

Race Differences in Tipping: Testing the Role of Norm Familiarity

Michael Lynn

School of Hotel Administration, Cornell University

545 Statler Hall, Cornell University, Ithaca, NY 14853-6902

Tel. 1 (607) 255-8271

Email: WML3@cornell.edu

Cornell Hospitality Quarterly (forthcoming)

ABSTRACT

On average, Blacks tip less than Whites in the United States. As a result, many servers dislike waiting on black tables and deliver inferior service to those Blacks seated in their sections. Furthermore, this race difference makes it difficult to attract and retain wait-staff in predominately black neighborhoods, which makes such neighborhoods less attractive places for corporations to locate full-service restaurants. To solve these problems, race differences in tipping need to be sizably reduced (if not eliminated). In a 2004 *Cornell Hotel and Administration Quarterly* article, Michael Lynn suggested that race differences in tipping were caused by race differences in awareness of tipping norms, so that reducing the latter would also reduce the former. This argument makes two assumptions that Lynn never tested; namely that norm awareness mediates race differences in tipping and that race does not moderate the effects of norm awareness on tipping. This paper presents a study that tests and supports both of these assumptions. The results suggest that race differences in tipping can be sizably reduced (though not eliminated) by educating Blacks about appropriate tipping norms, so restaurant managers as well as major industry organizations are encouraged to engage in such educational campaigns.

Race Differences in Tipping: Testing the Role of Norm Familiarity

African Americans are widely perceived within the restaurant industry as poor tippers. In fact, one recent survey of over a thousand servers from across the United States found that over sixty-five percent rated African Americans as “below average tippers” (McCall and Lynn, 2009). Among eighteen different groups of customers rated in that study, only teenagers and foreigners were more likely than African Americans to be regarded as poor tippers. This perception poses a problem for managers in the restaurant industry, because it leads many servers to dislike waiting on Black tables and to deliver inferior service to those Blacks seated in their sections (Rusche and Brewster, 2008). Furthermore, servers’ perceptions of Black tippers makes it difficult to recruit and retain wait-staff in predominately Black neighborhoods (Amer, 2002), which in turn makes restaurant corporations less likely to locate full-service restaurants in those neighborhoods (Wallace, 2001).

Complicating efforts to address these problems is the fact that servers’ perceptions of black tippers are grounded in reality. Several studies have found that Blacks are less likely than Whites to base their tips on bill size and that they leave smaller tips as a percentage of the bill than do Whites (Lynn, 2004a, 2009; Lynn & Thomas-Haysbert, 2003; Lynn, et. al., 2008). Moreover, these race differences persist even after controlling for customer education and income and for service quality (Lynn, 2006). These findings suggest that the problems associated with servers’ perceptions of black tippers cannot be solved merely by hiring non-racist servers or by telling servers that their perceptions are incorrect. Solving these problems requires either a reduction in the race differences in tipping or use of something other than tips to motivate wait-staff.

In a 2004 article in the *Cornell Hotel and Restaurant Administration Quarterly*, Michael Lynn argued that Black-White differences in restaurant tipping were due to differences in familiarity with the 15 to 20 percent restaurant tipping norm (see Figure 1) and, therefore, that those race differences in tipping could be reduced with an educational campaign designed to increase Blacks' awareness of the tipping norm. Consistent with this idea, he found that only 37 percent of Blacks, as compared to 71 percent of Whites, in a national telephone survey knew that the expected or normative restaurant tip was 15 to 20 percent of the bill size. Although this race difference in familiarity with the restaurant tipping norm has been replicated in a second national telephone survey (Lynn, 2006), it is insufficient to support Lynn's claims that race differences in tipping behavior are caused by differences in norm familiarity and that reducing the latter would diminish the former. Demonstrating such a mediation effect would require either manipulating familiarity with the tipping norm and observing its effect on race differences in tipping behavior or (failing that) measuring both norm awareness and tipping behavior and finding that race differences in behavior are attenuated after controlling for norm awareness. No such tests have been reported in the existing literature.

In the absence of data permitting tests of mediation, Lynn (2004b) has supported his claims that race differences in tipping are mediated by differences in awareness of tipping norms by arguing that such norms clearly guide the tipping behavior of Whites but cannot guide the behavior of Blacks who are unaware of them. Although persuasive, this argument makes a questionable assumption – namely that awareness of tipping norms will affect the tips of Blacks much as it does the tips of Whites. However, it is possible that Blacks who become aware of tipping norms choose not to comply with them.

Norm compliance is generally motivated by either an internalization of the norm or a concern for the social consequences of norm violation and this true for tipping norms as well (Lynn, 2009). Blacks may be less likely than Whites to internalize tipping norms because they learn about them from different people and in different ways than do Whites. More specifically, Whites probably learn about tipping norms from their parents. However, Blacks are less likely than Whites to know the norm (Lynn, 2004b; 2006) and, thus are less able to pass it on to their children or friends. As a consequence, Blacks are probably more likely to learn tipping norms from strangers. Since people are more likely to identify with family and friends than with strangers, this conjectured race difference in source of norm awareness may reduce Blacks' internalization of those tipping norms with which they are familiar. Similarly, the fact that Blacks comply with tipping norms less than do Whites may reduce the social pressure to comply felt by those Blacks who are aware of the norms, because people tend to look to similar others as their reference groups. These possibilities suggest that awareness of tipping norms may interact with race to affect tipping behavior such that race differences are greater when norm awareness is high or (equivalently) norm awareness effects on tipping are greater for Whites than for Blacks (see Figure 2). No tests of this interaction have been reported in the published literature on tipping. Some evidence against the likelihood of finding such an interaction is provided by Lynn's (2009) findings that Blacks and Whites were equally likely to claim that they tip to follow social norms. However, that motivation for tipping was not widely endorsed by either group and self-reported motivations are suspect because, as Lynn (2009) acknowledges, "people may not be fully aware of their motives (Nisbett and Wilson, 1977) and may be unwilling to publicly admit to some of those

motives they are aware of (Schlenker, 1980).” Thus, direct tests of the interaction are warranted.

The data and analyses reported in this paper were primarily intended to provide needed tests of the ideas that familiarity with the restaurant tipping norm mediates (see Figure 1) and/or moderates (see Figure 2) race effects on restaurant tipping behavior. Specifically, survey data about white and black consumers’ familiarity with tipping norms and their tipping behaviors are analyzed to see if race differences in behavior are attenuated after controlling for norm awareness. The data are also analyzed to see if norm awareness interacts with race to affect tipping behavior. Some of the data from this survey have been reported in an article by Lynn (2009), including the data on race differences in tipping behavior. However, Lynn’s (2009) article was not focused on race differences and he did not report on the survey’s data about race differences in familiarity with tipping norms. Nor did he test to see if norm familiarity mediated or moderated the Black-White differences in tipping behavior he observed. Thus, this paper goes substantially beyond Lynn’s (2009) article and provides new findings that bear on an important issue in restaurant management. A secondary purpose of the paper is to go beyond the existing literature by examining for the first time race differences in awareness of other (non-restaurant) tipping norms and their effects on tipping behavior.

METHOD

Sample

Members of the Zoomerang.com consumer panel were asked via e-mail to complete a brief web-based survey about tipping norms and habits. The company sent out

invitations (10, 729 in all) in waves until target numbers of at least 100 black respondents with no college education, 100 black respondents with some college education, 100 white respondents with no college education, and 100 white respondents with some college education were reached, which occurred after 831 people responded giving a response rate of 7.75 percent. Respondents in the final sample ranged in age from 17 to 86 years with a mean age of 43 years. Sixty eight percent were female, 54 percent were white, 46 percent were black, 65 percent had at least some college education, and 38 percent earned \$50,000 or more a year. Although not representative of the U.S. population, this sample is very heterogeneous and well suited for the purpose of examining race differences in tipping.

Survey Questions

Among other things, participants were asked about their knowledge of tipping norms, their tipping habits, and their demographic characteristics. More details about these questions are provided below.

Restaurant tipping norm. Participants were asked: “How much are people in the United States generally expected to tip restaurant waiters and waitresses?” The response options were: “Nothing;” “\$1-2;” “\$3 or more;” “less than 10% of the bill;” “10-15% of the bill;” “15-20% of the bill;” “more than 20% of the bill;” and “don’t know.” Since the restaurant tipping norm in the United States calls for tipping 15 to 20 percent of the bill (see Lynn, 2006), those participants responding with any of the percentage responses were coded as knowing the restaurant tipping norm in all analyses of restaurant tip type, but only those responding “15-20% of the bill” were coded as knowing the restaurant tipping norm in the analyses of restaurant tip percentage.

Non-restaurant tipping norms. Participants were asked: "Which of the following other service providers are people generally expected to tip in the United States?" In addition to some non-tipped occupations, the list of service providers included the following tipped occupations: bartenders, hair cutters, hotel maids, luggage handlers at hotels or airports, parking valets, pizza delivery drivers, and taxi drivers. The response options were: "tipped" "not tipped;" and "don't know." Participants responding "tipped" for a given tipped occupation were coded as having some knowledge of the tipping norm for that occupation. Also, data on (and analyses of) hotel maids and luggage handlers were not included in this paper, because there were no reliable ($p < .05$) race differences in tipping of these service providers in the current data.

Restaurant tipping behavior. Following Lynn and Thomas-Haysbert (2003: Study 1), participants were asked: "How much do you usually tip restaurant waiters and waitresses who give you good service?" The response options were: "Nothing;" "\$1-2;" "\$3 or more;" "less than 10% of the bill;" "10-15% of the bill;" "15-20% of the bill;" "more than 20% of the bill;" and "not applicable (I never eat at restaurants)." These responses were used to create two variables – tip type (dollar = 0, percent = 1) and percentage tip size (less than 10% coded as 8.5, 10-15% =coded as 12.5, 15-20% coded as 17.5, and more than 20% coded as 22.5). A third variable, dollar tip size was not analyzed in this study because Lynn (2009) found no reliable race effect on this measure.

Stiffing (not tipping) behavior outside of restaurants. Participants were asked: "How often do you tip the following service providers when they serve you?" The list of service providers included bartenders, hair cutters, hotel maids, luggage handlers at hotels or airports, parking valets, pizza delivery drivers, and taxi drivers. The response options

were: “1 - always/usually tip;” “2 – sometimes tip;” “3 – don’t tip;” and “4 – don’t use this service” so higher numbers represent a greater likelihood of stiffing (not tipping) that service provider. Participants responding “don’t use this service” were given a missing value on these variables. Also, data on (and analyses of) hotel maids and luggage handlers were not included in this paper, because there were no reliable ($p < .05$) race differences in stiffing of these service providers in the current data.

Demographic characteristics. Participants were asked to provide information about their age (in years), sex (M = 1, F = 2), race (White = 1, Black = 2; 36 respondents not answering this questions or indicating that were other than White or Black were dropped from analysis), education (using a seven point ordinal scale from 1 = “8th grade or less” to 7 = “Post-graduate”), and income (using a nine point ordinal scale from 1 = “under \$15,000” to 9 = “\$100,000 or more”).

RESULTS

Descriptive results. Sample sizes and means and standard deviations of the variables in this study are presented in Table 1. Note that we measured different levels of awareness for different tipping norms and that this is reflected in the mean awareness scores for the different norms. As expected, awareness that restaurant tips should be 15 to 20 percent of the bill is lower than awareness of norm that restaurant tips should be a percentage of the bill and awareness that the other service providers are customarily tipped. Measuring these different levels of knowledge about tipping norms was appropriate given the level of tipping behavior each was thought to mediate -- knowledge that restaurant tips should be 15 to 20 percent of the bill was tested as a mediator of race

differences in the level of restaurant percentage tips, while knowledge that restaurant tips should be a percentage of the bill was tested as a mediator only for tip type (i.e., dollar tip or percentage tip), and knowledge that other service providers are customarily tipped was tested as a mediator only for frequency of stiffing (or not tipping) those other service providers.

Effects of control variables. Age, sex, education and income were used only as control variables in this study, so their relationships to awareness of tipping norms and to tipping behavior will not be discussed or elaborated upon. However, interested readers can find the results of regression analyses assessing these effects in Table 2.

Norm awareness as a mediator. According to Baron and Kenny (1986), the mediation of an independent variable's effect on a dependent variable can be established by demonstrating that the proposed mediator is related to both the independent variable and the dependent variable after controlling for the independent variable. In the present case, norm awareness can be said to mediate race effects on tipping behavior if the races differ in norm awareness and if norm awareness predicts tipping behavior after controlling for race. These effects were assessed in regression analyses that also controlled for respondent age, sex, education and income and the critical results are presented in Table 3. The regression coefficients -- for race effects on norm awareness and for norm awareness effects on tipping behavior after controlling for race -- were also used to calculate values for the Sobel test (also presented in Table 3), which is another way to assess the statistical reliability of mediation effects. Based on the results of all these analyses, norm awareness does mediate race effects on restaurant tip type (Sobel test = -5.96, $p < .001$), restaurant tip percentages (Sobel test = -6.53, $p < .001$), and the

stiffing of hair cutters (Sobel test = 3.53, $p < .001$) and pizza delivery drivers (Sobel test = 3.00, $p < .01$). However, it does not mediate race effects on the stiffing of bartenders (Sobel test = .96, n.s.), parking valets (Sobel test = 1.17, n.s.), or taxicab drivers (Sobel test = .80, n.s.), because there are no race differences in the awareness that these latter service providers are customarily tipped.

The reliable mediation effects observed for some of the race differences in tipping mean that those race differences would be smaller if race differences in norm awareness could be eliminated. Eliminating race differences in tipping norm awareness was not possible in this study, but the effects of those race differences in norm awareness on tipping behavior could be eliminated statistically. A comparison of the effects of race on tipping behavior both before and after statistically controlling for norm awareness is presented in Table 4. These analyses indicate that controlling for awareness of the appropriate tipping norm reduces race differences in restaurant tip type by 43 percent, in restaurant tip percentages by 31 percent, in stiffing of hair cutters by 30 percent, and in stiffing of pizza delivery drivers by 17 percent. These percentages would be a reasonable estimate of the magnitude of the reduction in race differences in tipping behavior achievable by eliminating race differences in norm awareness, if norm awareness affects tipping behavior for Blacks as much as it does for Whites. This latter issue is addressed below.

Norm awareness as moderator. The interaction of race with norm awareness was assessed in regression analyses that controlled for respondents age, sex, education and income as well as for the main effects of both race and norm awareness. The critical results of these analyses are presented in Table 4 and the interactions are depicted in

Figures 3 and 4. None of the interactions were statistically significant, meaning that awareness of tipping norms affects the tipping behavior of Blacks the same as it does that of Whites. These results are consistent with Lynn's (2009) finding that Blacks and Whites are equally likely to say they tip to follow social norms and lend some support to the validity of those self-reports. They also suggest, together with the mediation analyses reported above, that educating Blacks about tipping norms will reduce Black-White differences in tipping behavior - by about 30 percent each in the cases of tipping restaurant servers and hair cutters.

CONCLUSION

The results of this study indicate that awareness of tipping norms partially mediate but do not moderate race differences in tipping behaviors. These findings support Lynn's (2004b) hypothesis that race differences in tipping are due (at least in part) to race differences in awareness of appropriate tipping norms, as well as his claim that race differences in tipping can be reduced by educating people about tipping norms. Ideally, large industry organizations, like the National Restaurant Association (NRA) or the Multicultural Foodservice and Hospitality Alliance (MFHA), would solicit funding for and organize a multi-media campaign promoting the 15 to 20 percent restaurant norm. To facilitate people's internalization of the restaurant tipping norm, this campaign should inform people that restaurant servers make less than the minimum wage and depend on tips as the main source of their income. To enhance the social pressure people feel to comply with the restaurant tipping norm, the campaign should also tell people that 15 to 20 percent tips are expected and that most people in this country do tip in that range.

Despite repeated calls for such a campaign (see Amer 2002; Lynn, 2004b), the industry seems unwilling or unable to make it happen. Interestingly, the Black community itself is beginning to take action. An African American freelance writer, Linda Wallace, has teamed up with several Black newspapers to educate Blacks about tipping norms and this award winning campaign has received support from at least one other black media outlet (Ajanaku, 2008; Mays, 2008; Wallace, 2008). Although the reach of this campaign is limited, hopefully it will inspire others to join in and will eventually become more widespread. Perhaps the NRA and/or MFHA could be persuaded to support this effort.

Any national campaign on this issue will be slow are to get started, so restaurant managers should not wait for such a campaign to address this issue. They can and should educate their own customers about the tipping norm. One tool managers can use to do this is a “Tipping Quiz” available free of charge at the Cornell Center for Hospitality Research’s website (<http://www.hotelschool.cornell.edu/research/chr/pubs/tools/>). This quiz, which can be printed on table tents or on menu inserts, asks questions about tipping and provides the answers to those questions so people can score their own knowledge about tipping. Customers taking the quiz and looking at the answers will learn about all the issues described above that should be addressed in an educational campaign. Since this quiz does not mention race differences in tipping and is likely to be viewed as interesting and fun by consumers, putting it on table tents or menu inserts should be a low risk way to increase awareness of the restaurant tipping norm and reduce race differences in tipping.

Although norm awareness does mediate race differences in tipping, that mediation is only partial. The data from this study suggest that completely eliminating race differences in awareness of the 15 to 20 percent restaurant tipping norm will reduce race differences in restaurant tip percentages by only about 30 percent. In other words, a substantial race difference in tipping will still exist even if Black's awareness of the tipping norm is brought up to the level of Whites' awareness of the norm. Thus, an educational campaign promoting tipping norms is only a partial solution to the industry problems stemming from race differences in tipping. Furthermore, educational campaigns will have no effect in service settings like bartending, car parking, and taxicab driving where there are no race differences in awareness of tipping norms to explain the race differences in tipping. To fully solve the problem of race differences in tipping, we need to better understand and address all the causes of those race differences. Unfortunately, it is not clear what is causing those race difference in tipping that persist after controlling for norm awareness. It is not differences in income, education, or service quality because the effects of those factors were also controlled for in this study through either question wording or statistical analysis. Thus, identifying and testing other potential explanations for race differences in tipping is an important task left for future researchers.

REFERENCES

- Ajanaku, Karanja A. 2008, Tri-state defender nets award in national competition.
Available at <http://tri-statedefenderonline.com/articlelive/articles/2676/1/Tri-State-Defender-nets-award-in-national-competition/Page1.html> (accessed on Sept. 30, 2009).
- Amer, Suzie. 2002. Minority report. *Restaurant Business* Nov. 15: 27-38.
- Baron, Rueben and Kenny, David. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology* 51: 1173-1182.
- Lynn, Michael. 2004a. Black-white differences in tipping of various service providers. *Journal of Applied Social Psychology* 34: 2261-2271.
- Lynn, Michael. 2004b. Ethnic differences in tipping: A matter of familiarity with tipping norms. *Cornell Hotel and Restaurant Administration Quarterly* 45: 12-22.
- Lynn, Michael. 2006. Geodemographic differences in knowledge about the restaurant tipping norm. *Journal of Applied Social Psychology* 36: 740-750.
- Lynn, Michael. 2009. Individual differences in self-attributed motives for tipping: Antecedents, consequences, and implications. *International Journal of Hospitality Management* 28: 432-438.
- Lynn, Michael, Sturman, Michael, Ganley, Christie, Adams, Elizabeth, Douglas, Mathew and Jessica McNeil. 2008. Consumer racial discrimination in tipping: A replication and extension. *Journal of Applied Social Psychology* 38: 1045-1060.

- Lynn, Michael and Clorice Thomas-Haysbert. 2003. Ethnic differences in tipping: Evidence, explanations and implications. *Journal of Applied Social Psychology* 33: 1747-1772.
- Mays, Myron. 2008. The big question: Do you tip when you dine out? If not, why not? Available at <http://tri-statedefenderonline.com/articlelive/articles/2685/1/The-Big-Question--Do-you-tip-when-you-dine-out-If-not-why-not/Page1.html> (accessed on Sept. 30, 2009).
- McCall, Michael and Ann Lynn. 2009, Restaurant servers' perceptions of customer tipping intentions. *International Journal of Hospitality Management* 28: 594-596.
- Nisbett, Richard & Timothy Wilson. 1977. Telling more than we can know: Verbal reports on mental processes. *Psychological Review* 84: 231-259.
- Schlenker, Barry. 1980. *Impression management: The self-concept, social identity, and interpersonal relations*. Belmont, CA: Brooks/Cole.
- Rusche, Sarah and Zachary Brewster. 2008. 'Because they tip for shit': The social psychology of everyday racism in restaurants. *Sociology Compass* Feb.6: 2008-2029.
- Wallace, Linda. 2001. The restaurant wars: Dare to go where no broker has gone before. DiversityInc.com. (accessed August 9, 2001).
- Wallace, Linda. 2008. The tipping gamble: Good service today, insults tomorrow. Available at <http://tri-statedefenderonline.com/articlelive/articles/2728/1/The-Tipping-Gamble-Good-service-today-insults-tommorrow/Page1.html> (accessed on Sept. 30, 2009).

TABLE 1. Descriptive statistics for variables in this study.

	N	Minimum	Maximum	Mean	Std. Deviation
<u>Demographics</u>					
Age	824	17	86	43.06	16.22
Sex (1 = male, 2 = female)	822	1	2	1.68	.47
School	827	1	7	4.69	1.34
Income	818	1	9	5.30	2.42
Race (1 = white, 2 = black)	795	1	2	1.46	.50
<u>Awareness of tipping norms</u>					
<u>(0 = not aware, 1 = aware) for:</u>					
Waiters (any % norm)	828	.00	1.00	.83	.38
Waiters (15 – 20% norm)	828	.00	1.00	.42	.49
Bartenders	827	.00	1.00	.86	.34
Hair cutters	825	.00	1.00	.87	.34
Parking valets	819	.00	1.00	.89	.31
Pizza delivery drivers	819	.00	1.00	.92	.27
Taxicab drivers	808	.00	1.00	.63	.48
<u>Restaurant tipping behavior</u>					
Tip type (0 = flat tip, 1 = percentage tip)	795	.00	1.00	.73	.44
Percent tip	588	8.50	22.50	16.14	3.42
<u>Frequency of stiffing (not tipping)</u>					
Bartenders	474	1	3	1.39	.61
Hair cutters	681	1	3	1.42	.68
Parking valets	469	1	3	1.38	.64
Pizza delivery drivers	686	1	3	1.28	.55
Taxicab drivers	447	1	3	1.70	.83

TABLE 2. Coefficients (and standard errors) from regressions of demographic variables on measures of tipping norm awareness and tipping behavior.

	N	Intercept	Age	Sex	Education	Income
<u>Awareness of tipping norms for:</u>						
Waiters (any % norm)	805	.24** (.08)	.004*** (.001)	.01 (.03)	.06*** (.01)	.02*** (.01)
Waiters (15 – 20% norm)	805	-.17 (.10)	.01*** (.001)	-.03 (.04)	.06*** (.01)	.03*** (.01)
Bartenders	805	.82*** (.07)	-.002** (.001)	-.01 (.03)	.02 (.10)	.02** (.01)
Hair cutters	802	.46*** (.07)	.002** (.001)	.08** (.03)	.02 (.01)	.02*** (.01)
Parking valets	799	.62*** (.07)	.001 (.001)	.03 (.02)	.02* (.01)	.02** (.01)
Pizza delivery drivers	796	.73*** (.06)	.000 (.001)	.03 (.02)	.01 (.01)	.02*** (.004)
Taxicab drivers	786	.14 (.10)	.01*** (.001)	-.04 (.04)	.04** (.01)	.02* (.01)
<u>Restaurant tipping behavior</u>						
Tip type	772	-.007 (.09)	.004*** (.001)	.000 (.03)	.07*** (.01)	.05*** (.01)
Percent tip	571	13.77*** (.96)	.003 (.01)	-.49 (.30)	.36** (.11)	.22** (.07)
<u>Frequency of stiffing (not tipping)</u>						
Bartenders	460	1.82*** (.18)	.001 (.002)	-.04 (.06)	-.03 (.02)	-.05*** (.01)
Hair cutters	662	2.33*** (.16)	-.003* (.002)	-.12* (.06)	-.06** (.02)	-.05*** (.01)
Parking valets	454	2.12*** (.18)	-.01** (.002)	-.06 (.06)	-.02 (.02)	-.05*** (.01)
Pizza delivery drivers	669	1.90*** (.13)	-.002 (.001)	-.11* (.05)	-.02 (.02)	-.05*** (.01)
Taxicab drivers	432	2.55*** (.24)	-.01*** (.002)	.04 (.08)	-.05 (.03)	-.04* (.02)

* p < .05, ** p < .01, ***p < .001

TABLE 3. Results of tests of norm awareness as a mediator of race effects on tipping.

Tipping norms (and behavior) when service provider is a	Coefficient (and standard error) of race effects on norm awareness ^a	Coefficient (and standard error) of norm awareness effects on tipping behavior ^b	Sobel test
Waiter (Tip Type)	-.15*** (.03)	.62*** (.04)	-5.96***
Waiter (Percentage Tip)	-.27*** (.03)	3.04*** (.25)	-6.53***
Bartender (Stiff)	-.02 (.03)	-1.30*** (.12)	.96
Hair cutter (Stiff)	-.09*** (.03)	-1.20*** (.08)	3.53***
Parking valet (Stiff)	-.03 (.02)	-1.06*** (.11)	1.17
Pizza delivery driver (Stiff)	-.06** (.02)	-1.09*** (.09)	3.00**
Taxicab driver (Stiff)	-.03 (.04)	-1.22*** (.07)	.80

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

^a Controlling for respondents' age, sex, education and income.

^b Controlling for respondents' age, sex, education, income and race.

TABLE 4. Coefficients (and standard errors) for race from regression analyses with and without controls for awareness of tipping norms.

Dependent variables	Models without norm awareness controls ^a	Models with norm awareness controls ^a	Percentage change
<u>Restaurant Tipping</u>			
Tip Type	-.21*** (.03)	-.12*** (.03)	- 43%
Percentage Tip	-2.29*** (.29)	-1.59*** (.26)	-31%
<u>Stiffing</u>			
Bartenders	.28*** (.06)	.23*** (.05)	-18%
Hair cutters	.33*** (.05)	.23*** (.05)	-30%
Parking valets	.15* (.06)	.12* (.06)	-20%
Pizza delivery drivers	.24*** (.04)	.20*** (.04)	-17%
Taxicab drivers	.33*** (.08)	.22*** (.06)	-33%

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

^a These analyses did control for respondents' age, sex, education and income.

TABLE 5. Statistics for the interaction between norm awareness and race.^a

Dependent variables	df error	Coefficient	Standard error
<u>Restaurant Tipping</u>			
Tip Type	733	-.13	.08
Percentage Tip	544	.44	.52
<u>Stiffing</u>			
Bartenders	438	.24	.25
Hair cutters	625	.18	.16
Parking valets	424	.34	.21
Pizza delivery drivers	628	.06	.20
Taxicab drivers	400	.26	.14

* $p < .05$, ** $p < .01$

^a These regression analyses controlled for respondents' age, sex, education and income as well as for the main effects of race and norm awareness.

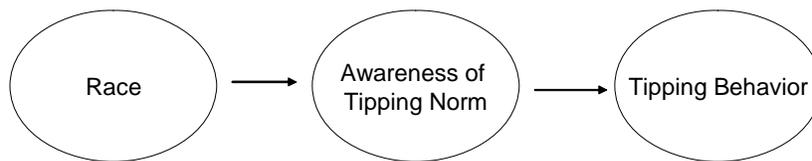


Figure 1. Model depicting norm awareness as a mediator of race differences in tipping behavior.

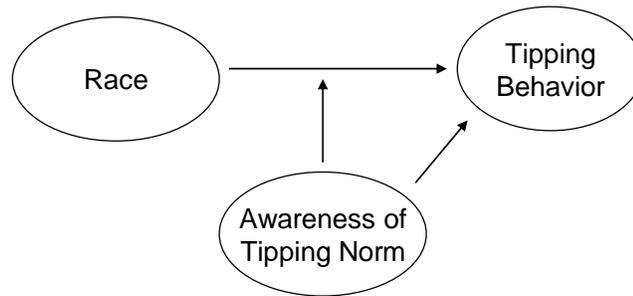
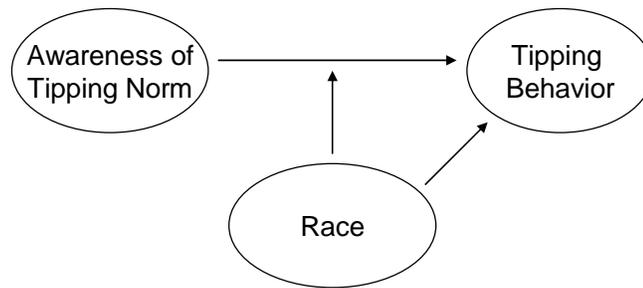


Figure 2. Models depicting race as a moderator of norm awareness effects on tipping behavior and norm awareness as a moderator of race differences in tipping. Mathematically and empirically, these models are the same.

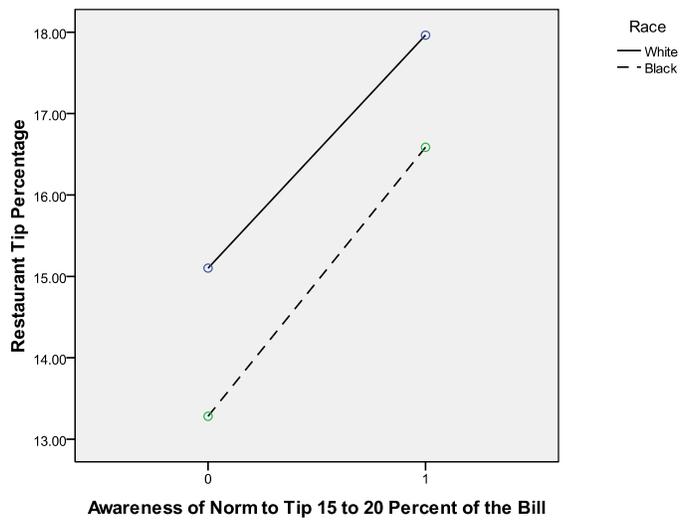
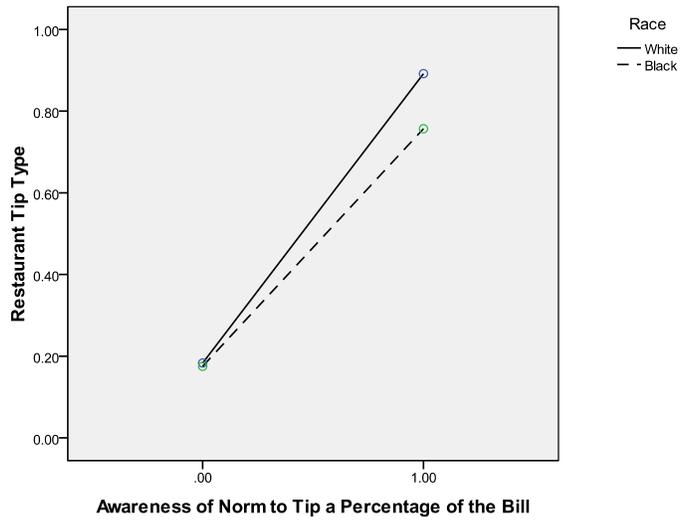


Figure 3. Interactions of Norm Awareness with Race as they Affect Restaurant Tipping

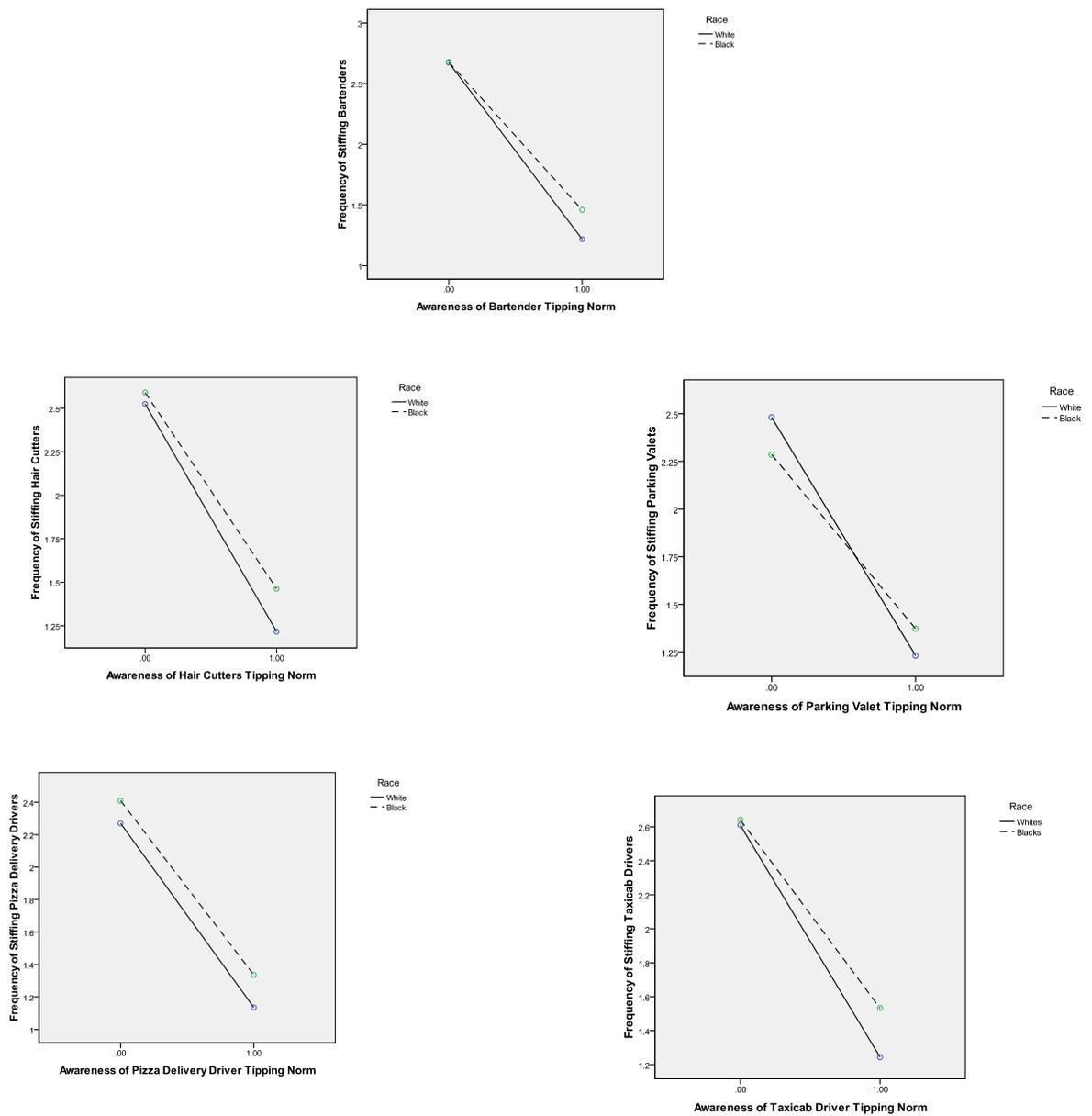


Figure 4. Interactions of Norm Awareness with Race as they Affect Stiffing of Various Service Providers