipping at two national conventions of the Multicultural Foodservice and Hospitality Alliance (MFHA) and in two cover-page stories of *Restaurant Business* (Amer 2002; Malone 2004). In additional, research on race differences in tipping has undoubtedly made it easier for the industry to openly discuss the issue by providing objective evidence to silence those who would label as racist anyone claiming that such race differences exist (see Romeo 2002, for a discussion of this point). Thus, if past impact of similar research is a measure of value, then our findings are, indeed, of practical value.

Finally, failure to get as rapid, robust, and vigorous a response as hoped for is a reason for continued effort, not a reason to give up. Research on race differences in tipping and calls for education campaigns designed to reduce race differences in perceived tipping norms may have effects that accumulate over time and eventually reach a critical mass that prompts vigorous and robust industry action. Such an effect would be consistent with field studies on the effects of voluntary, distributed exposures to advertisements. Those studies have found that consumers must be exposed to a message numerous times to maximize its effectiveness and that "an ad campaign may never wear out [in other words, lose effectiveness] if the exposure rate is low enough and if the ads are updated or modified periodically" (Pechman and Stewart 1988, 293). By periodically strengthening the evidentiary basis for calls to reduce racial and ethnic differences in perceived tipping norms, researchers can keep the issue alive and may slowly build support for such actions. Finally, additional research and renewed calls for action are necessary to reach new decision makers within the industry who were not exposed to previous research and calls for action. Thus, there is reason to believe

that continued study and discussion of race differences in tipping may eventually produce a stronger and more positive reaction from the restaurant industry than has been the case heretofore.

### *Study Limitations and Directions for Future Research*

Although our results make substantial contributions to understanding race differences in tipping and to hospitality management as described above, limitations in our methodology and findings leave much to be done in future research. Online surveys like ours have at least three problems that call for replication of the findings using different methodologies. First, online surveys attract some non-serious, dishonest, or careless participants whose responses are of questionable validity and may artificially inflate error terms. This necessitates the identification and elimination of significant outliers as we have done. However, the deletion of data is less than ideal and could itself bias results if the deleted outliers turned out not to be erroneous values.

Second, online surveys are subject to framing and self-selection problems that can lead to unrepresentative samples and biased results. In our case, the sample is clearly not representative, because we intended to over-sample ethnic minorities, and succeeded in doing so. More problematic, however, is the possibility (remote, we hope) of race differences in self-selection into the sample that might bias all racial comparisons of survey responses.

Finally, online surveys rely on self-reports that could be biased by subjects' self-presentational concerns or lack of self-awareness. In this case, each of our tests of perceived norm effects controlled for perceptions of other norms, which should have captured the same self-presentational concerns, so the key relationships of interest should be relatively free of self-presentational biases. Nevertheless, it remains possible that people's self-reported, hypothetical tipping behavior is different from what they would actually tip in a real dining experience.

The solution to these problems is not to abjure online surveys, but to replicate online survey findings using face-to-face surveys, objective data, or other methods that are less subject to these problems.[1] Fortunately, ethnic differences in tipping have been documented using a variety of different methodologies (see Lynn 2006b), so our replication of those race differences provides some support for the validity of our findings. Nevertheless, future researchers should try to replicate all our findings using different sources of data and methodologies.

In addition to the methodological limitations described above, our study was limited in scope by design. In particular, we decided to examine differences in the perceived tipping norms and tipping behaviors of Asians, blacks, Hispanics, and whites without measuring and examining differences within each of those groups. While the members within each of these racial and ethnic categories have commonalities, there are subcultural and individual differences within each that may moderate the effect on tipping attitudes, perceptions, and behavior of membership in the larger ethnic group (Hoyer and MacInnis 2010). Indeed, subcultural differences in the Asian and Hispanic communities may explain the inconsistent effects of these ethnic identities on tipping that have been observed across numerous studies (see Lynn 2006a, 2011, 2013, 2014; Lynn and Thomas-Haysbert 2003), as well as our failure to find previously observed Hispanic-white differences in tipping and in perceived tipping norms. Given the size and growth of the Asian and Hispanic markets in the United States (Nasser 2011), future researchers should begin to examine subcultural differences within these groups, as well as differences between them.

Finally, the results of our study provided a more limited explanation for Asian-white and black–white differences in tipping than we had hoped for. To be sure, our expansion and refinement of the normative framework did help to account for more of these racial differences in tipping than had previously been explained, but the direct effects of being Asian or black on tipping were reliable after controlling for perceived tipping norms in our study, so further research identifying and testing other causal mechanisms is clearly warranted.

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## Note

1. Note that these other methodologies have their own weaknesses. For example, studies using credit-card records or servers' recordings of tips are possible, but access to this type of data is rare and generally comes only from one or two restaurants. This, in combination with the relatively small numbers of ethnic minorities in the population, makes it very hard to get sizable samples and impossible to get geographically diverse samples, of those minorities in studies using these more objective measures. While not ideal, online surveys obtaining self-reported tipping behavior in response to a hypothetical scenario are really the only way to learn about the tipping behavior of a large, geographically diverse sample of ethnic minorities. That is why many of the published

studies on this topic have relied on general surveys such as the one here. Fortunately, tipping is a conscious behavior (though it can also be influenced by processes outside of awareness) so people should be able to give reasonably accurate reports on their general tipping intentions and behavior.

## References


Ajanaku, K. 2008. *Tri-State Defender nets award in national competition*. http://tri-statedefenderonline.com (accessed April 21, 2012).

Amer, S. 2002. Minority report. *Restaurant Business*, November 15, 27-38.

Azar, O. 2004. What sustains social norms and how they evolve? The case of tipping. *Journal of Economic Behavior & Organization* 54:49-64.

Barkan, R., and A. Israeli. 2004. Testing servers' roles as experts and managers of tipping behavior. *Service Industries Journal* 24:91-108.

Baron, R., and D. Kenny. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology* 51:1173-82.

Bodvarsson, O. B., W. A. Luksetich, and S. McDermott. 2003. Why do diners tip: Rule-of-thumb or valuation of service? *Applied Economics* 35 (15): 1659-65.

Brewster, Z. W. 2012a. Racialized customer service in restaurants: A quantitative assessment of the statistical discrimination explanatory framework. *Sociological Inquiry* 82 (1): 1-26.

Brewster, Z. W. 2012b. Racially discriminate service in full-service restaurants: The problem, cause, and potential solutions. *Cornell Hospitality Quarterly* 53 (4): 359-84.

Brewster, Z. W. 2013. The effects of restaurant servers' perceptions of customers' tipping behaviors on service discrimination. *International Journal of Hospitality Management* 32 (1): 228-36.

Brewster, Z. W., and C. Mallinson. 2009. Racial differences in restaurant tipping: A labour process perspective. *The Service Industries Journal* 29:1053-75.

Brewster, Z. W., and S. N. Rusche. 2012. Quantitative evidence of the continuing significance of race: Tableside racism in full-service restaurants. *The Journal of Black Studies* 43 (4): 359-84.

Cho, H. 2006. Influences of norm proximity and norm types on binge and non-binge drinkers: Examining the under-examined aspects of social norms interventions on college campuses. *Journal of Substance Use* 11:417-29.

Cialdini, R. B., R. R. Reno, and C. A. Kallgren. 1990. A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology* 58:1015-26.

Dirks, D., and S. Rice. 2004. "Dining while Black": Tipping as social artifact. *Cornell Hotel and Restaurant Administration Quarterly* 45:30-47.

Fisher, R. J., and L. L. Price. 1992. An investigation into the social context of early adoption behavior. *Journal of Consumer Research* 19:477-86.

Hayes, A. F. 2012. *PROCESS*. http://www.afhayes.com/public/process.pdf (accessed September 18, 2014).

Hoyer, W. D., and D. J. MacInnis. 2010. *Consumer behavior*. Mason, OH: South-Western.

Larimer, M. E., and C. Neighbors. 2003. Normative misperception and the impact of descriptive and injunctive norms on college students gambling. *Psychology of Addictive Behaviors* 17 (3): 235-43.

Lee, C. M., I. M. Geisner, M. A. Lewis, C. Neighbors, and M. E. Larimer. 2007. Social motives and the interaction between descriptive and injunctive norms in college student drinking. *Journal of Studies on Alcohol and Drugs* 68:714-21.

Lynn, M. 2004. Ethnic differences in tipping: A matter of familiarity with tipping norms. *Cornell Hotel and Restaurant Administration Quarterly* 45:12-22.

Lynn, M. 2006a. Geodemographic differences in knowledge about the restaurant tipping norm. *Journal of Applied Social Psychology* 36:740-50.

Lynn, M. 2006b. Race differences in restaurant tipping: A literature review and discussion of practical implications. *Journal of Foodservice Business Research* 9:99-113.

Lynn, M. 2011. Race differences in tipping: Testing the role of norm familiarity. *Cornell Hospitality Quarterly* 52 (1):73-80.

Lynn, M. 2013. A comparison of Asians', Hispanics', and whites' restaurant tipping. *Journal of Applied Social Psychology* 43:834-39

Lynn, M. 2014. The contribution of norm familiarity to race differences in tipping: A replication and extension. *Journal of Hospitality & Tourism Research* 38 (3):414-425.

Lynn, M., R. J. Kwortnik Jr., and M. J. Sturman. 2011. Voluntary tipping and selective attraction and retention of service workers in the United States: An application of the ASA model. *International Journal of Human Resources Management* 22 (9): 1887-1901.

Lynn, M., and C. Thomas-Haysbert. 2003. Ethnic differences in tipping: Evidence, explanations, and implications. *Journal of Applied Social Psychology* 33:1747-72.

Malone, M. 2004. Race matters. *Restaurant Business*, October 1, 31-2.

Massey, D., and N. Denton. 1993. *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

McCall, M., and A. Lynn. 2009. Restaurant servers' perceptions of customer tipping intentions. *International Journal of Hospitality Management* 28:594-96.

Miller, M., L. Smith-Lovin, and J. M. Cook. 2001. Birds of a feather: Homophily in social networks. *Annual Review of Sociology* 27:415-44.

Nasser, H. E. 2011. Census: Hispanic, Asian populations soar. *USA Today*, March 25. http://usatoday30.usatoday.com/news/nation/census/2011-03-24-hispanics-census_N.htm (accessed July 14, 2013).

Neighbors, C., R. M. O'Connor, M. A. Lewis, N. Chawla, C. M. Lee, and N. Fossos. 2008. The relative impact of injunctive norms on college student drinking: The role of reference group. *Psychology of Addictive Behavior* 22:576-81.

Park, H. S., K. A. Klein, S. Smith, and D. Martell. 2009. Separating subjective norms, university descriptive and injunctive norms, and U.S. descriptive and injunctive norms for drinking behavior intentions. *Health Communication* 24:746-51.

Pechman, C., and D. W. Stewart. 1988. Advertising repetition: A critical review of wear-in and wear-out. *Current Issues & Research in Advertising* 11 (1-2): 285-329.

Romeo, P. 2002. Editor's note: Lightning rod. *Restaurant Business*, November 15, 4.

Rusche, S. E., and Z. Brewster. 2008. "Because they tip for shit!": The social psychology of everyday racism in restaurants. *Sociology Compass* 2:2008-2029.

Seiter, J. S., G. M. Brownlee, and M. Sanders. 2011. Persuasion by way of example: Does including gratuity guidelines on customers' checks affect restaurant tipping behavior? *Journal of Applied Social Psychology* 41 (1): 150-59.

Wallace, L. 2008. *The tipping gamble: Good service today, insults tomorrow*. http://tri-statedefenderonline.com (accessed April 21, 2012).

Zhao, X., J. G. Lynch Jr., and Q. Chen. 2010. Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research* 37:197-206.

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