

Black-White Wage Gap among Restaurant Servers: A Replication, Extension, and Exploration
of Consumer Racial Discrimination in Tipping

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Abstract

There is a rich history of social science research centering on racial inequalities that continue to be observed across various markets (e.g., labor, housing, and credit markets) and social milieus. Existing research on racial discrimination in consumer markets, however, is relatively scarce and that which has been done has disproportionately focused on consumers as the victims of race-based mistreatment. As such, we know relatively little about how consumers contribute to inequalities in their roles as perpetrators of racial discrimination. In response, in this paper we elaborate on a line of research that is only in its' infancy stages of development and yet is ripe with opportunities to advance the literature on consumer racial discrimination and racial earnings inequities among tip dependent employees in the United States. Specifically, we analyze data derived from a large exit survey of restaurant consumers (n=378) in an attempt to replicate, extend, and further explore the recently documented effect of service providers' race on restaurant consumers' tipping decisions. Our results indicate that both White and Black restaurant customers discriminate against Black servers by tipping them less than their White coworkers. Importantly, we find no evidence that this Black tip penalty is the result of interracial differences in service skills possessed by Black and White servers. We conclude by delineating directions for future research in this neglected but salient area study.

Black-White Wage Gap among Restaurant Servers: A Replication, Extension, and Exploration of Consumer Racial Discrimination in Tipping

There is a rich history of social science research centering on advancing our understanding of the causes and consequences of the racial inequalities in the United States that continue to be observed across various markets and social milieus. A sizable portion of this body of empirical and theoretical work has focused on the identifying, isolating, and understanding the effects of discrimination on interracial disparities in employment, housing, and credit markets (Pager and Shepherd 2008; Quillian 2006). Considerably less research has been done to advance our understanding of racial discrimination in consumer markets and that which has been done has disproportionately focused on the consumer as the victim of race-based mistreatment (c.f., Brewster, 2012; Brewster and Rusche, 2012; Gabbidon, 2003; Gabbidon and Higgins, 2007; Harris 2003; Harris, Henderson, and Williams 2005; Yinger 1998). As such, we know relatively little about how consumers contribute to inequalities via their differential treatment of service workers on the basis of their race or ethnicity (e.g., consumer discrimination, c.f., Pager and Shepherd 2008, p. 182).

While employers and coworkers continue to be a salient source of racial inequities in labor markets (Pager and Shepherd 2008), in his classic work, *The Economics of Discrimination*, Becker (1971) predicted that consumers would increasingly become the most persistent source of racial disparities in earnings. Yet, given difficulties associated with isolating the effects of consumer racial discrimination on employees' earnings from other confounding factors including establishment (e.g., size, location, etc.), environmental (e.g., urban, suburban, rural), and most notably, employee (education, income, abilities/skill, etc.) characteristics, scholarship advancing

our understanding of this source of racial earnings disparities has been limited (Nardinelli and Simon 1990). Further, given the difficulties associated with measuring consumer discrimination much of the extant empirical work in this area has only been able to draw inferences about consumer discrimination indirectly by assessing the effects of the racial composition of establishments' customer base on employment outcomes among minority workers (Holzer and Ihlanfeldt 1998; Ihlanfeldt and Young, 1994). The lack of existing scholarship on the ways in which consumers' actions towards service employees are deleteriously shaped by service providers' race is particularly problematic given that over 80% of all wage and salaried workers are employed in service providing sectors in the U.S. economy (Bureau of Labor Statistics 2013).

Thus, in this article we advance scholarship on consumer racial discrimination by analyzing data derived from a large exit survey of restaurant consumers (n=378) in an attempt to replicate, extend, and further explore the recently documented effect of service providers' race on restaurant consumers' tipping decisions (Ayres, Vars, and Zakariva, 2005; Lynn, Sturman, Elizabeth, Douglas, and McNeil, 2008). We find evidence suggesting that White and Black restaurant customers discriminate against Black servers by tipping them less than their White coworkers. Most notably we provide compelling evidence demonstrating that the Black tip penalty is not the result of interracial differences in service skills possessed by Black and White servers.

BACKGROUND

The most developed body of empirical work that has directly tested for consumer racial discrimination is in the area of sports economics. As Parrett (2011, p. 88) has pointed out, the popularity of studying consumer discrimination in the sports market can be attributed to two

characteristics of this market. First, information about athlete's productivity/skills (e.g., performance statistics) can be easily ascertained and statistically held constant when modeling the effects of athletes' race on study outcomes. Second, under many conditions (e.g., purchasing sports cards, game attendance, viewing games on television, voting for all-star teams, etc.) the consumer is the sole actor thus allowing researchers to easily isolate the explanatory effects of consumer bias and discrimination from other sources of mistreatment (e.g., employer and coworker discrimination, see Becker, 1971). This body of literature has produced interesting (and mixed) results (cf. Broyles and Keen, 2010; Depken II and Ford, 2006; Foley and Smith, 2007; Kanazaw and Funk, 2001; Tainsky and Winfree, 2010) but has little practical implications beyond the niche sports market. Moreover, with few exceptions (e.g., minority athletes' salaries) consumer discrimination in the sports market does not have a direct adverse effect on the providers of service, or in this case entertainment. If *ceteris paribus*, for instance, the sports card of a Black professional athlete is worth less than that of a White athlete (Nardinelli and Simon, 1990) the proprietors of the sports card companies might suffer economic loss that in the absence of consumer discrimination they would have otherwise secured but the players themselves are not likely to take note.

Recently, however, a promising line of research on consumer racial discrimination has emerged around the custom of tipping (Ayres, Vars, and Zakariva, 2005; Lynn, Sturman, Elizabeth, Douglas, and McNeil, 2008). Research on customers' proclivities to discriminate in their tipping behaviors according to the race of their service provider is likely to be a particularly fruitful line of inquiry to advance our understanding of the causes and consequences of consumer discrimination. Like many consumer behaviors in the sports market, tipping service providers is discretionary and the sole actor involved is the consumer thus allowing for direct tests for

consumer discrimination. Unlike consumer behaviors in the sports market, however, tipping in the United States is a pervasive consumer behavior (Lynn, Zinkhan, and Harris, 1993). During an average month over 90% of the adult population dines out at least once (Scarborough Research Group, 2006) and nearly all of them leave a gratuity at the end of their meal. Further, aside from restaurant servers (and bartenders) there are over 30 additional professions in the US economy wherein millions of customers are routinely expected to leave a tip after they have received services (e.g., bellmen, taxi drivers, barbers, hairstylist, food delivery drivers, etc. see Lynn, Zinkhan, and Harris, 1993) and many of the recipients of these tips are racial minorities. In fact, there are over 1.3 million African Americans, Asians, Hispanics or Latinos working as restaurant servers, bartenders, barbers, hairstylists, cosmetologists, or taxicab drivers in the United States and all of these individuals are economically dependent on gratuities and thus vulnerable to economic loss by way of consumer racial discrimination in tipping (Bureau of Labor Statistics 2013).

Although tipping is an ideal and salient context in which to systematically study the causes and consequences of consumer racial discrimination, only two studies adequately assessing the effects of service providers' race on customers' tipping behaviors have been published. In their analysis of 1000 customer gratuities given to taxicab drivers in New Haven, Connecticut Ayres, Vars, and Zakariya (2005) found that Black drivers were given significantly smaller tips than were White drivers and this was true for both White and Black customers. The Ayres et al. (2005) study not only revealed for the first time the presence of consumer discrimination in tipping but also a pattern that was in contrast to existing literature highlighting consumers' preferences for same-race service providers (e.g., Hekman, Aquino, Owens, Mitchell, Schilpzand, and Leavitt 2010; Juni, Brannon, and Roth 1988). While the researchers

controlled for the effects of a host of factors that have been shown to affect customers' tipping decisions they were not able to rule out the possibility that the observed driver race effect on tipping among White and Black customers was the result of interracial differences in service quality provided by taxi drivers. In other words, it is possible that the lower tips given to Black taxi drivers reflect unobserved interracial differences in service skills rather than consumer discrimination (cf. Holzer and Ihlandfeldt, 1998; Neal and Johnson, 1996; Johnson and Neal, 1998).

In a second study Lynn, et al. (2008) analyzed 140 tips given to restaurant servers' working in a full-service restaurant in the Southern region of the United States in an attempt to replicate the previously documented seller race effects on tipping taxicab drivers. In this case, however, the authors included a composite index measuring restaurant servers' skills constructed from customers' ratings of their servers' appearance, friendliness, attentiveness, and promptness. Net of the effects of service skills on customers' tipping decisions both Black and White restaurant patrons were found to tip Black servers less than they did White servers. The authors further noted that the server race effect was moderated by customers' perceptions of their servers' job performance (e.g., service quality) and dining party size such that the disparity in tips given to White and Black servers was greatest among larger groups of diners and when service performance was rated highly. According to Lynn et al. (2008) these findings are consistent with what we know about implicit or unconscious manifestations of racial biases in the United States. Research on implicit racial attitudes has found, for instance, that under some conditions both Blacks and Whites in the U.S. have an unconscious bias for Whites over African Americans (e.g., Ashburn-Nardo, Knowles, and Monteith, 2003; Correll, Park, Judd, and Wittenbrink, 2002) and that these biases are likely to unconsciously affect people's interactions

with Black Americans in adverse ways (Dasgupta, 2004). However, in a subsequent analysis of the data used by Lynn et al. (2008), Lynn and Sturman (2011) decomposed the measure of service skills and found evidence of intraracial bias in customers' ratings of their servers' promptness and attentiveness such that subjects' rated these dimensions of servers' performance more favorably when they were waited on by a server of the same race. This finding suggests that the relatively inferior tips given to Black servers by Black customers may not be attributed to negative biases against their own race as had previously been thought.¹

Given the paucity of existing research on this topic, we aim in this paper to advance our understanding of consumer racial discrimination in tipping in several ways. First, we attempt to replicate the Ayres et al. (2005) and Lynn et al. (2008) findings in a different region of the United States by analyzing a relatively large sample of restaurant consumers (n=394) who were solicited to complete a survey about their dining experiences after exiting a full-service restaurant located in a large city in the Midwest. Second, we further explore the mediating effects of service skills in the relationship between servers' race and customers' tipping decisions by including in our analysis indicators of nuanced hospitality enhancing server behaviors. Specifically, whereas Lynn et al. (2008) controlled for the effects of service skills with a four item index measuring service quality constructed from subjects' holistic evaluations of their servers' appearance, friendliness, attentiveness, and promptness, we include two additional measures of service quality derived from questions that asked customers to report whether their server extended to them objective cues of hospitality that are conventionally required (e.g., my server smiled, maintained eye contact, etc.) or optional (e.g., my server made me laugh) and which have been shown to be predictive of customers' tipping behaviors (Lynn, 2005; Lynn and McCall, 2009).

This advancement is important because holistic measures of service quality, like that used by Lynn et al.'s (2008), may be weak predictors of customers' tipping decisions (Lynn and McCall, 2000) relative to the more nuanced server behaviors assessed in this study and to the degree that Black servers' exhibit such cues of hospitality less than their White counterparts it might explain why they are given smaller tips by both Black and White customers. If this is the case, what has previously been interpreted as evidence of consumer racial discrimination might reflect interracial differences in the way servers carry out their occupational roles (e.g., service skill differences). Lending credence to this possibility, in a large survey of restaurant servers Lynn and McCall (2009) found that relative to their White counterparts ethnic minority servers were statistically less likely to report utilizing some of the techniques that have been shown to positively affect customers' tipping decisions. Specifically, the authors found that non-White servers were less likely than White servers to report that they use upselling techniques, tell jokes or stories, complement customers' food choices, and squat next to their tables.

In this paper we also advance the literature on consumer racial discrimination by taking an exploratory approach in an attempt to identify the boundary conditions for server race effects on customers' tipping decisions. In particular, we chose variables with previously demonstrated effects on tipping – e.g., customer race, customer age, dining party size, bill size, and patronage frequency, food quality, service quality, and nuanced server behaviors– and tested their roles as potential moderators of server race effects on tipping behaviors. Finally, we advance the literature on consumer racial discrimination in tipping by delineating several salient directions for future research and highlighting the practical importance associated with pursuing this line of inquiry.

METHOD

Sample

Customers were approached after stepping out of a moderately priced restaurant located in a large northern city and asked if they would be willing to complete a short questionnaire about their dining experience that evening. To be eligible to participate in this study subjects must have eaten dinner at the restaurant in question and paid a bill. Data were collected in August and September of 2012 between 5:30pm and 9:00pm (Monday – Saturday). Of the 821 customers that were solicited to participate 515 agreed to complete the questionnaire thus resulting in a 63% participation rate. After deleting cases wherein the subject either failed to indicate how much they tipped their server ($n = 52$), was part of a party of 6 or more (for whom automatic gratuities are typically added to the bill; $n = 22$), or was determined to be disengaged from the survey (because he or she agreed or strongly agreed both that the server made them feel like an inconvenience and made them feel comfortable and welcome; $n = 47$), the sample consisted of 394 customers.

While less than 8% of these remaining 394 cases had missing values on any one of the independent or control variables in this study, multivariate listwise deletion across these variables would result in the loss of an additional 21% of cases ($n=82$). Thus, to retain these cases, a multiple imputation procedure was used to estimate values for observations with missing data on each of the independent variables included in this analysis (for a detailed discussion of multiple imputation, see Schafer and Graham 2002).

Dependent Variable

Respondents were asked to indicate in dollars and cents how large their bills and tips were. These variables were used to calculate our dependent variable - tip percentage.

Occasionally, respondents would report tips in percentage rather than dollar terms. In those cases, the reported percentages were used. One observation with a tip percentage of 286 was recoded as 42 (just above the next largest tip percentage) to avoid problems with significant outliers.

Primary Independent Variable

Our primary independent variable of interest in this study was measured by asking respondents to indicate whether their server was Black ($n = 73$), White ($n = 314$), or Other ($n = 7$). Server race was coded to reflect whether or not the server was Black (no = 0, yes = 1). There were at least four Black and four White servers working at the restaurant over time periods surveyed. To the researchers knowledge there were no servers of another race employed in the restaurant during the study period. Thus, there is some ambiguity surrounding the race of the server who waited on the 7 subjects who indicated that their server was of another race. Given this ambiguity, we defined the server race variable as Black vs non-Black – effectively combining the seven “other” cases with those where the server was White. To test for robustness, we also estimated our models after omitting these 7 cases and found that our substantive conclusions did not change from those reported in the main text below.

Mediating Variables (Server Skill)

Following Lynn et al.’s (2008) operationalization of service quality subjects were asked to indicate on a nine point scale how much they disliked (1) or liked (9) their servers’ appearance, friendliness, attentiveness and promptness. Answers to these four questions were averaged to form an index measuring customers’ holistic evaluations of the overall service quality provided to them by their server on the evening they were surveyed (Cronbach’s $\alpha = .89$). Scores were averaged across the three available items for two respondents who failed to provide information on one of the items used to create the service quality index. Subjects’ were also asked to indicate

(using a 5 point scale) how much they disagreed (1) or agreed (5) with statements specifying that their server smiled throughout the encounter, gave his/her name when greeting them, maintained appropriate posture, squatted or sat down at the table when taking their order, appeared distracted (reverse coded), recommended a food item when taking their order, complimented them on their choice of a particular dish, joked around and made them laugh, maintained eye contact when talking to them, thanked them for visiting the restaurant, made them feel comfortable and welcome, made them feel like they were inconveniencing him/her when they made a request (reverse coded), met their service expectations, and was authentic and seemed to sincerely care about their dining experience.

A factor analysis of these items using generalized least squares extraction and promax rotation produced two clear factors.² The first factor was comprised of smiling, giving name, correct posture, eye contact, thanking, made me feel comfortable, made me feel inconveniencing, met expectations and seemed authentic. These items were averaged to form a second index measuring customers' evaluations of their servers' skill, which we labeled "subtle service behaviors" (Cronbach's alpha = .88). Twenty-five cases had information on at least 6 of the items used to create the subtle service behavior index but were missing values on one or more of the remaining three items. In these cases index scores are based on the information the respondents provided. The second factor was comprised of recommended food items, complimented choices, and joked. These items were averaged to form a third index measuring customers' evaluations of their servers' skills, which because the items had substantially lower means than the other items was called "rare service behaviors" (Cronbach's alpha = .76). Scores were averaged across the two available items for respondents (n=2) who failed to provide information on one of the items used to create the rare service behaviors index.

Control Variables

Our analyses also include controls for a number of exogenous factors that have been shown to be associated with tipping behaviors. First, subjects were asked to indicate (using a nine point scale) how much they disliked (1) or liked (9) the food's appearance, taste, portion size, and value for the money. Answers to these questions were averaged to create an index measuring customers' evaluations of food quality (Cronbach's alpha = .79). Using the same nine point scale respondents were asked to indicate how much they liked/disliked the dining room lighting, temperature, noise level, and crowd level in the restaurant on the evening they were surveyed. Responses to these questions were averaged to create an index measuring customers' evaluations of atmosphere quality (Cronbach's alpha = .76).

Second, because there were male and female servers working at the restaurant over time periods survey a dummy variable (female =1) controlling for the effects of servers' gender is included in the analysis. Third, respondents were asked to indicate how many adults, teenagers and children under 12 were in the dining party. Responses to these items were summed to provide a measure of dining party size. Fourth, respondents were asked how often they eat at the restaurant wherein they were surveyed. They were prompted to report the number of times per week, month or year and to indicate which time period they used.³ Responses were converted to times per year and log 10 transformed to provide a measure of patronage frequency.

Finally, respondents were asked to indicate their sex, race, age, educational attainment, and income. Customer sex was dummy coded to reflect whether or not the customer was female (= 1) while customer race was coded to reflect whether or not the customer was Black (=1).⁴ Additionally, respondents were asked to indicate the year they were born (used to calculate age), highest education level obtained (1 = less than High School degree, 2 = High School degree, 3 =

Associates or Trade School degree, 4 = college bachelors degree, and 5 = Graduate degree), and their annual income (1 = below \$30,000, 2 = \$30,000 -\$49,000, 3 = \$50,000 - \$69,000, and 4 = \$70,000 or more).

RESULTS

[Table 1 about here]

In Table 1 we present summary statistics for the full analytic sample and for split samples by the race of customers' server on the evening they were surveyed. As shown in this table, the average respondent in our full sample is 43 years old, college educated, female (57%), White (63%), and earns slightly less than \$50,000 annually. On the evening that they were surveyed the typical respondent dined with one other person and was served by a White (81%) male (58%). The average bill size was \$44.00 and the typical respondent tipped their server roughly \$9.00, or 20% of their bill, following a service encounter wherein they evaluated the service, food, and atmosphere quite favorably. Importantly, we also show in Table 1 that customers who were served by a black waiter/waitress tended to leave smaller tips as a percentage of their bill compared to those who were served by a White waiter/waitress. Although the bivariate mean difference in percent tip by servers' race was only marginally significant ($t(392) = -1.55, p = .12$) it would not appear that this difference can be attributed to the service skills possessed by Black servers because customers with a Black server tended to report that their waiter/waitress exhibited significantly higher levels of subtle service enhancing behaviors ($t(392) = 1.89, p < .10$) and to have provided overall better service quality ($t(392) = 2.39, p < .05$) compared with those who were served by a White server.

To further explore the relationships between tip percent, servers' race, and our measures of servers' skills these data were analyzed using OLS multiple regression (see Table 2). Percent

tip was first regressed on server race and all the control variables (model 1) before adding our measures of server skills (model 2) and the product of servers' race and customers' race (model 3). As shown in model 1, Black servers in our sample received statistically smaller tips than did White servers ($B = -1.26$, $t(381) = -1.71$, $p < .10$) and as we inferred from the analysis of mean differences in table 1, this effect cannot be attributed to a poor job performance on the part of Black servers. In fact, and as shown in model 2, after controlling for all three service measures the server race effect on percent tip became more pronounced ($B = -1.49$, $t(378) = -2.05$, $p < .05$).⁵ Furthermore, adding the product of server race and customer race to this latter model produced a non-significant interaction term ($B = -.657$, $t(377) = -.456$, $p = .649$) indicating that both White and Black consumers discriminated against Black servers by tipping them less.⁶

[Table 2 and 3 about here]

In further attempts to identify moderators of the server race effect, the product of server race and each of the primary independent (e.g., service quality, rare/subtle service behaviors) and control variables were separately added to model 2 (Table 2). In these analyses, and as shown in models 1 and 2 (Table 3), we found that the only reliable moderators of the observed server race effect were customers' rating of service quality ($B = 1.42$, $t(377) = 2.09$, $p < .05$) and atmosphere quality ($B = 1.14$, $t(377) = 2.09$, $p < .05$) such that the Black-White server difference in tip percentages was greater when customers' rating of service quality and satisfaction with the restaurant's atmosphere were lower. Given the number of interactions tested ($n=14$), the two significant interactions that we did observe could be Type 1 errors thus we encourage readers to interpret these effects with caution. Nevertheless, given the scarcity of research on consumer discrimination in tipping behaviors we further explored them by estimating the effects of a three way interaction between server race by customer race by service

quality (model 3) and of server race by customer race by atmosphere quality (model 4). As shown in models 3 and 4, the coefficients of the three way interactions involving service quality ($B = 3.49$, $t(374) = 2.49$, $p < .05$) and atmosphere quality ($B = 2.02$, $t(374) = 1.84$, $p < .10$) were both statistically reliable. Figure 1 offers a graphical display of the nature of these three way interactions. As shown in this figure, these results suggest that Black consumers, but not White consumers, might discriminate against Black servers by leaving them smaller gratuities when they are less satisfied with the service and atmosphere quality.

DISCUSSION

Given the shortage of direct empirical test for consumer racial discrimination, we advance this line of inquiry by replicating two previous studies that found statistically significant effects of service providers' race on customers' tipping behaviors. Like Ayres et al. (2005) and Lynn et al. (2005), we too found evidence that consumers discriminate against Black service providers by leaving them smaller gratuities. This finding coupled with Ayres et al.'s (2005) and Lynn et al.'s (2008) results adds to our confidence that this phenomenon is not unique to specific locales (e.g., South, Northeast, Midwest) or to differences in design and/or execution across studies. Moreover, we found that the effect is not mediated by customers' holistic ratings of service quality or their perceptions of nuanced hospitality enhancing server behaviors.

These findings indicate that interracial differences in service skills are not able to account for restaurant customers' racially discriminate tipping practices. To the contrary we found that to the degree that there are interracial differences in serving skills Black servers in this study are perceived to provide better service relative to that provided by their White coworkers. Given these findings it is not surprising that after controlling for the effects of all three indices measuring service skills we found that the disparity between tips given to Black and White

servers was enhanced rather than attenuated. Consistent with these results, Coleman (2003) found that rather than decreasing the wage differential between black and White men, controlling for the effects of employers' ratings of employees' skills resulted in an increase in the racial wage gap. This study is particularly noteworthy because in contrast to more general indicators of skill (e.g., education, experience, etc.) used in existing studies of the racial wage gap (cf. Fugazza, 2003) it, like our study, included a measure of employee skill that is constituted by the perceptions of the same individual whose job it is to not only evaluate workers but also establish wages and allocate raises.

One might, however, rightfully question whether these results reflect impression management demands such that by asking customers to report the race of their server they were sensitized to the issue of race and thereby encouraged to evaluate Black servers' performances more favorably than those of White servers. While we cannot unequivocally refute this critique, we found that Black servers were rated more favorably than White servers across each of the three unique indices measuring service skills and one of those measures (the standard service quality index) was obtained from respondents before they were asked about their servers' race. If social desirability biases in reporting were a major issue in these data, we would expect customers' positivity towards Black servers relative to White servers to be greater when responding to questions about their servers' performance that were presented to them after they had been sensitized to the issue of race. To the contrary, we found the net difference in customers' evaluations of their servers to be similar when comparing the standard service quality measure obtained before questions about server race and the subtle server behavior measure obtained after a question about server race ($\beta = .04$ vs $.04$ respectively). Furthermore, we note that any reporting biases stemming from asking subjects' about the race of their servers should

have functioned to attenuate the effect of servers' race on customers' tipping decisions. Thus, the evidence of consumer racial discrimination in tipping that we document is likely to be a conservative estimate of this phenomenon that is otherwise net of subjects' strategic efforts to provide responses in a socially desirable manner.

Interpreted along with the results of the Ayres et al. (2005) and Lynn et al. (2008) studies, we feel confident in our finding that restaurant consumers are discriminating against Black servers by tipping them less and that the causal mechanism is not interracial differences in the way servers' deliver service. The causal mechanism(s) operating nevertheless remains elusive and should be the focus of future inquiries. To encourage and direct such research efforts we explored the moderating effects of other salient predictors of tipping decisions. We found in this exploration that the server race effect on customers' tipping decisions was not sensitive to servers' gender, customers' demographics (e.g., gender, age, race, education, and income), table characteristics (e.g., patronage frequency, size of dining party size, and bill size), or to subtle/rare hospitality enhancing server behaviors.

However, we did find evidence suggesting that the Black-White server difference in tip percentages was greater the less favorably customers assessed the overall level of service quality and the restaurant's atmosphere on the evening they were surveyed. Further, we found that these interaction effects might be driven by Black consumers' propensities to discriminate against Black servers more so than White servers when they are less satisfied with these aspects of their dining experience (e.g. service quality and atmosphere). Given the exploratory nature of our interaction analyses, we refrain from speculating on these two and three way interactions in much detail but we do draw from them to inform the directions for future research that we delineate below.⁷

Directions for Research and Applied Implications

Research on consumer racial discrimination in tipping is only in its' infancy stages of development and as such, this line of inquiry is ripe with opportunities to advance our understanding of this unique source of racial inequities in earnings. In this section we outline some directions that we feel are particularly salient in order to advance this line of inquiry. Given that our study constitutes only the second test for consumer racial discrimination in tipping behaviors in the restaurant context, we begin by encouraging replication efforts so that the boundaries of our findings can be established. The need for such work is underscored by the inconsistencies between the results we report and those reported by Lynn et al. (2008). In contrast to results reported by Lynn et al. (2008) we did not observe a reliable interaction between servers' race and dining party size and the interaction between servers' race and service quality that we observed in this study was in the opposite direction than was reported by Lynn et al. (2008).

Additionally, while the tip penalty levied on Black servers in this study appear to generalize to taxi drivers (cf. Ayres et al., 2005), we do not know if a similar pattern would be observed in other tipped professions (e.g., bellmen, barbers, hairstylist, cosmetologists, food delivery drivers, etc.) or among other customers of color (e.g., Hispanics, Asians, etc.). Researchers should also identify and test potential organizational-level characteristics that either curtail or facilitate consumers' propensities to discriminate racially in their tipping decisions. Given that existing research has found racial earnings inequities to be the greatest in relatively high status (and high paying) professions (Grosdsky and Pager, 2001), future research might start by exploring whether African Americans and other servers of color who work in expensive

restaurants are at a greater risk of consumer discrimination in tipping than their counterparts working in the moderately priced establishments that have been studied to-date.⁸

Importantly, we encourage concerted scholarly efforts to be devoted towards identifying the causal mechanism(s) that underlie customers' propensities to tip Black servers (and potentially other servers of color) less generously. A priority on this front should be to systematically test the effects of implicit racial biases on customers' tipping decisions (cf. Lynn et al., 2008). The literature on implicit racial biases provides a sound theoretically informed explanation for racial discrimination in tipping. Researchers have found, for instance, evidence of implicit preferences for whites to be manifest in the attitudes and behaviors of both African Americans and White experimental subjects (Ashburn-Nardo et al., 2003; Correll et al., 2002). Further, research has found the effects of implicit racial biases to be particularly evident in spontaneous decisions that are made under pressure (Dovidio, Kawakami, and Gaertner, 2002; Fazio, 1990; Kawakami, Young, and Dovidio, 2002).

Tipping decisions are not only made quickly at the end of the dining encounter but are also to some degree made without much thought. Many of the server behaviors that have been shown to be predictive of greater tips are, for instance, likely to operate outside of the customers' consciousness (e.g., repeating orders, predicting good weather, squatting next to the table, c.f., Lynn and McCall 2009). Further, consumers tend to round up or down from the calculated tip percentage that they leave their servers and such adjustments appear to be made without much conscious deliberation (Lynn et al. 2008). Thus, it makes theoretical sense that tipping decisions might be unconsciously influenced by implicit racial biases such that Black servers would come to realize smaller tips relative to their White counterparts.

Tipping decisions do of course require some conscious deliberation. After all, most people adhere to the 15% to 20% prescriptive tipping norm in the United States (Lynn and McCall 2000), which requires deliberative calculations. While most consumers are not likely to consciously consider the race of their server when calculating the size of gratuity that they will leave extant evidence suggest that the adverse effects of implicit racial biases on deliberative actions, like tipping, may be induced when such actions can be “justified on the basis of some factor other than race” (Dovidio, Gaertner, Kawakami, and Hodson 2002, p. 90; also see Dovidio and Gaertner 2000). Although not supported by Lynn et al. (2008), effects of implicit racial biases harbored by restaurant consumers on the deliberate dimension of tipping decisions would be consistent with our finding that the Black-White difference in tip percent increases as customers are less satisfied with the service and atmosphere quality. If server race effects on tipping can be replicated in online hypothetical service scenarios using photos of the servers, then the ability of customers’ implicit racial biases to explain racial discrimination in tipping behaviors could easily be tested, by asking subjects to take the race IAT as part of the larger service study and we encourage such efforts.

Further, stereotypes of Black Americans as lazy and underserving of sympathy or assistance continue to be a salient source of racial resentment in the United States. Such stereotypes have been shown to underlie many Americans’ opposition to redistributive policies like welfare and affirmative action programs (Bobo 2001, 2011; DeSante 2013). Thus, explicit and/or implicit racial attitudes might also lead customers to associate Black servers with a lack of deservingness of financial help and as such leave them smaller tips than they otherwise give to more deserving White servers. Lending credence to this possibility, Lynn (2009b) found that a large percent of consumers’ report that they are motivated to tip in order to help servers make a

living (72%). To the degree that Black servers are perceived to be less deserving of such help as a result of the enduring and systemic anti-Black stereotypes that are interwoven into the fabric of our society and embedded in the cognitions of many consumers the patterns observed in this study make perfect sense. If Black servers are thought to be less deserving of “help” we would, for instance, expect customers who are motivated to help servers make a living to reward White servers more than Black servers for exceptional service and to punish Blacks more than Whites when service is less than exceptional (cf. DeSante 2013).

While the effects of implicit and explicit racial attitudes on tipping decisions is a fruitful direction to take this line of research we note that additional causal mechanisms are likely operating and should be theoretically identified and tested in future studies. It is plausible that future studies will find that the operative causal mechanisms are different among White and Black customers. For instance, Lynn and Sturman (2011) suggested that Black customers might think that lower tips will be more acceptable to Black servers and as such, feel less social pressure to tip them as much as they do White servers. While the authors did not elaborate on why African Americans would feel less social pressure to tip Black servers the same as they do White servers, we posit that such differences might stem from Black customers awareness of servers’ perceptions of them as being inadequate tippers (cf. Brewster and Rusche, 2012). Given such awareness it is likely that some Black customers feel pressure to “over” tip White servers in an attempt to combat such stereotypes.

Consistent with this possibility, Lynn (2009b) found that Blacks were more likely than Whites to say they tipped to improve their group’s image. Further, if Black customers’ efforts to manage impressions of their racial group via their tipping practices are perceived to be less necessary when their server shares their racial identity it would explain why Black customers’

tipping decisions are positively associated with their perceptions of service quality and satisfaction with the restaurant's atmosphere only when they were waited on by a Black waiters/waitresses.⁹ When served by a White server, Black customers may deliberately refrain from "punishing" their waiter/waitress by leaving them smaller tips in response to being less than satisfied with their dining experience for fear that doing so would be attributed to their race (e.g., "Blacks don't tip," cf. Brewster and Rusche, 2012) rather than the aspects of their dining encounter with which they were dissatisfied. While there are anecdotal reports that support the plausibility of impression management concerns as a salient source of Blacks' tendencies to over tip White servers, relative to Black servers, this explanation warrants further research.

Pursuing these and other lines of research on this unique type of consumer racial discrimination is not only necessary to advance our understanding of its causes and potentially far reaching consequences, but is also needed to inform business decisions among employers who rely on tipping as a compensation structure. Knowing if, when, and how servers' race affects consumers' tipping behavior is, for instance, important to restaurant managers for several reasons. First, race discrimination in terms and conditions of employment is unlawful in the United States under Title VII in the Civil Rights Act of 1964 and the Supreme Court ruled in *Griggs v. Duke Power Company* (1971) that this statute prohibits business policies and practices that have a disparate impact on protected classes even if those policies and practices appear at face value to be neutral and are not intended to discriminate (Twomey 1998; Yinger 1998). If consumers do tip on the basis of race (or sex), then the practice of tipping may have an adverse impact that the courts would deem unlawful. This means that restaurants and restaurant chains relying upon tipping to partially compensate their employees could be subject to expensive class-action lawsuits alleging racial discrimination in business practices (Ayres, 2008; Lynn, et. al.,

2008). Information about if, when and how servers' race effects consumers' tipping behavior would help restaurant managers and other business operators that rely on tipping as a source of employee compensation to better assess this risk.

Second, restaurant servers should be happier, more productive, and less likely to quit the higher their tip income (Lynn, Kwortnik and Sturman, 2011) and the fairer their compensation opportunities are (Bettencourt and Brown, 1997). Information about if, when and how servers' race affects effects consumer tipping would help restaurant managers to realize these benefits by assigning shifts and tables in such a way as to maximize their servers' tip incomes and/or equalize their servers' tip earning opportunities. Finally, some restaurant managers use tips as a gauge of server performance (Lynn, 2001). Information about if, when and how servers' race effects consumer tipping would help those restaurant managers to identify and correct for such biases in this measure of performance.

CONCLUSION

Research on racial inequities in the labor market has generally found residual earning disparities between whites and nonwhites even after controlling for a host of salient individual and establishment level characteristics associated with employability and productivity (Leicht, 2008). The net gap in earnings is often attributed to discrimination that stems from explicit and implicit biases harbored by employers. A considerably smaller body of research has also implicated consumers' racial biases and the resultant discriminatory market behaviors in the residual earnings gap, but direct tests of this source of racial earnings inequity are rare. In response, we capitalized on an opportunity to directly investigate consumer racial discrimination by assessing the effects of restaurant servers' race on consumers' tipping behaviors.

Our results replicated those of two prior studies that found evidence of racial discrimination in the tipping behaviors of Black and White taxi (Ayres et al., 2005) and restaurant consumers (Lynn et al., 2008) thus suggesting that the effect is indeed a real phenomenon. Additionally, we extended this line of research by assessing the mediating effects of a wider range of server skills than had been considered to-date and which had been shown to be predictive of customers' tipping behaviors. Our results provide compelling evidence that customers' tendencies to tip Black servers less vis-à-vis White servers cannot be attributed to interracial differences in service skills as approximated by three independent measures of perceived service quality. The causal mechanism(s) underlying this Black tip penalty nevertheless remain elusive thus underscoring the need for additional research on this unique source of racial earnings inequity. Like all social inequities the underlying causes of such disparities are likely to be multifaceted and complex. Thus, we encourage interdisciplinary scholarship on consumer racial discrimination in tipping practices so that this source of racial inequity in earnings might be further understood and ultimately eradicated.

In closing, we hope that this paper heightens scholarly interest in consumer racial discrimination more generally. Beyond tipping there is a seemingly infinite number of unexplored ways that implicit/explicit racial prejudices may become manifest in customers' interactions with service providers of color. For instance, despite the commonly adopted organizational maxim that "the customer is always right," there is growing body literature indicating that customers may not only be wrong but in some cases outright unjust, aggressive, and abusive towards their service providers (c.f., Berry and Seiders 2008; Bitner, Booms, and Mohr 1994; Grandey, Dickter, and Sin 2004). Further, such acts of mistreatment have been linked with a host of adverse effects including employee emotional exhaustion, burnout, stress,

feelings of degradation, and even physical harm (Grandey et al. 2004; Harris and Reynolds 2003). Yet there have been limited attempts to test whether incidents of such mistreatment systematically vary by service providers' race or ethnicity. A rare exception to this observation is Grandey et al.'s (2004) research on call center employees, or service representatives, in a large utility company. The authors found that employees were on average verbally attacked by angry consumers ten times a shift. Importantly, and as contemporary theories of racism would predict (Dovidio et al. 2002; Dovidio and Gaertner 2000), the frequency of incidences of consumer hostility was found to be statistically greater among Hispanic vis-à-vis non-Hispanic service representatives thus suggesting that consumers "who have the opportunity to 'punish' someone do so to a greater extent if the person seems to be a minority member" (Grandey et al. 2004, pp. 411). Additional research exploring the varied ways in which consumers might differentially treat service workers on the basis of their race or ethnicity is clearly needed and we hope this paper encourages such efforts.

REFERENCES

- Ashburn-Nardo, Leslie, Megan L. Knowles, and Margo J. Monteith. 2003. "Black American's Implicit Racial Associations and Their Implications for Intergroup Judgment." *Social Cognition* 21(1): 61-87.
- Ayres, Ian, Fredrick E. Vars and Nasser Zakariya 2005. 'To Insure Prejudice: Racial Disparities in Taxicab Tipping.' *The Yale Law Journal* 114(7): 1613–1674.
- Becker, Gary. 1971. *The Economics of Discrimination*. University of Chicago Press, Chicago.
- Berry, Leonard L. and Kathleen Seiders. 2008. "Serving Unfair Customers." *Business Horizons* 51(1): 29-37.
- Bitner, Mary Jo, Bernard H. Booms, and Lois A. Mohr. 1994. "Critical Service Encounters: The Employee's Viewpoint." *Journal of Marketing* 58(4): 95-106.
- Bobo, Lawrence D. 2001. "Racial Attitudes and Relations at the Close of the Twentieth Century." Pp. 264-301 in *America Becoming: Racial Trends and Their Consequences*. N.
- Bobo, Lawrence D. 2011. "Somewhere Between Jim Crow and Post-Racialism: Reflections on the Racial Divide in America Today." *Daedalus, the Journal of the American Academy of Arts & Sciences* 140(2): 11-36.
- J. Smelser, W. J. Wilson, and F. Mitchell (eds.). Washington, D.C.: National Academies Press.
- Brewster, Zachary W. 2012. "Racialized Customer Service in Restaurants: A Quantitative Assessment of the Statistical Discrimination Framework." *Sociological Inquiry* 82(1): 3-28.
- Brewster, Zachary W. and Sarah Nell Rusche. 2012. "Quantitative Evidence of the Continuing Significance of Race: Tableside Racism in Full-Service Restaurants." *Journal of Black Studies* 43(4): 359-384.

- Broyles, Philip and Bradley Keen. 2010. "Consumer Discrimination in the NBA: An Examination of the effect of Race on the Value of Basketball Trading Card." *The Social Science Journal* 47(1): 162-171.
- Coleman, Major G. 2003. "Job Skill and Black Male Wage Discrimination." *Social Science Quarterly* 84(4): 892-905.
- Correll, Joshua, Bernadette Park, Charles M. Judd, and Bernd Wittenbrink. 2002. "The Police Officer's Dilemma: Using Ethnicity to Disambiguate Potentially Threatening Individuals." *Journal of Personality and Social Psychology* 83(6): 1314-1329.
- Dasgupta, Nilanjana. 2004. "Implicit Ingroup Favoritism, Outgroup Favoritism, and Their Behavioral manifestations." *Social Justice Research* 17(2): 143-169.
- Davis, Stephen F., Brian Schrader, Teri R. Richardson, Jason P. Kring, and Jamie C. Kieffer. 1998. "Restaurant Servers Influence Tipping Behavior." *Psychological Reports* 83: 223-226.
- Depken II, Graig A. and Jon M. Ford. 2006. "Customer-based Discrimination against Major League Baseball Players: Additional Evidence from All-Star Ballots." *The Journal of Socio-Economics* 35(6): 1061-1077.
- Dovidio, John F., Kerry Kawakami, and Samuel L. Gaertner. 2002. "Implicit and Explicit Prejudice in Interracial Interaction." *Journal of Personality and Social Psychology* 82(1): 62-68.
- Dovidio, John F. and Samuel Gaertner. 2000. "Aversive Racism and Selection Decisions: 1989 and 1999." *Psychological Science* 11(4): 319-323.
- Dovidio, John F., Samuel Gaertner, Kerry Kawakami, and Gordon Hodson. 2002. "Why Can't

- We Just Get Along? Interpersonal Biases and Interracial Distrust.” *Cultural Diversity and Ethnic Minority Psychology* 8(2): 88-102.
- Fazio, Russell H. 1990. Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 75–109). Orlando, FL: Academic Press.
- Fugazza, Marco. 2003. “Racial Discrimination: Theories, Facts, and Policy.” *International Labour Review* 142(4): 507-541.
- Gabbidon, Shaun L. 2003. “Racial Profiling by Store Clerks and Security Personnel in Retail Establishments.” *Journal of Contemporary Criminal Justice* 19(3): 345-364.
- Gabbidon, Shaun L. and George E. Higgins. 2007. “Consumer Racial Profiling and Perceived Victimization: A Phone Survey of Philadelphia Area Residents.” *American Journal of Criminal Justice* 32(1-2): 1-11
- Grandey, Alicia A., David N. Kickter, and Hock-Peng Sin. 2004. “The Customer is Not Always Right: Customer Aggression and Emotion Regulation of Service Employees.” *Journal of Organizational Behavior* 25(3): 397-418.
- Grodsky, Eric and Devah Pager. 2001. “The Structure of Disadvantage: Individual and Occupational Determinants of the Black-White Wage Gap.” *American Sociological Review* 66(4): 542-567.
- Harris, Anne-Marie G. 2003. "Shopping While Black: Applying 42 U.S.C. § 1981 to Cases of Consumer Racial Profiling," *Boston College Third World Law Journal* 23: 1: 1-57.
- Harris, Anne-Marie G., Geraldine R. Henderson, and Jerome D. Williams. 2005. “Courting Customers: Assessing Consumer Racial Profiling and Other Marketplace Discrimination.” *Journal of Public Policy and Marketing* 24: 1: 163-171.

- Harris, Lloyd C. and Kate L. Reynolds. 2003. "The Consequences of Dysfunctional Customer Behavior." *Journal of Service Research* 6(2): 144-161.
- Hekman, David R., Karl Aquino, Bradley P. Owens, Terence R. Mitchell, Pauline Schilpzand, and Keith Leavitt. 2010. "An Examination of Whether and How Racial and Gender Biases Influence Customer Satisfaction." *Academy of Management Journal* 53(2): 238-264.
- Holzer, Harry J. and Keith R. Ihlanfeldt. 1998. "Customer Discrimination and Employment Outcomes for Minority Workers." *The Quarterly Journal of Economics* 113(3): 835-867.
- Ihlanfeldt, Keith R. and Madelyn V. Young. 1994. "Intrametropolitan Variation in Wage Rates: The Case of Atlanta Fast-Food Restaurant Workers." *The Review of Economics and Statistics* 76(3): 425-433.
- Jacob, Celine, Nicolas Gueguen, Gaelle Boulbry, and Renzo Ardiccioni. 2010. "Waitresses' Facial Cosmetics and Tipping: A Field Experiment." *International Journal of Hospitality Management* 29(1): 188-190.
- Johnson, William and Derek Neal. 1998. "Black Skills and the Black-White Earnings Gap." In *the Black-White Test Score Gap*, eds. C. Jencks and M. Phillips, pp. 480-498. Washington, DC: Brookings Inst.
- Juni, Samuel, Robert Brannon, and Michelle M. Roth. 1988. "Sexual and Racial Discrimination in Service Seeking Interactions: A Field Study in Fast Food and Commercial Establishments." *Psychological Reports* 63: 71-76
- Kanazaw, Mark T. and Jonas P. Funk. 2001. "Racial Discrimination in Professional Basketball: Evidence from Nielsen Ratings." *Economic Inquiry* 39(4): 599-608.
- Kawakami, Kerry, Heather Young, and John F. Dovidio. 2002. "Automatic Stereotyping:

- Category, Trait, and Behavioral Activations.” *Personality and Social Psychology Bulletin*, 28: 3-15.
- Leicht, Kevin T. 2008. “Broken Down by Race and Gender? Sociological Explanations of New Sources of Earnings Inequality.” *Annual Review of Sociology* 34: 237-255.
- Lynn, Michael, George M. Zinkhan, and Judy Harris. 1993. “Consumer Tipping: A Cross-Country Study.” *Journal of Consumer Research* 20: 478-85.
- Lynn, Michael, Michael Sturman, Christie Ganley, Elizabeth Adams, Mathew Douglas, and Jessica McNeil. 2008. “Consumer Racial Discrimination in Tipping: A Replication and Extension.” *Journal of Applied Social Psychology* 38(4): 1045-1060.
- Lynn, Michael. 2001. “Restaurant Tipping and Service Quality: A Tenuous Relationship.” *Cornell Hotel and Restaurant Administration Quarterly* 42(1): 14-20.
- Lynn, Michael. 2005. Increasing Servers’ Tips: What Managers Can Do and Why They Should Do It.” *Journal of Foodservice Business Research* 8(4): 89-98.
- Lynn, Michael. 2009a. “Determinants and Consequences of Female Attractiveness and Sexiness: Realistic Tests with Restaurant Waitresses.” *Archives of Sexual Behavior* 38(5): 737-745.
- Lynn, Michael. 2009b. “Individual Differences in Self-Attributed Motives for Tipping: Antecedents, Consequences, and Implications. *International Journal of Hospitality Management*, 28, 432-438.
- Lynn, Michael and Michael Sturman. 2011. “Is the Customer Always Right? The Potential for Racial Bias in Customer Evaluations of Employee Performance.” *Journal of Applied Social Psychology* 41 (9): 2312-2324.
- Lynn, Michael, Robert J. Kwortnik Jr., and Michael Sturman. 2011. “Voluntary Tipping and the

- Selective Attraction and Retention of Service Workers in the USA: An Application of the ASA Model.” *International Journal of Human Resource Management* 22(9): 1887-1901.
- Lynn, Michael and Tony Simons. 2000. “Predictors of Male and Female Servers’ Average Tip Earnings.” *Journal of Applied Social Psychology* 30(2): 241-252.
- Lynn, Michael and Michael McCall M. 2000. Gratitude and Gratuity: A Meta-Analysis of research on the Service-Tipping Relationship. *Journal of Socio-Economics* 29(2), 203-214.
- Lynn, Michael and Michael McCall. 2009. “Techniques for Increasing Servers’ Tips: How Generalizable are They? *Cornell Hospitality Quarterly* 50(2): 198-208.
- Neal, Derek, and William Johnson. 1996. “The Role of Pre-Market Factors in Black-White Wage Differences.” *Journal of Political Economy* 104(5): 869-895.
- Nardinelli, Clark and Curtis Simon. 1990. “Customer Racial Discrimination in the Market for Memorabilia: The Case of Baseball.” *The Quarterly Journal of Economics* 105(3): 575-595.
- Pager, Devah and Hana Shepherd. 2008. “The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets.” *Annual Review of Sociology* 34: 181-209.
- Parrett, Matthew. 2011. “Customer Discrimination in Restaurants: Dining Frequency Matters.” *Journal of Labor Research* 32(2): 87-112.
- Quillian, Lincoln. 2006. “New Approaches to Understanding Racial Prejudice and Discrimination.” *Annual Review of Sociology* 32: 299-328.
- Roth, Philip L. and Fred S. Switzer III. 1995. “A Monte Carlo Analysis of Missing Data Techniques in a HRM Setting.” *Journal of Management* 21(5): 1003-1023.

- Scarborough Research. 2006. "Dining Out is Quintessentially American: The Scarborough Restaurant Report." Available online at http://www.scarborough.com/press_releases/The%20Scarborough%20Restaurant%20Report%20July%2013%202006%20Final%20B.pdf (Last accessed March 29, 2013)
- Tainsky, Scott and Jason A. Winfree. 2010. "Discrimination and Demand: The Effect of International Players on Attendance in Major League Baseball." *Social Science Quarterly* 91(1): 117-128.
- Twomey, D. P. 1998. *Labor and Employment Law* (10th ed.). Eagan, MN: West.
- Yinger, John. 1998. "Evidence of Discrimination in Consumer Markets." *Journal of Economic Perspectives* 12(2): 23-40.

Table 1. Descriptive Statistics for Full Sample and by Race of Customers' Server

	Min. – Max.	Full Sample (n=394)		Black Server (n=73)		White Server (n=321)		Mean Difference
		Mean	SD	Mean	SD	Mean	SD	
<u>Principle Variables of Interest</u>								
Percent Tip	4.65 – 42.00	20.27	5.76	19.33	6.45	20.49	5.58	-1.16
Server Black (yes =1)	0 - 1	.19	-	-	-	-	-	-
Rare Service Behavior Index	1 - 5	2.86	1.32	3.03	1.24	2.83	1.34	.20
Subtle Service Behavior Index	1.22 - 5	4.28	.78	4.43	.65	4.24	.78	.19 [†]
Service Quality Index	3.5 - 9	7.96	1.13	8.23	1.03	7.89	1.15	.33*
<u>Control Variables</u>								
Customer Age	19 - 81	42.89	23.49	44.33	13.44	42.56	13.37	1.77
Customer Education	2 - 5	4.00	.92	3.91	.94	4.02	.91	-.12
Customer Income	1 - 4	2.79	1.13	2.81	1.00	2.79	1.15	.02
Customer female (yes = 1)	0 - 1	.57	-	.60	-	.56	-	.04
Customer Black (yes = 1)	0 - 1	.37	-	.41	-	.37	-	.05
Patronage Frequency (log transformed)	.00 - 2.41	.61	.59	.73	.61	.59	.59	.14 [†]
Bill size	3.50 – 150.00	43.89	23.49	48.27	27.30	43.15	22.33	5.13 [†]
Dining Party Size	1 - 5	2.28	.89	2.25	.91	2.28	.89	-.04
Server female (yes =1)	0 - 1	.42	-	.19	-	.47	-	-.28***
Atmosphere Quality Index	2.75 - 9	7.26	1.30	7.25	1.28	7.26	1.30	-.01
Food Quality Index	3.75 - 9	8.14	.92	8.34	.76	8.09	.95	.25*

[†] p < .10, * p < .05, ** p < .01, *** p < .001

Table 2. Metric Coefficients from OLS Regression Analysis Predicting Tip Percent

	Model 1	Model 2	Model 3
<u>Principle Variables</u>			
Server Black	-1.26 [†] (.737)	-1.50* (.726)	-1.22 (.930)
Rare Service Behaviors Index		.431 [†] (.233)	.440 [†] (.234)
Subtle Service Behaviors Index		.538 (.511)	.529 (.512)
Service Quality Index		.668 [†] (.341)	.668 [†] (.341)
Customer Black	-2.23*** (.603)	-2.17*** (.592)	-2.05** (.646)
Customer Race X Server Race			-657 (1.44)
<u>Control Variables</u>			
Atmosphere Quality Index	.018 (.235)	-.340 (.245)	-.339 (.246)
Food Quality Index	-.185 (.334)	-.607 [†] (.345)	-.611 [†] (.345)
Customer Female	.180 (.600)	.002 (.589)	.001 (.590)
Customer Age	-.079** (.024)	-.079** (.024)	-.079** (.024)
Customer Education	.211 (.321)	.295 (.316)	.296 (.316)
Customer Income	.145 (.308)	.111 (.300)	.100 (.301)
Patronage Frequency (log transformed)	1.39** (.484)	1.21* (.481)	1.23* (.484)
Dining Party Size	.193 (.349)	.229 (.342)	.214 (.344)
Bill Size	-.042** (.013)	-.043** (.013)	-.043** (.013)
Server Female	-1.67** (.587)	-1.50* (.583)	-1.48* (.585)
Constant	26.00*** (2.97)	23.05*** (3.07)	23.07*** (3.07)
R ²	.14	.19	.19

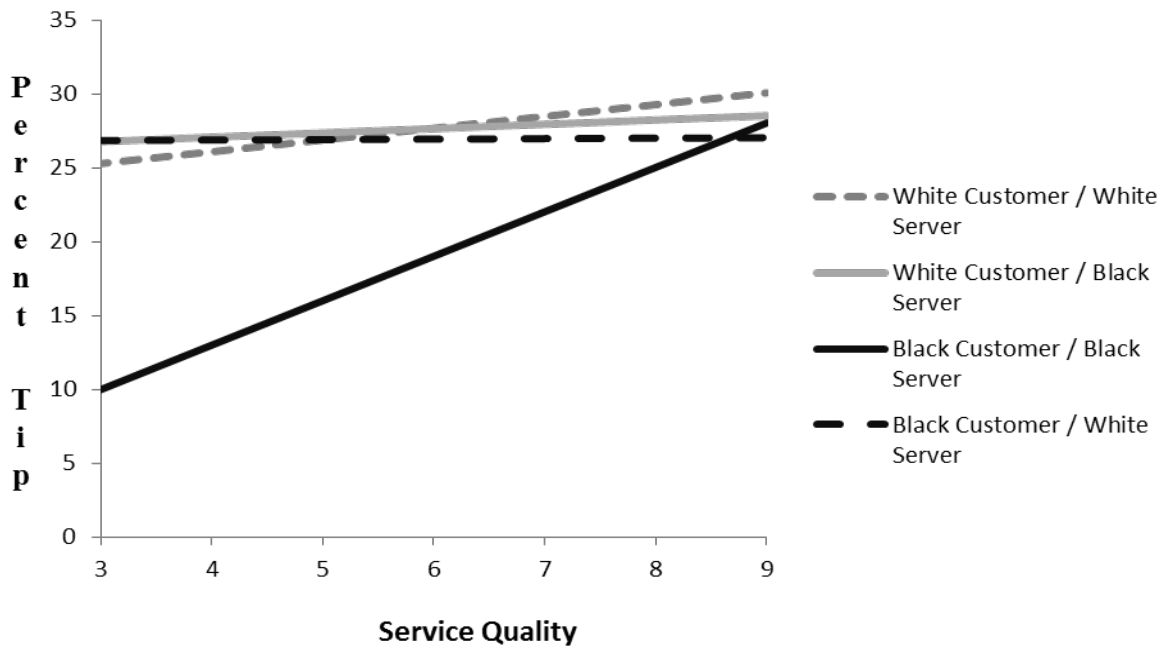
[†] p < .10, * p < .05, ** p < .01, *** p < .001

Table 3. Metric Coefficients from Exploratory Moderation Analyses Predicting Tip Percent

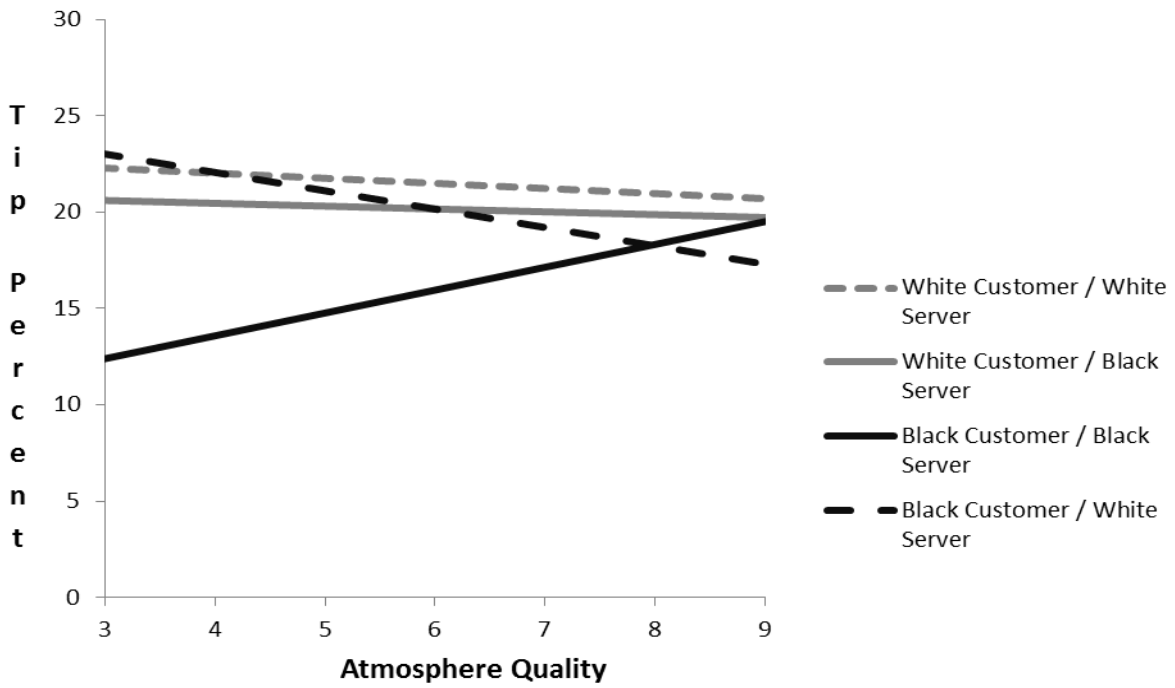
	Model 1	Model 2	Model 3	Model 4
Principle Variables				
Server Race X Service Quality	1.42* (.678)		-.507 (1.03)	
Server Race X Atmosphere Quality		1.14* (.543)		.117 (.787)
Server Race X Customer Race X Service Quality			3.49* (1.40)	
Server Race X Customer Race X Atmosphere Quality				2.02† (1.10)
Server Black	-13.14* (5.61)	-9.70* (3.98)	3.01 (8.64)	-2.03 (5.84)
Customer Black	-2.19*** (.589)	-2.21*** (.589)	3.86 (4.23)	2.80 (3.47)
Service Quality	.465 (.352)	.638† (.338)	.799† (.416)	.629† (.338)
Atmosphere Quality	-.380 (.245)	-.559* (.265)	-.362 (.244)	-.264 (.334)
Server Race X Customer Race			-28.82* (11.56)	-15.01 (8.05)
Customer Race X Service Quality			-.767 (.533)	
Customer Race X Atmosphere Quality				-.689 (.475)
Constant	24.67*** (3.15)	24.76*** (3.16)	22.89*** (3.45)	23.08*** (3.40)
R ²	.19	.19	.21	.20

Figure 1. Graphical Display of Three Way Interaction Effects between Servers' Race, Customers' Race, and Service Quality (A) / Atmosphere Quality (B) on Tip Percent

Panel A



Panel B



NOTES

¹ In a third study, Parrett (2011) analyzed survey data collected outside of five Virginia restaurants and found no effect of servers' race on customers' tipping decisions. Parrett's sample was, however, quite racially homogenous. In fact, of the 295 cases in the analysis that included measures of customers' and servers' race there were only eighteen observations with nonwhite customers and fifteen with nonwhite servers. Further, given the lack of minority representation in these data Parrett was not able to compare tips given to White servers with those given to Black servers, as had been done in the Ayres et al. (2005) and Lynn et al. (2008) studies.

² Two items - sat down and seemed distracted -- did not load highly on either factor and were eliminated from further analysis.

³ Twenty-nine respondents provided a number without reporting which period they were using (e.g., week, month, or year). These cases were coded as referencing the annual number of times they dine in the surveyed restaurant.

⁴ The attribute set for our measure of customers' race included an "Other" response option. Thirty subjects' identified with this "Other" racial category. In the analysis these subjects were coded as non-Black (=0). However, to test for robustness, we estimated our models that included dummy variables for both Black (=1) and Other (=1) customers with the reference group being White customers (=0) and found that our substantive conclusions did not change from those reported in the main text.

⁵ The correlations between the three service measures were all positive and statistically reliable (at $p < .001$) as you would expect. However, the three measures did capture unique aspects of service as the service quality index correlated with the rare service behavior index only .33 and

with the subtle service index only .63. Furthermore, the rare service behavior index and the subtle service behavior index correlated with one another only .41. All three measures correlated with percent tip at .14, $p < .01$.

⁶ Lynn and Sturman (2011) found a server race by customer race interaction effect reflecting a positive same-race bias on ratings of situational dimensions of service (i.e., server attentiveness and promptness) but not on personal dimensions of service (i.e., server appearance and friendliness). In an effort to directly replicate this effect, we subdivided the service quality index into separate indices of situational and personal dimensions of service and then regressed each on all the control variables, server race and its interaction with customer race. Similar analyses were done on the rare service behaviors index and the subtle service behaviors index in an attempt at conceptual replication. None of the server race by customer race interactions were significant – for situational service index ($B = .106$, $t(373) = .33$, $p = .74$), for personal service index ($B = -.14$, $t(373) = -.3$, $p = .60$), for rare service behaviors ($B = .44$, $t(380) = 1.26$, $p = .21$) and for subtle service behaviors ($B = -.08$, $t(380) = -.44$, $p = .66$).

⁷ One intuitive interpretation of these three way interactions is that they reflect out-group favoritism among Black customers (see Dasgupta 2004). However, in the absence of additional research we feel that such a conclusion would be premature. Had we found evidence of out-group biases in African Americans' subjective evaluations of the service provided to them by White relative to Black servers we would be more comfortable elaborating on implicit out-group favoritism as a potential explanation underlying these findings. Given that this was not the case (cf. endnote # 6) we present this finding as a point of reference for future research on this topic.

⁸ While not our focus, we observed customers in our study to tip female servers significantly less than their male coworkers. While this finding is consistent with those produced from a large survey of restaurant servers (Lynn and McCall, 2009), it deviates from most studies, which have found non-significant server-gender differences in tip earnings (e.g., Lynn, Kwortnik and Sturman, 2011; Lynn et al., 2008; Parrett, 2011) or have found that female servers garner larger tips than their male coworkers (Davis, Schrader, Richardson, Kring and Kieffer, 1998).

Additional research is clearly needed to clarify the equivocal nature of this finding. As a point of departure we suggest that researchers further explore the moderating effects of servers' physical characteristics (e.g., young, thin, blond hair, cosmetic use, etc.) in the relationship between servers' gender and customers' tipping decisions (cf. Jacob, Gueguen, Boulbry, and Ardiccioni, 2010; Lynn, 2009a; Lynn and Simons, 2000).

⁹ Although neither of the three way interactions between servers' race, customers' race, and food quality ($B = 2.75$, $t(374) = 1.53$, $p = .127$) and between servers' race, customers' race, and subtle hospitality enhancing server behaviors ($B = 2.68$, $t(374) = 1.17$, $p = .241$) were statistically reliable the nature of these effects likewise suggest that Black customers might discriminate against Black servers, but not White servers, by tipping them less when they are less satisfied with the food quality and when Black servers' convey fewer hospitality enhancing behaviors. In fact, to the degree that tips relinquished by Black customers to White servers are associated with their perceptions of food quality the nature of this relationship, like atmosphere quality, is negative thus suggesting that Black customers might tip White servers more the less satisfied they are with this facet of their dining experience.