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Mitigating implicit racial bias in tipping : When direct and indirect experience matters

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Mitigating implicit racial bias in tipping: when direct and indirect

experience matters

Purpose Academic research has supported the belief that consumers undertip minority race service workers due to implicit racial biases. However, there has been less focus in examining possible moderating factors. This paper fills this gap by analyzing the role of direct and indirect experience in tipping frontline service workers from a minority background. Given the prominence of customer ratings on digital service platforms and the perception that African-Americans are discriminated against, we look at the interplay of interaction length (direct experience) and customer ratings (indirect experience) on the relationship between race and tipping.

Design/methodology/approach An expectancy disconfirmation framework was developed and tested with a sample of 360 US participants in an online experiment. The experiment followed a 2 x (race: African-American versus Caucasian) x 2 (direct experience: limited versus extensive) x 3 (indirect experience: absent versus positive versus negative customer rating) design.

Findings We found consumers who have extended direct experience (longer service interaction) and no indirect experience (absent customer ratings) tipped African-Americans more than Caucasians. Interestingly, this effect is reduced in the presence of indirect experience (customer ratings). Lastly, where the consumer lacks direct experience (shorter service interaction) but is exposed to positive indirect experience (positive customer ratings), consumers tip African-Americans more.

Originality/value This is the first paper that examines the role of direct and indirect experience in the relationship between race and tipping. Based on our findings, we provide

several contributions, including recommendations to reduce inequalities arising from implicit racial bias on digital service platforms.

Introduction

Digital service platforms such as Uber, Airbnb and Didi are increasingly adding customer ratings and tipping functionality to their apps (Hawkins, 2017). While these changes have largely benefitted consumers, service workers are exposed (e.g., in terms of customer ratings) and dependent (e.g., in terms of tipping facilities), particularly exacerbating minority workers' vulnerabilities (Edelman, 2014; Rosenblat et al., 2017). For instance, as recent as 2017, it was reported that Airbnb guest applications were 16% less likely to be accepted for African Americans (Edelman, 2017). Further, the widely held belief amongst Uber drivers that the rating system is 'racially-biased' led to a discrimination lawsuit against Uber in 2020 (Kerr, 2020), with the company also acknowledging that African-American drivers get short-changed in tips (Brustein, 2016). While some platforms have made efforts to manage discrimination (Kerr, 2020), indicating the managerial and societal relevance of this issue, success has been mixed, and discrimination remains rampant (Goel et al., 2020). In addition, the debate whether to discard tipping to eliminate discrepancies in wages for minority service workers remains (Ferdman, 2016; The Economist, 2018) while also arousing the interest of scholars in the field (Alexander et al., 2021; Lynn, 2018; Lynn and Kwortnik, 2015; 2020).

We offer a greater understanding of race dynamics in the U.S gig economy. Extant literature has provided invaluable insight on the main effect of race on service outcomes (e.g. Edelman, 2017; Ge *et al.*, 2016; Houston, Grandey and Sawyer, 2018). For example, empirical research supports that customers, regardless of their race, rate African-American

employees' performance more negatively than white employees', even when they deliver the same quality of work (Roberson and Block, 2001). This effect can be attributed to implicit racial biases (Dovidio and Gaertner, 2000), which represent an unintentional and unconscious form of discrimination. Specifically, some scholars have focused on the effects of racial stereotypes on consumers' tipping behavior (Ayres *et al.*, 2005; Chandar *et al.*, 2019; Koku, 2005; Lynn *et al.*, 2008); however, the results are inconclusive to date. Interestingly, most of these studies have focused on situations where the length of service interaction (a form of direct experience) is quite limited, and indirect experience (for example, customer ratings) are absent (Ayres *et al.*, 2005; Lynn *et al.*, 2005; Lynn *et al.*, 2008).

Lack of empirical consensus on the issue and the increasing relevance of customer ratings on digital service environments call for further investigation to find conditions that mitigate any negative effects deriving from frontline employees' race. We address this lack of insight by tackling a critical research question, and namely: *how do direct experience and indirect experience affect tip amount for African-American versus Caucasian service workers*?

We tackle this question by proposing an expectancy disconfirmation framework (Oliver, 1977), whereby consumers' tipping behavior depends on whether stereotype-based expectations are confirmed (or disconfirmed) by the evidence gained through both direct and indirect experience (Hoch and Ha, 1986; Tse, 2003). First, with more extended direct experience and in the absence of indirect experience, we contend that the tension between consumers' negative expectations and the perceived service performance will trigger compensatory behavior that will make consumers tip African-American service providers more than their Caucasian counterparts. Second, with more limited direct experience and in the latter

as a social norm to either negatively or positively disconfirm their expectation and guide their behavior in line with the consensus heuristic (Axson et al., 1987). Third, with extensive direct experience and in the presence of indirect experience, consumers' stereotype-based expectations may be updated by other customers' ratings due to increased opportunities to process second-hand information (Fazio and Zanna, 1981; Guan *et al.*, 2020; Kokkinaki and Lunt, 1997); in addition, due to a longer interaction, consumers are more likely to collect more first-hand evidence that confirms their expectations (Hoch and Ha, 1986; Rothbart *et al.*, 1979). A large-scale scenario-based experiment supports our hypotheses.

Our research offers multiple contributions. Firstly, to the best of the authors' knowledge, although previous studies focused on the role of stereotypes and implicit racial biases in tipping (Koku, 2005; Lynn *et al.*, 2008), we provide the first attempt to test the synergetic effect of direct and indirect consumer experiences with minority service providers on tipping. Furthermore, we also build on previous findings in the literature by demonstrating that the negative impact of racial stereotypes are mitigated and even reversed in specific service scenarios. On the whole, these insights are critical to the emerging and promising literature on promoting social justice, equality, and reducing discrimination in service settings (Grandley *et al.*, 2019; Houston *et al.*, 2018).

Secondly, we provide a series of practical implications. As the first and most important implication, we suggest that service firms test alternatives to current tipping practices, for example, removing tipping, pooling tips, and having a fixed tip percentage. This would reduce the power imbalance between consumers and minority workers and address the broader issues of 'privilege' versus 'oppressed' in society (Johnson, 2001; Pyke, 2010). We also provide guidance on when customer ratings should be leveraged to promote equality, that is, when service interactions with individual customers are likely to be longer. In

addition to this, we also contribute to managerial practice by empowering minority workers; we inform them about service characteristics that amplify stereotypes and raise attention for consumers who may reflect on potential biases.

The remainder of the article is structured as follows. We first review the literature on stereotypes in service settings, focusing on consumer tipping practices. Next, we introduce our expectancy disconfirmation framework, based on which we outline some scenarios of the effect of stereotypes on tipping (direct and indirect experience) and propose formal hypotheses. We will then discuss the methodology adopted, findings, and finally theoretical and managerial implications.

Theoretical Background and Hypotheses Development

The Effect of Stereotypes on Evaluations and Tipping

Differences in gender, age, ethnicity, physical ability, sexual orientation, and other qualities are widening the gap between the privileged and the oppressed in society (Johnson, 2001). Race specifically seems to be creating enormous disparities in the marketplace (Crockett and Grier, 2021), and marketing researchers are now more than ever reporting how racial minorities are victims of discrimination both online and offline and materially disadvantaged due to widespread stereotypes (Poole *et al.*, 2021).

Stereotypes are biased "beliefs about the characteristics, attributes and behaviors of members of certain groups" (Hilton and von Hippel, 1996, p. 240). They are adopted to make quick evaluations about others in an attempt to reduce situational complexity and save an individual's cognitive resources (Huetten *et al.*, 2019; Taylor, 1981). They are usually associated with an individual's gender, physical appearance, race, ethnicity and country of origin (Baltes and Rudolph, 2010).

The role of stereotypes has been widely acknowledged in the marketing literature and they have been found to influence a wide array of attitudes and behaviors in several service contexts (Baltes and Rudolph, 2010; Fiske and Taylor, 1991) and industries (Grandey *et al.*, 2019; Hekman *et al.*, 2010; Huetten *et al.*, 2019). Specifically, individuals tend to hold general biases and pre-existing stereotypes towards frontline service employees based on their race and other demographic or physical characteristics. These stereotypes are used to form expectations, evaluate service encounters and even justify prejudice and biased treatment towards minority service providers (Grandey *et al.*, 2019).

For example, service consumers tend to rate African-American employees' performance more negatively than white employees', even when performance is objectively the same. For example, Bavishi *et al.* (2010) analyzed stereotypes that students hold of professors before the beginning of classes and found that African-American professors were deemed less competent, legitimate and sociable than Caucasians. Further extending on this, Hekman *et al.* (2010) discovered that non-white frontline service providers received lower aggregated customer satisfaction evaluations in both medical and retail settings regardless of the respondent's race. Lastly, Grandey *et al.* (2019) showed that African-American frontline employees tend to be evaluated less favorably than Caucasians, unless the former display more emotional labor, in terms of warmth. The authors claim that since African-Americans are allegedly considered loud, argumentative, threatening, aggressive, quick-tempered, and, thus, not "warm" people, displaying emotional labor can improve judgements towards them, upregulate positive emotions, and thus reduce racial disparities.

Overall, these studies support that racial stereotypes exist in service settings and negatively impact consumers' judgements. These stereotypes could be a manifestation of "implicit racial biases" (Dovidio and Gaertner, 2000), whereby individuals discriminate

against minorities unintentionally and unconsciously rather than openly and explicitly. Thus, racial stereotyping may go beyond just affecting one's poorer perception of frontline employees' performance and service quality evaluation. Previous research has demonstrated that "implicit racial biases" can come into play during tipping – the customer's voluntary custom of giving a monetary gift to service employees who performed services for them (Lynn and Latané, 1984; Lynn *et al.*, 1993). For instance, some studies have suggested that Caucasian taxi drivers received higher tips than ethnic minority taxi drivers (Ayres *et al.*, 2005; Chandar *et al.*, 2019). Moreover, Lynn *et al.* (2008) supported these findings by showing that both African-American and Caucasian customers discriminated against African-American frontline service workers by tipping them less than their Caucasian counterparts; however, Caucasian customers did so to a greater extent. Conversely, Koku (2005) revealed that ethnicity did not influence tipping behaviors in service contexts other than hospitality (i.e. restaurants).

To summarize, service customers may disfavour minorities like African-Americans, which can lead to employment discrimination (Lynn and Withiam, 2008). Nevertheless, the negative impact of racial stereotypes on tipping is not consistent in the literature to date, thus warranting further investigation on conditions that mitigate this effect. As discussed in the following paragraphs, we propose that tipping behavior for minority service providers depends on the quantity and/or quality of the evidence they can gather about the customer experience.

Customer Experience and the Role of Expectations in Tipping

Customer experience reflects customers' interaction with a firm over time across multiple touchpoints (Lemon and Verhoef, 2016). Based on their experiences, consumers gather proof of the quality of a service, form expectations, perceptions, attitudes and behaviors towards the service provider (Park *et al.*, 2017). In particular, experiences allow customers to assess their satisfaction and perceived quality with a product and/or the service provider (Hoch and Ha, 1986), both crucial predictors of tipping behavior (Lynn *et al.*, 1993; Tse, 2003). In fact, the more satisfied a consumer is with a service performance, the higher the tip they will give the service provider.

According to expectancy disconfirmation theory (Oliver, 1977; 2014), consumer satisfaction depends on the discrepancy between their expectations and their experience with a service provider. Three possible outcomes may ensue: 1) confirmation of the expectations, which occurs when expectations are met by perceptions, yielding mere satisfaction; 2) positive disconfirmation, which occurs when expectations are lower than perceptions, yielding high satisfaction or delight; 3) negative disconfirmation, which occurs when expectations. Previous research has established a link between expectation disconfirmation and tipping behavior. For example, Tse (2003) found that the tipping amount is higher for positive disconfirmation and lower for negative disconfirmation.

Direct and Indirect Experience in Tipping Minority Service Providers

How do consumers gather information to form their expectations and perceptions about a service experience? The literature distinguishes two modes of learning about service experiences: direct experience, which represents a first-hand encounter with a service provider and is, therefore, an active form of learning (Hamilton and Thompson, 2007; Hoch and Deighton, 1989); and indirect experience, which represents a second-hand encounter with a service provider through information provided by others (e.g., advertising, word-of-mouth, external reviews, and customer ratings) and is a passive form of learning (Dai *et al.*, 2019; Fazio *et al.*, 1978). Importantly, researchers have suggested that knowledge gained through indirect experience can represent a tentative hypothesis that consumers tend to confirm or disconfirm through direct experience (Hoch and Ha, 1986), relating to the expectancy disconfirmation theory previously discussed (Oliver, 1977).

Drawing on these theories and the dichotomy between direct and indirect experience, we contend that the effect of racial stereotypes on consumers' tipping behavior is contingent on the quantity and quality of direct and indirect experience they are exposed to. While previous research has shown that implicit racial stereotypes are at play when tipping, with consumers giving lower gratuities to ethnic minority workers (Lynn *et al.*, 2010), these findings may be ascribed to the absence of any indirect experience and very limited direct experience with the service provider (e.g., Ayres *et al.*, 2005; Lynn *et al.*, 2010). Indeed, individuals require more evidence to change pre-conceived stereotypes (Ditto and Lopez, 1992), so limited direct experience is unlikely to disprove their expectation that a minority ethnic service provider is up to standard, and they will undertip them due to negative disconfirmation.

As a result, further investigation is needed to comprehend the interplay of these two variables (direct and indirect experience) in amplifying, mitigating or reversing the negative effect of racial stereotypes on tipping. Here we extend the existing literature by manipulating the amount of direct experience available to consumers (limited vs extended) and the presence and type of indirect experience (absent vs present and negative vs positive) (Table I). Using expectancy disconfirmation theory, each scenario leads to differences in consumers' expectations for an African-American service worker and differences in the perceived performance of the African-American service worker. Using the discrepancy between

expectations and perceived performance as a basis, we then formulate our hypotheses on tip amount by scenario.

[Insert table I about here]

Scenario 1: Extensive Direct Experience and Absence of Indirect Experience

The first scenario describes a consumer exposed to extensive direct experience (e.g., a longer service interaction) and no indirect experience (e.g., no customer ratings). Individuals generally display implicit racial biases towards minority service workers, negatively affecting their attitudes and tipping behaviors (Dovidio and Gaertner, 2000; Lynn et al., 2010). However, when consumers have extensive direct experience, they have a better opportunity to gather evidence and change their pre-conceived idea about a stereotype (Ditto and Lopez, 1992; Hilton and von Hippel, 1996). In this case, the expectation is set by implicit racial biases (i.e., ethnic minority service workers will perform worse than Caucasian ones). However, this expectation is more likely to be positively disconfirmed by one's perceptions and evidence gathered, leading to a more positive perception of performance. Thus, according to expectancy disconfirmation theory, we predict that when perceived performance exceeds expectations, higher tips for ethnic minority workers will follow (Tse, 2003). Because holding negative stereotypes is socially undesirable, the tension between social norms and one's implicit racial biases could lead consumers to display overcompensation behaviors and even tip ethnic minorities more than their Caucasian counterparts. Indeed, research has found that individuals who fail to adhere to societal standards, such as holding implicit racist attitudes and biases, are more likely to engage in prosocial or compensatory behaviors (Tagney and Dearing, 2002; Tagney et al. 2007). For instance, Burmeister et al. (2019) discovered that individuals develop compensatory beliefs or engage in actions to

offset past behaviors that are socially undesirable. Similarly, Dahl *et al.* (2008) found that consumers engage in compensatory behavior to make up for a negative action towards a service provider. One of the compensatory behaviors that consumers may adopt to counteract socially undesirable thoughts or actions is tipping (Parrett, 2006).

To summarize, in the absence of indirect experience, a consumer will tip a minority service provider more than a Caucasian not only because their expectations are more likely to be positively disconfirmed but also because they overcompensate for implicit biases. Hence, we hypothesize:

H1: With extensive direct experience (i.e. longer service interaction) and in the absence of indirect experience (i.e. customer ratings), tips for African-American service workers will be greater than for their Caucasian counterparts.

Scenario 2: Limited Direct Experience and Presence of Indirect Experience

The second scenario occurs when a consumer has limited direct experience (e.g., a shorter service interaction) but is exposed to either negative or positive indirect experience (e.g., customer ratings). Similar to the previous scenario, consumers will hold the expectation that minority workers deliver more poorly than Caucasians due to implicit racial biases. However, because consumers have little first-hand evidence to form their own evaluation of the frontline service worker, they will have to rely more on indirect experience (positive or negative) to assess the service performance. In particular, for offerings that usually would require more direct experience with the provider to be evaluated, consumers are more likely to align their attitudes and behaviors with the evidence provided by indirect experience (Huang *et al.*, 2009; Park and Lee, 2009; Senecal and Nantel, 2004). In other words, under these circumstances, consumers tend to go along with the consensus of the majority, a

manifestation of the consensus heuristic (Axson et al., 1987) and use this as a social norm to justify their behavior (Fogel and Zachariah, 2017; Sridhar and Srinivasan, 2012).

Depending on how positive the indirect experience is, two situations can ensue. In the presence of negative indirect experience (e.g., low customer ratings), consumers' implicit bias and expectation that ethnic minority service workers deliver more poorly than Caucasians are supported by indirect experience, and negative confirmation will lead to lower tips for minorities. Conversely, in the presence of positive indirect experience (e.g., high customer ratings), consumers' expectations will be positively disconfirmed by indirect experience because they are unable to find any evidence that aligns with the stereotype. This is in line with previous research demonstrating that exposing individuals to expectancy disconfirming information about a group may attenuate their erroneous and pre-conceived group-based belief (Hewtstone *et al.*, 1992; Johnson and Hewstone, 1992). For instance, akin to scenario 1, this positive disconfirmation will induce consumers to overcompensate for holding implicit negative biases for minority service workers and tip them more than their Caucasian equivalents. We hypothesize that:

H2a: In the presence of limited direct experience (i.e. shorter service interaction) and negative indirect experience (i.e.negative customer ratings), tips for African-American service workers will be lower than for their Caucasian counterparts.

H2b: In the presence of limited direct experience (i.e. shorter service interaction) and positive indirect experience (i.e. positive customer ratings), tips for African-American service workers will be greater than for their Caucasian counterparts.

Scenario 3: Extensive Direct Experience and Presence of Indirect Experience

The third and final scenario describes consumers exposed to both extensive direct experience (i.e., a longer service interaction) and indirect experience (e.g. both positive or negative customer ratings). In this scenario, while the initial expectation of the performance of African-Americans is likely to be marked by implicit bias, this expectation is expected to be influenced by indirect experience in the form of customer ratings (Guan et al., 2020), which are usually available prior to the service delivery. Extant research stipulates that consumers tend to consider indirect experience more when they have extended direct experience (Fazio and Zanna, 1981; Kokkinaki and Lunt, 1997). That is because 1) more extended service interactions will lead to a higher tip amount, thus making the financial risk greater, and 2) there is greater impact from a possible negative service experience in terms of time spent (Rothschild, 1977). Thus, we suggest that consumers will be more likely to update their expectations of performance in scenario 3 when compared to scenario 2. As a result, consumers exposed to customer ratings, either positive or negative, are likely to update their initial expectations based on the new evidence, with negative customer ratings for African-Americans strengthening the initial negative expectation and positive customer ratings for African-Americans reducing it.

Likewise, consumers' assessment of performance in this scenario is influenced by how positive the indirect experience is. Scholars have demonstrated that setting an expectation of a product may alter individuals' perceptions and attitudes (Lee *et al.*, 2006) as well as the saliency of product characteristics that confirm the expectation (Rothbart *et al.*, 1979). Similarly, more extensive direct experience may allow consumers to collect evidence that confirms the expectation set by indirect experience (Hoch and Ha, 1986). For example, a taxi passenger who encounters a chatty taxi driver during a long drive may perceive their performance differently based on how positive the review of the taxi driver is. On the one hand, a passenger who encounters an overly chatty taxi driver with a three-star rating may judge the experience as "irritating" given that the passenger is seeking out support for the expectation set by the negative rating. On the other hand, an overly chatty taxi driver with five stars is more likely to be perceived as "friendly" as the passenger seeks out positive confirmation of the driver's positive customer ratings. Thus, we expect that consumers will evaluate a longer service interaction in light of the information provided by indirect experience, leading to mere confirmation of expectations. As per expectancy disconfirmation theory, a performance that meets expectations is unlikely to result in lower or higher tips; therefore, we predict equal tips between the races. In other words, having customer ratings reduces the effect of African-Americans receiving higher tips that existed in longer service interactions in the absence of indirect experience (scenario 1). This leads to our third hypothesis:

H3: In the presence of extensive direct experience (i.e. longer service interaction) and indirect experience (i.e. either positive or negative customer ratings), tips for African-American service workers will be the same as for their Caucasian counterparts.

Method

*Overview*A 2 x (race: African-American versus Caucasian) x 2 (direct experience: limited versus extensive) x 3 (indirect experience: absent versus positive versus negative) experiment was designed. First, we chose a ride-sharing context (Uber), because of 1) the ability to manipulate direct experience in the form of trip length and quality of indirect experience in the form of customer (star) ratings, and 2) the increasing relevance of ride-sharing (14 million rides completed each day for Uber alone; <u>www.uber.com</u>). Race was operationalized as African-American versus Caucasian because of strong negative stereotypes for African-

Americans service workers (Grandey et al., 2019). A limited direct experience was operationalized as a 4 minute Uber trip, whereas a 60 minute trip depicted an extensive direct experience. The latter corresponded with Uber's real-life definition of a 'long ride' (Griswold, 2017). Positive customer ratings were operationalized as a five out of five star rating. On the other hand, negative customer ratings were represented by a three out of five star rating given that drivers receiving three stars are usually dropped by Uber (Paul, 2019).

Stimuli

Respondents were presented with a scenario which described that an Uber ride was required to travel to a friend's house (i.e. either a 4 or 60 minute trip). We provided the respondent with a picture of their driver 'Dave,' (as is the case with a real-life Uber booking). The picture of the driver received by the respondent differed across and within experimental conditions: There were 3 versions of 'African-American Dave,' and 3 versions of 'Caucasian Dave' in the study, with each respondent within a condition randomly receiving one. This was done to minimize bias stemming from Dave's appearance, such as perceived attractiveness. Each respondent was then given the same neutral service description. At the end of the scenario, respondents were reminded of how long the trip took. See Appendix A for stimuli examples, showing all versions of 'Dave' used across the study.

Sample and measures

US Amazon M-turk respondents (N=360; $M_{Age} = 35.08$; SD = 10.58; 36.7% females) were randomly assigned to one of the conditions. Tipping was measured with the question: "How much would you be willing to tip Dave? (percent of trip fare)" on a 8-point scale (I am not willing to tip at all, 1-5%, 6-10%, 11-15%, 16 - 20%, 21-25%, 26-25%, over 30%). The questionnaire ended with sociodemographic questions and an open-ended question checking for experimental effects.

Results

To test the interaction between race and direct experience on tip amount (H1) and the 3-way interaction between race, direct experience, and indirect experience on tip amount (H2 and H3), we employed model 3 of Hayes' (2018) PROCESS macro with 5000 bootstrapped samples (see table II). This test was chosen as it allows for moderated moderation by testing for tip amount at specific values of the two moderators. We entered race as the IV (Caucasian = 0; African-American = 1); tip amount as the continuous DV; direct experience as a binary moderator W (limited = 0; extensive = 1) and indirect experience as a categorical moderator Z (none = 1; negative = 2; positive = 3).

[Insert table II about here]

The results for H1 show a significant two-way interaction between race and trip length (β = 1.39, SE= 0.62, p=0.01). Specifically, for extensive direct experience (in the absence of customer ratings), African-Americans received higher tips (M= 4.71) than Caucasians (M= 3.9). The tip difference between the two races is significant when trips are extensive (β = 0.81; SE= 0.44; p= 0.03) supporting H1. While not strictly related to our hypotheses, a univariate ANOVA was run to test whether the difference in tip amount received from drivers in going from a limited to extensive trip was significant for each race. Interestingly, for African-American drivers, extensive direct experience makes a moderately significant difference on tip amount (M_{Diff} = 0.79; SE= 0.33; p= 0.1) whereas for Caucasian drivers it does not (M_{Diff} = -0.60; SE= 0.45; p= 0.19). Overall, these results indicate a crossover interaction as the effect of race on tip amount is reversed depending on the amount of direct experience. The mean tip difference from going from a limited to extensive trip is - 0.60 for Caucasians, yet it is 0.78 for African-Americans.

H2a predicts that Caucasians receive higher tips compared to African-Americans when direct experience is limited, and customer ratings are negative, whereas H2b expects that African-Americans receive higher tips when direct experience is extensive, and customer ratings are positive. To test these hypotheses, the same model that tested H1 was used, but the moderators were flipped (these results are presented in panel B of table II). Results show that when direct experience is limited, the interaction of race and indirect experience is significant (F=4.52 (2, 348); p=<0.01; one-tailed test). However, when customer ratings are negative, there was no significant difference in tip amounts between races (β = 0.35, SE = 0.44, p=0.22; one-tailed test), thus not supporting H2a. Contrary, the conditional effect of race on tipping when customer ratings are positive and direct experience is limited was significant (β = 1.27, SE = 0.43, p=<0.01; one-tailed test), supporting H2b (panel C). Figures 1 and 2 visually display the disparity in tip amount between the races (M_{African-American}= 5.10; M_{Caucasian}= 3.83) under conditions of limited direct experience and positive customer ratings, with African-Americans receiving a substantially higher tip.

The last hypothesis stipulates that when direct experience is extensive, the mere presence of indirect experience will result in an insignificant difference in tip amount between the two races, irrespective of whether the customer ratings are positive or negative (H3). Results revealed an overall significant 3-way interaction between negative customer ratings (versus no ratings), race, and direct experience on tipping (β = -1.94 SE = 0.87, p= 0.03). Specifically, when customer ratings are low, the interaction between race and direct experience is not significant (β = -0.56, F = 0.83(1,348), p = 0.36) (panel A of table II), supporting H3. Similarly, the results are mirrored for the interaction of positive customer ratings (versus the absence of customer ratings), race, and direct experience. While the overall 3-way interaction is significant (β = -2.39 SE = 0.86, p=0.01), the interaction of race

and direct experience when customer ratings are positive is not significant (β = -1.01, F = 2.85(1,348), p = 0.09). Thus, overall H3 is supported. The means for tip amount by race and customer ratings when direct experience is extensive are as follows: negative customer ratings - M_{African-American}= 4.00 and M_{Caucasian} = 4.21; positive customer ratings - M_{African-American}= 4.43 and M_{Caucasian}= 4.17. Refer to figures 1 and 2 for visual representations of results.

[Insert figures 1 and 2 about here]

Lastly, while not hypothesized, our results provide some support for the negative effect of racial stereotyping on tip amount at the 'baseline level' (i.e. limited direct experience in the absence of indirect experience). Caucasian drivers received higher tips (M=4.5) in comparison to African-Americans (M=3.93) in the limited direct experience and no indirect experience condition. While the direction of the tipping difference between the races supports current research (Lynn *et al.*, 2008) the difference was marginally significant (p=0.10). It should also be noted that while we do not hypothesize a difference in results by respondent race, our findings hold when tested with a sub-sample analysis of respondents from a minority race (n=116). Therefore, the race of respondents does not appear to significantly affect the results.

Discussion

Theoretical implications

Our study contributes to a greater understanding of race dynamics in the U.S gig economy. The effects of racial disparities and discrimination in the marketplace have been widely acknowledged (Crockett and Grier, 2021; Johnson, 2001; Poole *et al.*, 2021; Roberson

and Block, 2001). However, limited attention has been paid to the effect of discrimination on ethnic minorities' financial wellbeing and, more importantly, mitigating stereotype effects. Indeed, marketing researchers have been urging to investigate the role of race and social justice in the marketplace to devise better and more inclusive policy measures (Bennett *et al.*, 2013; Leak *et al.*, 2015).

We contribute to this emerging literature by casting light on the roles of direct and indirect experience on consumers' tipping behavior of minority service providers. While previous studies suggested that minority service providers are victims of implicit racial biases which negatively affect consumers' judgements and tipping behaviors (Lynn *et al.*, 2008; 2010), they are mainly focused on racial stereotyping in the presence of limited direct (or first-hand) experience and absence of indirect (or second-hand) experience (e.g., Ayres *et al.*, 2005; Lynn *et al.*, 2010). Drawing on expectancy disconfirmation theory, we fill this gap by analyzing the synergetic effect of these two forms of experience on tipping behavior. Specifically, we propose that individuals tend to confirm or disconfirm their stereotype-based expectations by collecting evidence from their direct experience (Hoch and Ha, 1986), which affects their tipping behavior (Tse, 2003). In doing so, we do not only investigate alternative scenarios to those already examined, but we also outline when the negative effect attributed to racial stereotyping is mitigated or even reversed.

In particular, we identified the following scenarios. First, when individual consumers have extended direct experience (i.e., longer service interaction) and no indirect experience information (i.e., no customer ratings), consumers tend to tip African-American service providers more than their Caucasian counterparts (scenario 1). This is because extended direct experience allows individuals to collect more evidence to change pre-conceived stereotypes (Ditto and Lopez, 1992). As a result, the tension between the expectation set by

their implicit racial biases and social norms will trigger a compensatory behavior making them tip African-American service providers more than their Caucasian counterparts (H1). Second, when individual consumers have limited direct experience and are exposed to indirect experience information (scenario 2), they will use the latter as a social norm to confirm or disconfirm their expectations and guide their behavior following the consensus heuristic (Axson et al., 1987). In the case of positive ratings, we found that tipping amounts for African-American service providers were higher than for Caucasians (H2a), but no significant difference was found for negative ratings (H2b). Finally, when consumers have extensive direct experience and are exposed to indirect experience information, either positive or negative (scenario 3), we find no difference in tips between the two conditions (H3). Under these circumstances, we contend that consumers' stereotype-based expectations may be updated by customer ratings (Guan et al., 2020) because they have more opportunity to consider indirect experience when they have extended direct experience (Fazio and Zanna, 1981; Kokkinaki and Lunt, 1997). Furthermore, due to the longer service interaction, consumers have an opportunity to collect more direct evidence that confirms their expectations (Hoch and Ha, 1986; Rothbart et al., 1979).

By considering these alternative scenarios, our study adds to several streams of literature. On the one hand, our findings contribute to the current literature on conditions that could mitigate the detrimental effects of consumers' implicit racial biases and discrimination in service settings (Grandey *et al.*, 2019; Houston *et al.*, 2018). We identify that exposure to extended service interactions with the provider and to consumer reviews (regardless of how positive they are) represents one of such conditions as it does not translate in better or worse financial outcomes for either African-American or Caucasian service employees. Furthermore, we reveal two conditions that reverse the negative effect of indirect racial

biases on tipping: 1) when direct experience is extensive, and indirect experience is absent; and 2) when direct experience is limited, and positive indirect experience is present. The extant literature has shown that beneficial outcomes can come from positive stereotypes (e.g. African-Americans are superior athletes) (Czopp *et al.*, 2015; Kay *et al.*, 2013; yet, our findings extend this to show that negative stereotypes can also lead to better outcomes for targets of stereotyping under certain circumstances. On the other hand, we show the synergetic interaction effects of direct and indirect experience on behavior, which have generally been studied separately (Gino *et al.*, 2010) and specifically so in the tipping domain. Although direct experience is more likely to be a stronger driver of behavior (Millar and Millar, 1996), we show that indirect experience can attenuate the effect of direct experience on behavior by acting as a social norm.

Managerial implications

Based on our findings, several measures can be taken. We firstly recommend service firms experiment with alternatives to the current tipping practice. We advocate for tips being pooled and distributed equally across service workers or a set tip percentage being set for customers who choose to tip. A rehaul would send a positive signal, given the tainted history tipping has in the United States, where not just racial minorities but also females have historically been disadvantaged by the institution of tipping, which continues up to this day (Alexander *et al.*, 2021). Given the digitalization of tipping, our suggestions should be easy to implement and reinstated should unforeseen negative consequences occur. Secondly, we recommend that customer ratings be leveraged to promote equality by making them more salient when service interactions are likely to be longer. This measure is feasible in the gig economy as the nature of the service required is typically selected upfront (e.g., Uber customers input their trip destination at the start of their customer journey), and customer

ratings currently appear after. Thirdly, we suggest that service providers who promote indirect experience such as customer ratings should encourage extended service interactions with individual customers where possible across all service workers regardless of race. For example, this could be achieved by allowing customers to book round trips with the same service provider in order to extend their service interaction. This is because our findings revealed that in the presence of indirect experience, more extensive direct experience resulted in similar tip amounts between races. Importantly, we do not encourage longer shifts per worker, which may cause stress and emotional labor; rather, we suggest longer customer interactions with individual customers within their current shift hours. Therefore, we do not foresee any negative consequences from this recommendation, rather enhanced well-being for service workers, especially those from a minority race, both financially (in relation to tipping, as per our research) and psychologically (from stronger customer-employee relationships) (Gremler and Gwinner, 2000; Price et al., 1995). We thus highlight these changes as our most important recommendations, given that they are consistent with the notion that inequalities are interconnected. They address the power imbalance between the consumer and minority service employee discussed in critical theory and work even in the case where lower tips are driven by internalized racism (Johnson, 2001; Pyke, 2010).

Further, until wider systematic changes as per above can be actioned, or in the absence of leadership that is unwilling to take such actions, we seek to empower minority service workers by highlighting work conditions under which they can avoid biases that affect tips. For minority service workers who have positive customer ratings, it is recommended to engage in shorter service interactions to maximize tips where possible, such as inner-city rides. In service encounters that do not feature customer ratings, however, minority service workers may be better off signing up for extended customer interactions

such as a trip from the airport. As mentioned earlier, extending service encounters with individual customers would alter the number of customers attended to in a shift rather than extending total shift hours, thus ensuring that positive well-being benefits ensue. Service workers can not only flexibly accept or reject service tasks in crowdsourcing platforms but also cherry-pick between competitor platforms, for instance by switching from Uber to Lyft. Thus, the present findings enable service workers to control the work environment in a way that maximizes their tips.

Finally, we raise general awareness and provide insights on racial biases which we hope may also affect consumers to reflect on potential biases when it comes to tipping and rating service workers from a minority race.

Limitations and future research

While racial bias against African Americans is critical in the current socio-political climate, it would also be pertinent to investigate different demographic, cultural, and contextual settings. For instance, future research may consider Muslim minorities in Europe as service providers given the stigmatization of this group (Ahmed, 2010) or occupation-based stereotypes such as prejudices about female drivers. A second limitation is that the presented study was conducted using an online panel (i.e. Amazon Mechanical Turk) rather than in a field setting with actual customers. While we believe in the value of a field-based replication, it is important to acknowledge the ethical and psychological ramifications of recruiting service providers for a study on racism, where employees are the target of such racism.

Our findings also open the door for further research in exploring other mitigating factors, such as other distinctions of direct experience (e.g. positive versus negative) and

indirect experience (e.g. textual vs pictorial ratings). Alternatively, one could look into other characteristics of the service itself (e.g. people processing services such as drivers versus possession processing services such as gardening) or of the service provider (e.g. perceived level of acculturation). Furthermore, while our findings lead to the promotion of customer ratings under certain conditions, future research should validate whether the ratings received are tainted by discrimination to begin with (i.e. African-Americans are more likely to receive negative reviews) (Eidelson and Bloomberg, 2020). This future research avenue may in fact would provide some relevant insights into when and how our recommendations should be implemented. Finally, scholars interested in the services domain of tipping behavior could investigate how our suggestions to alternate tipping practices (e.g. setting a given tip percentage or pooling tips) affect customers' willingness to tip in the first instance.

References

- Ahmed, A. M. (2010), "Muslim discrimination: Evidence from two lost-letter experiments", *Journal of Applied Social Psychology*, Vol. 40 No. 4, pp. 888-898.
- Alexander, D., Boone, C. and Lynn, M. (2021), "The Effects of Tip Recommendations on Customer Tipping, Satisfaction, Repatronage, and Spending", *Management Science*, Vol. 67 No. 1, pp. 146-165.
- Axsom, D., Yates, S., and Chaiken, S. (1987), "Audience response as a heuristic cue in persuasion." *Journal of Personality and Social Psychology*, Vol. 53, pp. 30-40.
- Ayres, I., Vars, F. E. and Zakariya, N. (2005), "To insure prejudice: Racial disparities in taxicab tipping," *Yale Law Journal*, Vol. 114 No. May, pp. 1613-1674.
- Baltes, B. B., Bauer, C. B. and Frensch, P. (2007), "Does a structured free recall intervention reduce the effect of racial biases in performances ratings and by what mechanism?", *Journal of Applied Psychology*, Vol. 92, pp. 151-164.
- Baltes, B. B. and Rudolph, C. W. (2010), "Examining the effect of negative Turkish stereotypes on evaluative workplace outcomes in Germany", *Journal of Managerial Psychology*, Vol. 25 No. 2, pp. 148-158.
- Bavishi, A., Madera, J.M. and Hebl, M.R. (2010), "The effect of professor ethnicity and gender on student evaluations: Judged before met", *Journal of Diversity in Higher Education*, Vol. 3 No. 4, pp. 245-256.
- Bennett, A. M., Hill, R. P. and Oleksiuk, D. (2013), "The impact of disparate levels of marketplace inclusion on consumer-brand relationships", *Journal of Public Policy & Marketing*, Vol. 32 No 1, pp. 16-31.
- Brustein, J. (2016), "Uber says tips are bad for black people but what about ratings bias", *Bloomberg*, available at: https://www.bloomberg.com/news/articles/2016-04-28/uber-says-tips-are-bad-for-black-people-but-what-about-ratings-bias
- Burmeister, A., Fasbender, U., and Gerpott, F. H. (2019). "Consequences of knowledge hiding: The differential compensatory effects of guilt and shame", *Journal of Occupational and Organizational Psychology*, Vol. 92 No. 2, pp. 281-304.

- Chandar, B., Gneezy, U., List, J. A., and Muir, I. (2019), "The drivers of social preferences: Evidence from a Nationwide tipping field experiment." NBER Working Paper 26380, National Bureau of Economic Research, Cambridge, MA.
- Crockett, D., and Grier, S. A. (2021), "Race in the Marketplace and COVID-19", *Journal of Public Policy & Marketing*, Vol. 40 No. 1, pp. 89-91.
- Kay, A. C., Day, M. V., Zanna, M. P., and Nussbaum, A. D. (2013), "The insidious (and ironic) effects of positive stereotypes", *Journal of Experimental Social Psychology*, Vol. 49 No. 2, pp. 287-291.
- Dahl, D. W., Honea, H., and Machanda, R. V (2008), "Three Rs of Interpersonal Consumer Guilt: Relationship, Reciprocity, Reparation", *Journal of Consumer Psychology*, Vol. 14 No. 4, pp. 307-315.
- Dai, H., Chan, C. and Mogilner, C. (2019), "People rely less on consumer reviews for experiential than material purchases", *Journal of Consumer Research*, Vol. 46 No. 6, pp. 1052-1075.
- Ditto, P. H., and Lopez, D. F. (1992), "Motivated Skepticism: Use of Differential Decision Criteria for Preferred and Nonpreferred Conclusions." *Journal of Personality and Social Psychology*, Vol. 63 No. 4, pp. 568-584.
- Dovidio, J.F. and Gaertner, S.L. (2000), "Aversive racism and selection decisions: 1989 and 1999", *Psychological Science*, Vol. 11, pp. 319-323.
- Edelman, B. G., and Luca, M. (2014), "Digital Discrimination: The Case of Airbnb.com." Harvard Business School NOM Unit Working Paper No. 14-054, available at: https://doi.org/10.2139/ssrn.2377353
- Edelman, B. B., Luca, M., and Svirsky, D. (2017), "American economic association racial discrimination in the sharing economy: Evidence from a field experiment," *American Economic Journal: Applied Economics*, Vol. 9 No. 2, pp. 1–22.
- Eidelson, J. (2020), "Uber sued by non-white drivers alleging race-biased ratings lead to firings", *Fortune*, available at: https://fortune.com/2020/10/26/uber-lawsuit-drivers-fired-low-ratings-racial-discrimination/
- Fazio, R. H., and Zanna, M. P. (1981), "Direct experience and attitude-behavior consistency. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, Vol. 14, pp. 161-202. San Diego, CA: Academic Press.

- Fazio, R. H., Zanna, M. P., and Cooper, J. (1978), "Direct experience and attitude-behavior consistency: An information processing analysis", *Personality and Social Psychology Bulletin*, Vol. 4 No. 1, pp. 48-51.
- Ferdman, R. (2016), "I dare you to read this and still feel good about tipping." *The Washington Post*, available at: https://www.washingtonpost.com/news/wonk/wp/2016/02/18/i-dare-you-to-read-thisand-still-feel-ok-about-tipping-in-the-united-states/
- Fiske, S. T. and Taylor, S. E. (1991), "Social cognition", New York: McGraw-Hill.
- Fogel, J. and Zachariah, S. (2017), "Intentions to use the yelp review website and purchase behavior after reading reviews", *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 12 No. 1, pp. 53-67.
- Ge, Y., Knittel, C. R., MacKenzie, D. and Zoepf, S. (2016), "Racial and gender discrimination in transportation network companies" In *NBER Working paper series*, Vol. 91 No. 5, pp. 1689–1699, available at: https://doi.org/10.1017/CBO9781107415324.004
- Gino, F., Argote, L., Miron-Spektor, E., and Todorova, G. (2010), "First, get your feet wet: The effects of learning from direct and indirect experience on team creativity", *Organizational Behavior and Human Decision Processes*, Vol. 111 No. 2, pp. 102-115.
- Goel, N., Rutagarama, M., and Faltings, B. (2020), "Tackling Peer-to-Peer Discrimination in the Sharing Economy." In 12th ACM Conference on Web Science, Southampton, United Kingdom, 7-10 July, pp. 355-361.
- Grandey, A. A., Houston III, L. and Avery, D.R. (2019), "Fake it to Make it? Emotional Labor Reduces the Racial Disparity in Service Performance Judgements", Journal of Management, Vol. 45 No. 5, pp. 2163-2192
- Gremler, D. D., and Gwinner, K. P. (2000). "Customer-employee rapport in service relationships." *Journal of Service Research*, Vol. 3 No. 1, pp. 82-104.
- Griswold, A. (2017), "Uber is beginning to warn drivers about long trips likely to last over an hour", *Quartz*, available at: https://qz.com/1053152/uber-is-beginning-to-warn-drivers-about-long-trips-likely-to-last-over-an-hour/
- Guan, X., Wang, Y., Yi, Z., and Chen, Y. J. (2020), "Inducing consumer online reviews via disclosure." *Production and Operations Management*, Vol. 29 No. 8, pp. 1956-1971.

- Hamilton, R. W., and Thompson, D. V. (2007), "Is there a substitute for direct experience? Comparing consumers' preferences after direct and indirect product experiences." *Journal of Consumer Research*, Vol. 34 No. 4, pp. 546-555.
- Hawkins, A. (2017), "Uber finally caves and adds a tipping option to its app", *The Verge*, available at: https://www.theverge.com/2017/6/20/15840818/uber-tipping-option-app-seattle-minneapolis-houston
- Hayes, A. F. (2018), "Introduction to Mediation, Moderation, and Conditional Process Analysis Second Edition: A regression-based Approach", New York, NY: Ebook, The Guilford Press.
- Hilton, J. L. and von Hippel, W. (1996), "Stereotypes", Annual Review of Psychology, Vol. 47, pp. 237–271.
- Hekman, D. R., Aquino, K., Owens, B. P., Mitchell, T. R., Schilpzand, P. and Leavitt, K. (2010), "An Examination of Whether and How Racial and Gender Biases Influence Customer Satisfaction", *Academy of Management Journal*, Vol. 53 No. 2, pp. 238-264.
- Hewstone, M., Johnston, L., and Aird, P. (1992), "Cognitive models of stereotype change:(2) Perceptions of homogeneous and heterogeneous groups", *European Journal of Social Psychology*, Vol. 22 No. 3, pp. 235-249.
- Hoch, S. J., and Deighton, J. (1989), "Managing what consumers learn from experience", *Journal of Marketing*, Vol. 53 No. 2, pp. 1-20.
- Hoch, S. J., and Ha, Y. W. (1986), "Consumer learning: Advertising and the ambiguity of product experience", *Journal of Consumer Research*, Vol. 13 No. 2, pp. 221-233.
- Houston, L., Grandey, A. A. and Sawyer, K. (2018), "Who cares if " service with a smile " is authentic ? An expectancy-based model of customer race and differential service reactions", Organizational Behavior and Human Decision Processes, Vol. 144 No. 1, pp. 85–96.
- Huang, P., Lurie, N. H., and Mitra, S. (2009), "Searching for experience on the web: An empirical examination of consumer behavior for search and experience goods." *Journal of Marketing*, Vol. 73 No. 2, pp. 55-69.
- Huetten, A. S. J., Antons, D., Breidbach, C. F., Piening, E. P. and Salge, T. O. (2019), "The impact of occupational stereotypes in human-centered service systems", *Journal of Service Management*, Vol. 30 No. 1, pp. 132-155.

- Kerr, D. (2020), "Uber's 'racially biased' ratings system hurts non-white drivers, lawsuit says" *Cnet*, available at: https://www.cnet.com/news/ubers-racially-biased-ratings-system-hurts-non-white-drivers-lawsuit-says/
- Koku, P. S. (2005), "Is there a difference in tipping in restaurant versus non-restaurant service encounters, and do ethnicity and gender matter?", *Journal of Services Marketing*, Vol. 17 No. 7, pp. 445 452.
- Kokkinaki, F. and Lunt, P. (1997), "The relationship between involvement, attitude accessibility and attitude-behavior consistency," *British Journal of Social Psychology*, Vol. 36 No. 4, pp. 497-509.
- Leak, R. L., Woodham, O. P. and Stone, G. W. (2015), "Felt discrimination increases offensiveness of stereotyped out-group depictions", *Journal of Consumer Marketing*, Vol. 32 No. 1, pp. 26-33.
- Lee, L., Frederick, S. and Ariely, D. (2006), "Try it, you'll like it: The influence of expectation, consumption, and revelation on preferences for beer." *Psychological Science*, Vol. 17 No. 12, pp. 1054-1058.
- Lemon, K. N. and Verhoef, P. C. (2016), "Understanding customer experience throughout the customer journey", *Journal of Marketing*, Vol. 80 No. 6, pp. 69-96.
- Lynn, M. (2018), "The effects of tipping on consumers' satisfaction with restaurants", *Journal of Consumer Affairs*, Vol. 52 No. 3, pp. 746-755.
- Lynn, M. and Grassman, A. (1990), "Restaurant tipping: An examination of three 'rational' explanations" [Electronic version], Retrieved 17th June 2020, from Cornell University, School of Hospitality Administration site, available at: http://scholarship.sha.cornell.edu/articles/43.
- Lynn, M. and Latané, B. (1984), "The Psychology of Restaurant Tipping", Journal of Applied Social Psychology, Vol. 14 No. 6, pp. 549-561.
- Lynn, M., and Kwortnik, R. J. (2015), "The effects of tipping policies on customer satisfaction: A test from the cruise industry", *International Journal of Hospitality Management*, Vol. 51, pp. 15-18.
- Lynn, M., and Kwortnik, R. J. (2020), "Tipping policy effects on customer satisfaction: An informative failure to replicate", *International Journal of Hospitality Management*, Vol. 86, 102448.

- Lynn, M., Sturman, M., Ganley, C., Adams, E., Douglas, M. and McNeil, J. (2008), "Consumer Racial Discrimination in Tipping: A Replication and Extension", *Journal* of Applied Social Psychology, Vol. 38 No. 4, pp. 1045-1060.
- Lynn, M. and Withiam, G. (2006), "Tipping and its alternatives: business considerations and directions for further research", *Journal of Services Marketing*, Vol 22. No. 4, pp. 328-336.
- Lynn, M., Zinkhan, G.M. and Harris, J. (1993), "Consumer Tipping: A Cross-Country Study", *Journal of Consumer Research*, Vol. 20 No. 3, pp. 478-488.
- Oliver, R. L. (1977), "Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation." *Journal of Applied Psychology*, Vol. 62 No. 4, pp. 480-486.
- Oliver, R. L. (2014), "Satisfaction: A behavioral perspective on the consumer: A behavioral perspective on the consumer." Routledge.
- Paul, K. (2019), "Uber to ban riders with low ratings", *The Guardian*, available at: https://www.theguardian.com/technology/2019/may/31/uber-to-ban-riders-with-low-ratings
- Park, C., and Lee, T. (2009), "Information direction, website reputation and eWOM effect: A moderating role of product type." *Journal of Business Research*, Vol. 62 No. 1, pp. 61-67.
- Park, J., Park, J., and Ezell, S. (2017), "The impact of customers' direct and indirect experience on E-trust". In *The Customer is NOT Always Right? Marketing Orientations in a Dynamic Business World*. Springer, Cham, pp. 726-732.
- Parrett, M. (2006), "Analysis of the Determinants of Tipping Behavior: A Laboratory Experiment and Evidence from Restaurant Tipping", Southern Economic Journal, Vol. 73 No. 2, pp. 489-514.
- Poole, S. M., Grier, S. A., Thomas, K. D., Sobande, F., Ekpo, A. E., Torres, L. T., Addington, L. A., Weekes-Laidlow, M., and Henderson, G. R. (2021), "Operationalizing critical race theory in the marketplace", *Journal of Public Policy & Marketing*, Vol. 40 No. 2, pp. 126-142.
- Price, L. L., Arnould, E. J., and Deibler, S. L. (1995). "Consumers' emotional responses to service encounters: the influence of the service provider." *International Journal of Service Industry Management*. Vol. 6 No. 3, pp. 34-63.

- Roberson, L. and Block, C. J. (2001), "Racioethnicity and job performance: A review and critique of theoretical perspective on the causes of group differences", *Research in Organizational behavior*, Vol. 23, pp. 247-325.
- Rosenblat, A., Levy, K. E. C, Barocas, S. and Hwang, T. (2017), "Discriminating Tastes: Uber's Customer Ratings as Vehicles for Workplace Discrimination", *Policy & Internet Special Issue: The Platform Society Part 1*, Vol. 9 No. 3, pp. 256-279.
- Rothschild, M. L. (1977), "Advertising strategies for high and low involvement situations." Graduate School of Business, University of Wisconsin-Madison.
- Senecal, S., and Nantel, J. (2004), "The influence of online product recommendations on consumers' online choices." *Journal of Retailing*, Vol, 80 No, 2, pp. 159-169.
- Sridhar, S., and Srinivasan, R. (2012), "Social Influence Effect in Online Product Ratings," *Journal of Marketing*, Vol. 76 No. 5, pp. 70-88.
- Tagney, J. P., and Dearing, R. L. (2002), "Shame and guilt", New York: Guilford.
- Tagney J. P., Stuewig, J., and Mashek, D. J. (2007), "Moral emotions and moral behavior," *Annual Review of Psychology*, Vol. 58, pp. 345-372.
- Taylor, S.E. (1981), "A categorization approach to stereotyping", D.L. Hamilton (Ed.), Cognitive processes in stereotyping and intergroup behavior, Hillsdale, NJ: Lawrence Erlbaum, pp. 88-114.
- The Economist. (2018), "Why tipping in America is up for debate", *The Economist*, available at: <u>https://www.economist.com/the-economist-explains/2018/06/21/why-tipping-in-america-is-up-for-debate</u>
- Tse, C. A. (2003). Tipping behavior: a disconfirmation of expectation perspective. *International Journal of Hospitality Management*, Vol. 22 No. 4, pp. 461-467.

Table I.

Predictions for tip amount by race for level of direct and indirect experience (based on consumers' expectations and perceived performance for African-American service workers)

			Direct experience			
			Limited	Extensive		
	None		Existing literature: Higher tips for	Scenario 1: Higher tips for African-		
Indirect experience			Caucasians (Ayres et al., 2005; Lynn et al., 2010) Expectations of African-American service workers based on implicit racial bias (negative) Perceived performance based on implicit racial	Americans (H1) Expectations of African-American service workers based on implicit racial bias (negative) Perceived performance based on direct		
	Present	Negative	bias (negative) Scenario 2: Higher tips for Caucasians (H2a)	experience (positive) Scenario 3: Tips not different between races		
	riesent		Expectations of African-American service workers based on implicit racial bias (negative) Perceived performance based on indirect experience (negative)	(H3) Expectations of African-American service workers influenced by indirect experience (negative) Perceived performance influenced by direct experience (neutral - negative)		
		Positive	Scenario 2: Higher tips for African- Americans (H2b)	Scenario 3: Tips not different between races (H3)		
			Expectations of African-American service workers based on implicit racial bias (negative) Perceived performance based on indirect experience (positive)	Expectations of African-American service workers influenced by indirect experience (neutral - positive) Perceived performance influenced by indirect experience (neutral - positive)		

Table II: Moderated Moderation results

Model summary

Model Summary				
R	MSE	F	df	
0.05	2.7	1.64*	11, 348	
	1			

Model

	Unstandardized	р
	Coefficient (Standard Error)	
Constant	4.50 (0.30)	< 0.01
Race	-0.57 (0.44)	0.1#
Direct experience (extensive)	-0.60 (0.43)	0.12
Race x direct experience (extensive)	1.39 (0.62)	0.12
Negative indirect experience (negative customer rating)	-0.67 (0.43)	0.14
Positive indirect experience (positive customer rating)	-0.67 (0.43)	< 0.01**
Race x negative indirect experience (negative customer rating)	0.92 (0.62)	0.16
Race x positive indirect experience (positive customer rating)	1.84 (0.61)	0.03*
Direct experience (extensive) x negative indirect experience (negative customer rating)	0.97 (0.60)	0.10
Direct experience (extensive) x positive indirect experience (positive customer rating)	0.94 (0.60)	0.12
Race x Direct experience (extensive) x negative indirect experience (negative customer rating)	-1.94 (0.87)	0.03*
Race x Direct experience (extensive) x positive indirect experience (positive customer rating)	-2.39 (0.86)	0.01**

Predictor = tip amount.

Note: The numbers in parentheses are standard errors. # = One-tail test is applied where predicted effect is directional. Significance: **p<.01, *p<.05

Panel A: Test of conditional race x direct experience (extensive) interaction at values of indirect	t
experience (customer rating)	

Indirect experience (customer rating)	Effect	F	df	р
None	1.39	5.05	1, 348	0.01#*
Negative	-0.56	0.83	1, 348	0.36
Positive	-1.01	2.85	1, 348	0.09

= one-tail test. Significance: **p<.01, *p<.05

Panel B: Test of conditional race x indirect experience (customer rating) interaction at values of direct experience (trip length)

Direct experience (trip length)	F	df	р
Limited	4.52	(2,348)	0.01#*
Extensive	1.41	(2,348)	0.25
# - one-tail test Significance: **n< 0	1 * n < 05		

= one-tail test. Significance: **p<.01, *p<.05

(edstonier ratings)					
Direct experience (trip length)	Indirect experience (customer rating)	Effect	se	t	р
Limited	None	-0.57#	0.44	-1.31	0.1#
Limited	Negative	0.35	0.44	0.80	0.43
Limited	Positive	1.27	0.43	2.96	< 0.01**
Extensive	None	0.81#*	0.44	1.87	0.03**
Extensive	Negative	-0.21	0.43	-0.49	0.63
Extensive	Positive	0.26	0.41	0.63	0.53

Panel C: Conditional effects of race at values of direct experience (trip length) and indirect experience (customer ratings)

= one-tail test. Significance: **p<.01, *p<.05

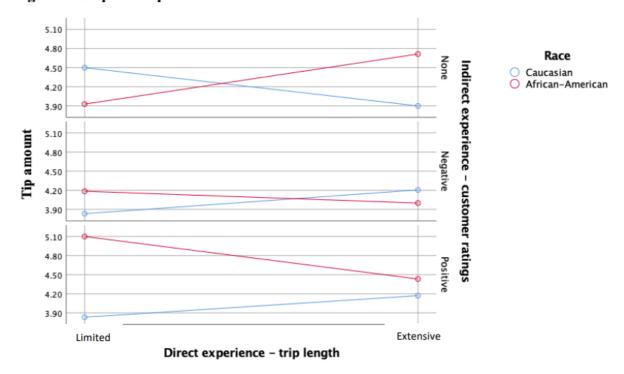


Figure 1: Graphical representation of results

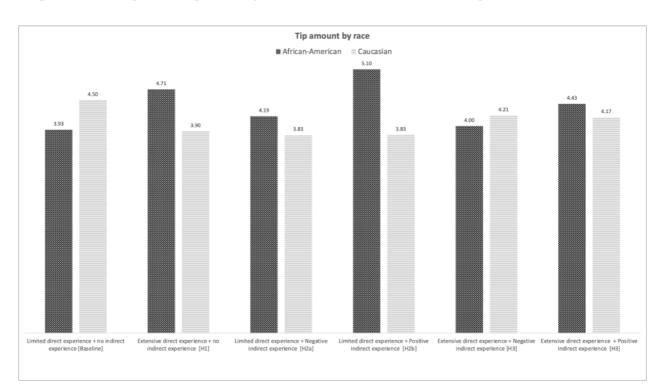


Figure 2: Mean comparison of tip amount by race across levels of direct and indirect experience

Appendix: Example of stimuli

Imagine you need to travel to a friend's house. You book an Uber.

The trip to your friend's house will be a short [long] ride and take

approximately 4 minutes [60 minutes]

A driver named Dave, is available.

The Uber app shows a picture of your driver "Dave."¹

It tells you that he is a driver with a 5 star [3 star] rating (out of 5 stars)²





You book the ride with Dave. Dave drives a Toyota Prius and arrives in expected time. Dave gets out of the car and opens the back passenger door for you. You explain that you would prefer to sit at the front. Dave does not comment. You open the front passenger door and take a seat. Dave confirms your destination. You both now drive off. He asks you about your day to which you respond that you are tired. Nevertheless, he makes friendly small talk. You tell Dave that you and your friend are looking for a pizza restaurant for dinner tonight. Dave tells you he lives locally and suggests Mario's Pizzeria. Dave stays at the speed limit for the entire journey.

As you approach your destination, **after a short 4 [long 60] minute ride**, you thank Dave for his services. He wishes you a good day and you exit the car.

¹Respondents were randomly assigned to one version of Dave i.e. only received one of the above photos

² The no customer rating conditions did not feature the line about stars or star images