

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

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Running Head: RACE DIFFERENCES IN TIPPING

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Abstract

In U.S. restaurants, racial and ethnic minorities often tip less than Whites and these differences in tipping create numerous problems ranging from discriminatory service to restaurant executives' reluctance to open new 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 to 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/ethnic differences in tipping. This finding suggests that racial differences in tipping can be reduced with marketing campaigns that promote the dominate 15 to 20 percent injunctive tipping norm and that inform consumers about widespread compliance with that norm.

KEYWORDS: services; tipping; social norms; race differences

Racial and Ethnic Differences in Tipping:

The Role of Perceived Descriptive and Injunctive Tipping Norms

Asians, Blacks, and Hispanics are widely perceived with-in the U.S. restaurant industry to be poor tippers (McCall & 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' educations and incomes (Lynn, 2006b). Thus, the race differences in tipping cannot be dismissed simply as reflecting socio-economic differences across racial/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 & Israeli, 2004; Bodvarsson, Luketich, 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 & Mallinson, 2009; Brewster & Rusche, 2012; Dirks & Rice 2004; Lynn, 2004; Rusche & Brewster 2008). This 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 & 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 and a series of articles by Lynn (2004, 2006a, 2011, and 2012) has argued that Black-White and Hispanic-White differences in tipping 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, 2012). 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, 2012).

In this paper, we conceptually replicate and extend Lynn's (2004, 2006a, 2011, and 2012) work on a normative explanation for racial and ethnic differences in tipping. The conceptual replication involves re-examining 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-Loven & Cook, 2001) suggests that the tipping behaviors of Black, Hispanic, Asian, and White Americans may be governed by overlapping and yet unique 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 & Kallgren, 1990), which depend on the visibility of the normative behavior (Fisher & Price, 1992). In restaurant settings, it is typically only the tipper and the waiter/waitress who knows precisely the check and tip total. In fact, bills and tips are usually either formally (e.g., check booklets) or informally (e.g., turning the

bill upside down on the table) concealed from others. 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 2012) 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 & 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/or 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 threats (see Lynn, Kwortnik and Sturman, 2011, for a similar argument) and, thus, increases our confidence that perceived injunctive and descriptive tipping norms really do affect tipping and mediate race differences in tipping.

Insert Figure 1 about here

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 Figure 1. Data on these variables come from an online survey of a diverse sample of Asians, Blacks, Hispanics, and Whites. More details about the study are provided below.

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 and moderator variables ($n = 64$) and/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-facia 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 usable data. The final sample was not representative of the U.S. population, but it was demographically diverse (see Table 1).

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 and services that were "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 participant. In addition, the order of presentation of the pictured restaurants (each with its own unique bill size) was constant across participants. The four tipping questions were counterbalanced in a Latin-Square design across the four pictures/bills/presentation-orders. By varying the stimuli associated with each of our four tipping questions in this manner, we hoped to (i) reduce participants' likelihood of adopting a rote or unthinking response set, and (ii) 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, 765) > 4.75, 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 in order 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 homogenous nature of interpersonal networks and the saliency 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 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?” 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)

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 answers to this question were

converted to a percentage of the bill and that percentage was used as the measure of local injunctive tipping norms.

Race/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/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 other questions. The answers to these questions were included in in this study as covariates, because each has been shown to affect tipping behaviors. Those co-variates were:

- 1) personal experience working for tips (yes=1, no = 0),
- 2) age (in years), sex (males=1, females =2),
- 3) education (“High School/GED or less” = 1, “Some College” = 2, “2-year College Degree” = 3, “4-year College Degree” = 4, “Masters Degree” = 5, and “Professional or Doctoral Degree (JD, MD, PhD)” = 6, and
- 4) 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).

The few missing values for these covariates were assigned the modal or median value as appropriate given the variable's scale of measurement.

Results

Descriptive statistics for the measures in this study are presented in Table 1. These data were used to assess the effects of race/ethnicity on tipping (after statistically controlling for age, sex, education, income, experience working for tips, and counter-balance order) as well as the role of perceived local injunctive, proximate descriptive, and distal descriptive tipping norms as mediators of the race/ethnicity effects. The findings are summarized in Table 2 and briefly described below.

Insert Table 1 about here

Race/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 counter-balance order (see Table 2, Model 4). Compared to 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 percent 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 & 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/ethnicity. A 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 Table 2, 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/Ethnicity Differences in Perceived Tipping Norms

Mediators must also be related to the independent variable whose effects on the dependent variable they mediate (Baron & Kenny, 1986). To test this requirement of mediation, we ran separate regression analyses predicting the injunctive tipping norm (i.e., Expected Tip), the proximate descriptive tipping norm (i.e., Friend Tip), and the distal descriptive tipping norm (i.e., Average Person Tip) from race/ethnicity and the

other covariates in this study (see Table 2, Models 1-3). These analyses indicated that when compared to Whites, Asians and Blacks believed:

- 1) their best friends would tip less (Asians: $B = -1.34$, $t(751) = -2.32$, one-tailed $p < .01$; Blacks: $B = -1.23$, $t(751) = -2.35$, one-tailed $p < .01$),
- 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/waitresses was less (Asians: $B = -0.98$, $t(751) = -1.66$, one-tailed $p < .07$; Blacks: $B = -1.09$, $t(751) = -2.03$, one-tailed $p < .03$), though the latter Asian-White difference did not reach conventional levels of statistical significance.

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 ($B = .50$, $t(751) = .97$, n.s.), or what the minimum tip acceptable to waiters/waitresses was ($B = -0.11$, $t(751) = -0.20$, n.s.). These null results may explain why no reliable Hispanic-White difference in tipping was observed in this study.

Insert Table 2 about here

Significance Tests for Indirect and Direct Race/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' (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 & Chen, 2010). Analyzing the indirect effects of Asian and Black ethnicity on tipping with this program, and using 5000 bootstrap samples, produced the following results:

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

Additional analyses (see Table 2, 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 ($B = -0.70$, $t(751) = -1.72$, 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 ($B = -1.05$, $t(751) = -2.83$, one-tailed $p < .006$). This indicates that the Asian-White and Black-White difference 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 importantly, the results of this study provide evidence for the first time that perceived proximate and distal descriptive tipping norms have unique effects (above those of perceived injunctive tipping norms) as predictors of tipping behavior and mediators of race/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, 2012). 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/or other impression management demands as alternative explanations for the positive relationship between measures of tipping behavior and perceived tipping norms. All of 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 finding an Asian-White difference in tipping (Lynn and Thomas-Haysbert, 2003) and numerous other studies finding 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 the current 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, 2006, 2012, 2013). This discrepancy might reflect the fact that Hispanic ethnicity was allowed to supersede racial affiliation in the current study, but not in those previous studies. In other words, the Hispanic-White tipping difference might have been diluted in the current study by including as Hispanic all those who reported to be of Hispanic origin, regardless of whether they also reported being white or non-white. Separating the tips of white-Hispanics and nonwhite-Hispanics in the current study did not support this possibility — neither group differed significantly from their non-Hispanic, White counterparts in self-reported tipping behaviors. However, there were only 61 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 the current study also have important implications for hospitality management. In particular, they 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 later 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 has been demonstrated to be an effective way to increase tips more generally (Seiter, Brownlee & Sanders, 2011) and would likely reduce ethnic differences in perceptions of the injunctive restaurant tipping norm, which the current data suggests partially underlies 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 previously suggested.

Restaurant executives can also encourage and (thru donations) help industry organizations, like the National Restaurant Association and the Multi-Cultural Foodservice and Hospitality Alliance, to run public service announcements (PSA) educating the people about (i) servers' substandard wages and dependence on tips, (ii) servers' expectations about how much consumers should tip, and (iii) the general public's compliance with those expectations. The PSAs should not mention ethnic differences in tipping behavior since doing so would only reinforce separate and different descriptive tipping norms across racial groups. Furthermore, these PSA's should be targeted at the general public (not just ethnic minorities) and should identify maximum as well as minimum normative tip amounts. The desire to show off and/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 Lynn (2004, 2006a, 2011, and 2012). The contribution of this study is not in suggesting new ideas for managerial action, but in increasing the empirical basis for believing that some of the ideas we already have will work. As previously discussed, this study provides the first evidence that descriptive tipping norms mediate race/ethnic differences in tipping and it provides stronger evidence than previous studies that injunctive norms mediate race/ethnic differences in tipping. The practical importance of these findings are that they support claims (made previously and repeated here) that one way to reduce race/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 over ten years of calling for efforts to reduce racial/ethnic differences in perceived tipping norms have gone unheeded by the industry (see Amer, 2002; Lynn, 2004, 2006b, 2012). 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/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/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/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). Additionally, 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 consumer must be exposed to a message

more than once 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 & Stewart, 1988, pg. 293). By periodically strengthening the evidentiary basis for calls to reduce racial/ethnic differences in perceived tipping norms, researchers can keep the issue alive and may slowly build support for such actions. Furthermore, 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 their findings using different methodologies. First, online surveys attract some non-serious, dishonest, and/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 are not 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 -- we intended to, and succeeded in, over-sampling ethnic minorities. 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 and/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.

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 like 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.

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 sub-cultural and individual differences within each that may moderate the effect on tipping attitudes, perceptions and behaviors of membership in the larger ethnic group (Hoyer and MacInnis, 2010). Indeed, sub-cultural differences in the Asian and Hispanic communities may explain the inconsistent effects of these ethnic identities on tipping that have been observed across studies (see Lynn and Thomas-Haysbert, 2003; Lynn, 2006a, 2011, 2012, 2013) 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 U.S. (Nasser, 2011), future researchers should begin to examine sub-cultural 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 effect of being Asian or Black on tipping was reliable after controlling for perceived tipping norms in our study, so further research identifying and testing other causal mechanisms is clearly warranted.

Conclusions

Racial and ethnic minorities often tip less than Whites in U.S. restaurants and these differences in tipping create numerous problems ranging from discriminatory service to restaurant executives' reluctance to open new restaurants in minority communities. The current study found that perceived injunctive and descriptive tipping norms independently mediate Asian-White and Black-White differences in tipping, which suggests that those differences, and their attendant problems, 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. Hopefully, this paper will encourage such marketing campaigns.

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Table 1. Descriptive statistics for all participants and by racial/ethnic group.

	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
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

RACE DIFFERENCES IN TIPPING 32

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

Table 2. 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.

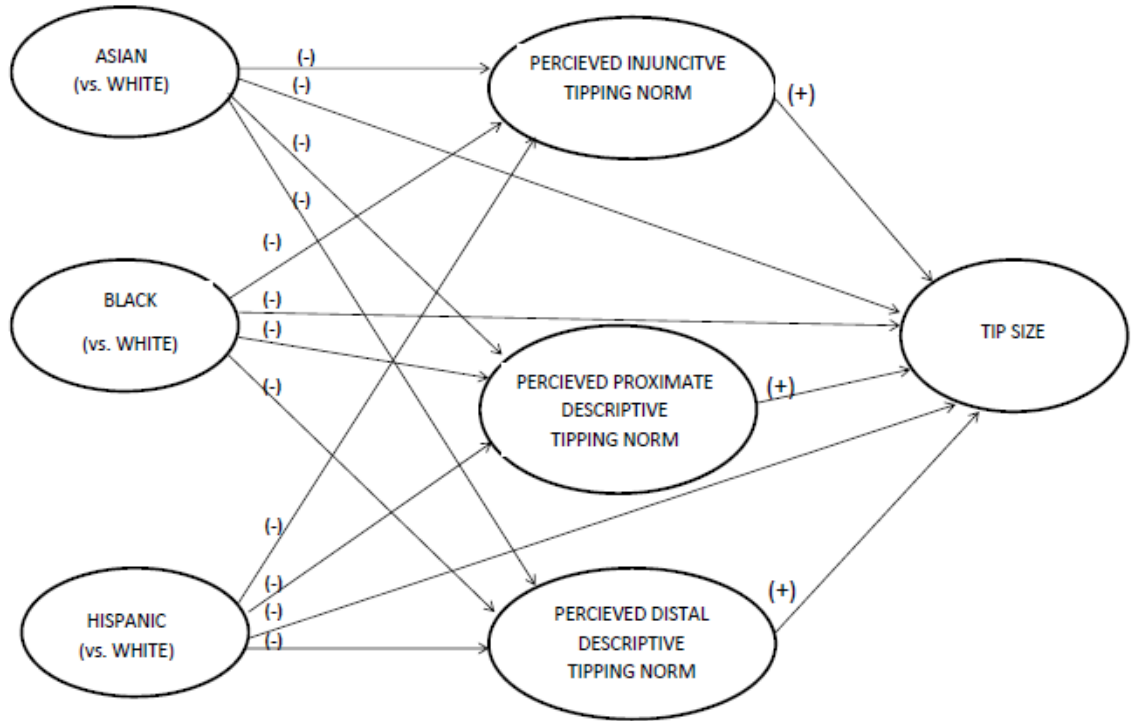


Figure 1. Model of relationships examined in this study and expected effects.