Pro tip: Screen-based payment methods increase negative feelings in consumers but do not increase tip sizes

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Abstract

Leaving monetary tips for servers is a commonplace occurrence in the United States. Tipping research has proposed that consumers tip to serve a variety of motives such as to ensure good service on future patronage, supplement servers' wages, and comply with social norms. Meanwhile, research on environmental factors that affect tipping behavior, such as method of bill payment, have yielded mixed findings. The advancement of technology has increased the use of screen-based payment methods that feature options with differing suggested tip amounts. This technology may pressure consumers into leaving larger tips or start tipping in situations where they previously would not. Using a computer-based study, we simulated counter-service experiences where customers have short interactions with their servers (e.g., ordering a cup of coffee to-go at a coffee shop). We studied how the availability of screen-based payment methods affected consumer feelings about establishments and tip amounts. Results indicated that, in our simulated coffee shop scenario, people feel negatively about screen-based payment methods and may avoid counter-service establishments that use them, but they did not leave larger tips when compared to other payment methods. Moreover, people tipped more when a server was visible (versus absent) and empathy did not moderate this effect. Together, these findings suggest that people tip to comply with social norms even if they may feel negatively about the consumer experience.

Keywords: consumer behavior, payment methods, social norms, tipping

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Pro tip: Screen-based payment methods increase negative feelings in consumers but do not increase tip sizes

Imagine arriving at your favorite café for your weekly visit and ordering your regular beverage. After ringing up your order, the barista swings a new tablet around for you to sign off on the transaction. As the barista is watching, a screen appears asking you how much you want to tip. You've never tipped before in this café. How would you feel having this new suggestion? Would you offer a tip? If the barista was not watching you, would this change how you felt or your willingness to tip? Electronic tip screens are becoming more common in establishments that previously did not have this kind of technology. Our study aimed to investigate how tip screens and the presence of a service worker influence tipping behavior and perceptions of establishments that use these technologies.

Numerous factors influence whether and how much customers tip (Lynn & McCall, 2016), including environmental factors such as colors used in a restaurant's atmosphere, server physical attractiveness, and method of bill payment (Lynn & Latané, 1984; Lynn & Mynier, 1993; Guéguen & Jacob, 2012, 2014; Lee, Noble, & Biswas, 2018). Tipping is also influenced by individual motivations such as ensuring good service on future visits to the establishment, adhering to social norms, and helping supplement server income (Azar, 2007a, 2007b; Saunders & Lynn, 2010; Lynn, 2015a). With regard to the motive of ensuring continued good service on future visits, people self-report that they tip to gain high quality service for future visits and that they tend to leave larger tips at establishments they frequently patronize (Lynn & Grassman, 1990; Lynn & McCall, 2000; Conlin, Lynn, & O'Donoghue, 2003; Lynn, 2009). Other studies, however, report that the effect of repeated patronage of an establishment on tip size is weak, is difficult to attribute solely to frequent patronage, or is simply non-existent (Lynn & McCall, 2000; Conlin et al., 2003; Azar, 2007c). When coupled with the fact that people tip even when they do not expect future interactions with their server (e.g., when people dine at an out-of-town restaurant), the notion that people tip solely to ensure quality future service is an insufficient explanation for why people may be motivated to tip since doing so will not benefit them. Instead, a more plausible explanation for why people may be motivated to tip is to adhere to the social norm.

People conform to social norms to match the social expectations of others around them (Deutsch & Gerard, 1955). Researchers have theorized that people tip to gain social approval from others and out of obligations that stem from these internalized tipping norms (Lynn & Grassman, 1990; Bodvarsson & Gibson, 1997; Azar, 2007a; Lynn, 2015a). Support for tipping to adhere to social norms has been reflected in surveys eliciting people's motivations to tip. These surveys found that respondents agreed with statements that explicitly state that they tip to follow social norms and that this finding is consistent across people from different ethnic groups and nationalities (Lynn, 2009, 2011; Azar, 2010; Saunders & Lynn, 2010; Futrell, 2015). One possible reason why people comply with tipping norms is to avoid negative feelings (e.g., embarrassment and guilt) that result from not complying with these norms (Bodvarsson & Gibson, 1997; Azar, 2004, 2007a; Parrett, 2006; Lynn, 2015b). This notion has been supported by surveys that found respondents agreed with statements that reflect tipping to avoid the experience of negative feelings (Parrett, 2006; Lynn, 2009; Azar, 2010; Futrell, 2015). However, Lynn (2009) and Azar (2010) found that respondents indicated their motivation to follow social norms—and thus to gain social approval—was stronger compared to their motivation to avoid negative feelings from not tipping. Additionally, this finding suggests that people tip to serve several motives at a time, which aligns with Azar's (2004) proposition that, though people tip to

follow social norms, they may also do so because of other reasons such as empathy for servers who may earn lower wages compared to themselves.

People may decide to tip servers to help supplement their low wages (Azar, 2004, 2010; Lynn, 2009; Saunders & Lynn, 2010; Lynn, 2015b). In particular, empathy has been proposed to moderate this motivation to tip because individuals high in empathy are expected to be able to take the perspective of others with ease (de Waal, 2008; Iacoboni, 2009). Indeed, studies on tipping behavior have shown that people who had experience working at tip-receiving jobs tended to leave larger tips than those who did not have similar work experiences (Parrett, 2011; Lynn Jabbour, & Kim, 2012). Moreover, other studies have found that empathy manipulated via the activation of prosocial primes (e.g., listening to songs that contain prosocial lyrics) led to increases in tendency to tip and larger tip sizes (Jacob, Guéguen, & Boulbry, 2010; Jacob, Guéguen, Ardiccioni, & Sénémeaud, 2013). When considered together with the pressure to adhere to social norms, the desire to supplement server wages because one empathizes with their server could help explain why tipping is still a prevalent practice in society.

Effect of bill payment method on tipping behavior

Besides individual motivations to tip, environmental factors such as method of bill payment may affect tipping decisions. Though one might expect that method of payment (credit card or cash) may influence tip size, existing studies have yielded mixed findings. While some studies have found that the use of a credit card payment method results in greater tip sizes compared to a cash payment method (Lynn & Latané, 1984; Lynn & Mynier, 1993), others have found no difference in tip sizes between the two payment methods (Parrett, 2006). Additionally, the continuous advancement of technology has offered establishments in the food and beverage industry the option of mobile payment methods for sale transactions. Mobile point-of-sale systems that utilize electronic tablets such as iPads have become ubiquitous with establishments that wish to remain relevant in an increasingly digital society (Taylor, 2016). Such payment methods typically provide customers with tip screens that feature suggested tip amount options calculated based on their bill size, which has in turn been suggested to cause customers to feel obligated to leave a tip or tip amounts larger than they would otherwise prefer (Levitz, 2018). In other words, customers feel pressured to tip their server, resulting in potentially greater tips for servers in the short-term but also greater negative feelings from customers towards the establishment in the long-term. The inclusion of a tip screen payment method could thus reinforce the social pressure associated with the norm to tip, contributing to existing theories of why we continue to engage in tipping behavior (Azar, 2004; Lynn, 2015a).

Furthermore, previous work on tipping behavior has largely been conducted in the context of establishments that provide table service where customers interact with their server over a prolonged period. What is less known is how tipping behavior differs in the context of establishments that utilize counter service (e.g., coffee shops, food kiosks, and bars) where customers typically have fleeting interactions with their server. Taken together with the fact that counter-service establishments frequently make use of mobile point-of-sale systems that provide suggested tip amount options, the interplay between the potential added pressure to tip and customer-server interaction duration on tipping behavior remains to be explored.

Present study

The primary goal of the present study was to examine the effect of the tip screen payment method on tipping behavior. To do this, we created a computer-based simulation of a coffee

house where customers order their beverages from a barista at a counter. First, we hypothesized that people would have more negative feelings towards establishments that utilize a tip screen compared to establishments that utilize a tip jar for tip solicitation due to increased pressure to tip. A corollary hypothesis was that people would indicate greater avoidance of establishments that utilize tip screens instead of tip jars because they want to avoid the negative feelings associated with tip screens. Third, payment method was hypothesized to affect tip size, with tips made via a tip screen being larger than tips made via other payment methods due to the nudging effects of tip amount suggestions. In addition to investigating the effects of a tip screen payment method on tip size, a secondary goal of the present study was to examine the effect of server presence on tip size. Specifically, we expected people to indicate larger tip sizes when an image of the barista was present compared to when absent. This hypothesis aligns with people behaving more generously when they had knowledge of subtle cues that their actions were being observed (e.g., an image of a pair of eyes; Haley & Fessler, 2005; Bateson, Nettle, & Roberts, 2006; Burnham & Hare, 2007). In a related vein, the effect of barista presence on tip size was hypothesized to be moderated by individual differences in empathy since empathetic individuals should be more sensitive to the presence of the barista compared to less empathetic individuals.

Methods

Participants and procedures

Participants were 236 undergraduates (177 women, 56 men, 3 unspecified; M_{age} = 19.32, *SD* = 1.77) recruited through the undergraduate psychology study pool at the University of Nebraska-Lincoln from October to November 2017. The majority of participants were White (75%; see Table S1 for detailed description). All participants received course credit and completed an informed consent form that was approved by the university Institutional Review Board prior to the start of the study (protocol #17100) and conforms to US Federal Policy for the Protection of Human Subjects.

Participants completed the study in a computer laboratory via Qualtrics Online Survey Software (https://qualtrics.com). To investigate the extent of the potential increased pressure to tip in a counter service establishment, participants indicated their tip amounts for six conditions in which we varied the presence of a barista and payment method (Figure 1). After completing the tipping conditions, participants indicated their feelings towards establishments that utilize tip screens and tip jars and the extent to which they would go to avoid such establishments. Finally, participants completed an empathy scale and received research credit for their participation.

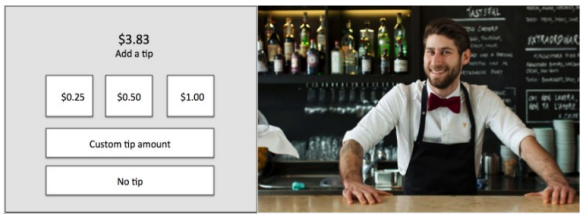
Measures

Tipping scenarios

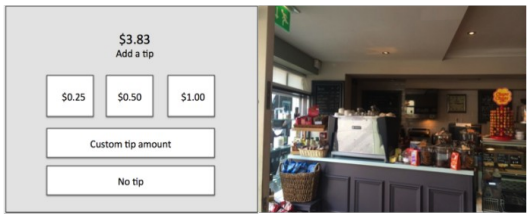
Participants indicated their desired tip amounts for six tipping conditions. Each tipping condition consisted of a pairing between a barista condition (two levels) and payment method (three levels; Figure 1). For the barista condition, participants saw either an image of a barista standing in front of a cash register along with the total cost of a food item (barista present condition) or an image of a cash register with no barista (barista absent condition), along with the total cost of a food item. For payment method, participants saw one of three images: (1) a tip screen with suggested tip amounts (tip screen condition), (2) a receipt with empty tip and total amount fields (receipt condition), and (3) a tip jar filled with dollar bills (tip jar condition). For each tipping condition,

participants were informed of the total cost of the food item before they either selected from a menu or manually entered their desired tip amount and were then directed to the next tipping condition. The order of tipping conditions was randomized for each participant to prevent the occurrence of question order effects.

(a) Tip screen, barista present

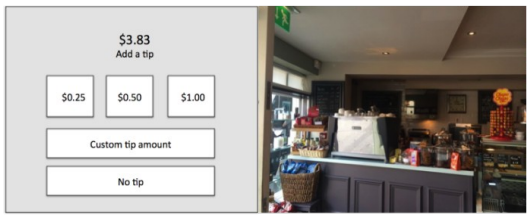


(b) Tip screen, barista absent



(c) Receipt, barista present

(d) Receipt, barista absent



(e) Tip jar, barista present

(f) Tip jar, barista absent

Figure 1. Screenshots of tipping scenarios. Participants observed six tipping scenarios in randomized order where the barista condition and payment method were varied before indicating their desired tip amount. The six scenarios were (a) tip screen, barista present condition, (b) tip screen, barista absent condition, (c) receipt, barista present condition, (d) receipt, barista absent condition, (e) tip jar, barista present condition, and (f) tip jar, barista absent condition. For each tipping scenario, participants read the following description: "Imagine you go to a coffeehouse, "The Grind", and order an item from the menu. Your item costs $3.83." In the barista present scenarios, this description was followed by "[Once you pay for it with a credit card, you are prompted with a tip screen. OR You pay for it with a credit card. OR Once you pay for it with cash, you notice the tip jar on the counter in front of the barista.] The barista is waiting for you to pay so he can finish the transaction. How much do you tip?" In the barista absent scenarios, the sentence, "the barista is waiting for you to pay so he can finish the transaction", was replaced with "the barista has already begun helping another customer." Figure used with permission: Goh et al., 2020; available at https://doi.org/10.17605/OSF.IO/6FMVS under a CC-BY4.0 license.

Feelings towards tip screens and tip jars

Participants indicated the level of negativity they felt towards establishments that utilize tip screens and tip jars. Specifically, they responded to the question "Some food establishments use a tip screen [tip jar] to make it very easy for people to tip. How positive or negative does this make you feel?" on a Likert-type scale that featured seven options ranging from (1) "very positive" to (7) "very negative". Additionally, participants indicated how often they have

consciously tried to avoid establishments that utilize tip screens and tip jars ("How often have you consciously tried to avoid or reduce exposure to a tip screen [tip jar]?") on a Likert-type scale ranging from (1) "never" to (5) "more than 10 times".

Individual differences in empathy

The emotional quotient scale (Lawrence, Shaw, Baker, Baron-Cohen, & David, 2004) was used to measure participants' empathy. The scale contains 28 items that measure three factors of empathy: cognitive empathy, emotional empathy, and social skills. Participants rated the extent to which they agreed with each item on the emotional quotient scale (e.g., "I find it easy to put myself in somebody else's shoes.") on a Likert-type scale ranging from (1) "strongly disagree" to (7) "strongly agree". Reverse keyed items were reverse coded before scores on the scale were summed and averaged across the 28 items to provide participants with overall mean empathy scores with higher scores indicating a greater amount of empathy. This scale demonstrates strong reliability and validity with other measures of empathy (Lawrence et al., 2004; Groen, Fuermaier, Den Heijer, Tucha, & Althaus, 2015).

Data analysis

Data were processed and analyzed using R Statistical Software (Version 3.6.3; R Development Core Team, 2020) and the R packages *BayesFactor* (Version 0.9.12-4.2; Morey et al., 2018), *broom* (Version 0.5.5; Robinson & Hayes, 2020), *car* (Version 3.0.7; Fox & Weisberg, 2019), *here* (Version 0.1; Müller, 2017), *lme4* (Version 1.1.23; Bates, Mächler, Bolker, & Walker, 2015), *lsr* (Version 0.5; Navarro, 2015), *patchwork* (Version 1.0.0; Pedersen, 2019), *rptR* (Version 0.9.22; Stoffel, Nakagawa, & Schielzeth, 2017), and *tidyverse* (Version 1.3.0; Wickham et al., 2019) for all our analyses. We excluded participant responses from our analyses that were missing or at least three standard deviations above the mean tip size for our sample (following recommendations from Ratcliff (1993) because the tipping literature has shown that people consistently tip around 15 to 20 percent of their total bill in the United States (e.g., Lynn et al., 2012; Lynn & McCall, 2016). For mean empathy scores, we excluded participants from our analysis who did not complete the emotional quotient scale because this would have resulted in an inaccurate overall mean empathy score. Additionally, the distribution of tip amounts was positively skewed (absolute value = 0.58) and platykurtic (absolute value = 1.73). A square root transformation reduced the skew (absolute value = 0.07) and only increased kurtosis slightly (absolute value = 1.41). Thus, we conducted our analyses on the square root transformed data. Data and analysis scripts are available in Supplementary Materials and at the Open Science Framework (https://osf.io/bqf52/).

We conducted paired samples t-tests to investigate our hypotheses that participants would have more negative feelings towards establishments that utilize a tip screen compared to establishments that utilize a tip jar, and that participants would indicate greater avoidance of establishments that utilize tip screens instead of tip jars. In contrast, we used linear mixed effects models to test our hypotheses on the effects of payment method and barista presence on tip size, and empathy and barista presence on tip size. Linear mixed-effects modeling was warranted for the latter set of hypotheses to account for the non-independence in our data because participants repeatedly made decisions on how much to tip for their purchases whereas participants only had to indicate their response once for our feelings and avoidance questions (Peugh, 2010). We calculated the intraclass correlation (ICC) for participant tip amounts to check for this non-independence and our result yielded that 47.1% [95% CI: 40.8, 53.0] of the variation in tip amounts was accounted for by differences among participants. This suggests that participants

tipped differently from one another across the various tipping conditions, therefore justifying our use of a linear mixed-effects model for our analyses.

To find the best-fitting model for our data, we used a backward model selection procedure to first find the best-fitting random-effect structure, then tested the various fixed effects together with the random-effect structure. To investigate the effect of payment method and barista presence on tip size, we started with the full random-effect structure that included a random intercept for participants (to account for participants tipping multiple times) and random slopes for payment method and barista presence (to account for participants potentially experiencing the effects of both variables differently from each other). We then eliminated non-significant effects before using a nested model comparison (likelihood ratio test) to select the best-fitting random-effect structure. The full fixed-effect model was subsequently constructed by adding payment method, barista presence, and their interaction to the random-effect structure. Lastly, the final best-fitting model was selected using the same elimination and nested model comparison procedure used for the random effects. To investigate the effect of empathy and barista presence on tip size, we used the same backward model selection procedure as that for the effects of payment method and barista presence, with the only difference being the inclusion of mean empathy score instead of payment method in the full fixed-effect model. All final models met assumptions of normally distributed residuals and homogeneity of variance.

In addition to frequentist statistics, we calculated Bayes factors (BF) to assess the amount of evidence for the alternative hypothesis (H_1) against the null hypothesis (H_0). Specifically, we compared each fixed-effect model to the best-fitting random-effect structure by converting each model's Bayesian Information Criterion (BIC) as specified by Wagenmakers (2007). Bayes factors were interpreted based on Wagenmakers et al. (2018; see Table S2 for more detailed interpretations): $BF > 3$ provide evidence for the alternative hypothesis, $BF < 1/3$ provide evidence for the null hypothesis, and $1/3 < BF < 3$ indicate neither hypothesis has evidence supporting it.

Results

Participants experienced six tipping conditions where the barista presence and payment method were varied (see Table S3 for descriptive information for tip sizes as a function of barista presence and payment method).

Feelings towards tip screens and tip jars

Results from a paired samples t-test revealed that participants had greater negative feelings towards establishments that utilize tip screens compared to those that utilize tip jars ($t(230) = -3.16$, $p = 0.002$, $BF = 9.2$, Cohen's $d = 0.25$; Figure 2a). Additionally, participants reported avoiding establishments that utilize tip screens more frequently compared to those that utilize tip jars ($t(229) = -2.76$, $p = 0.006$, $BF = 3.0$, Cohen's $d = 0.21$; Figure 2b).

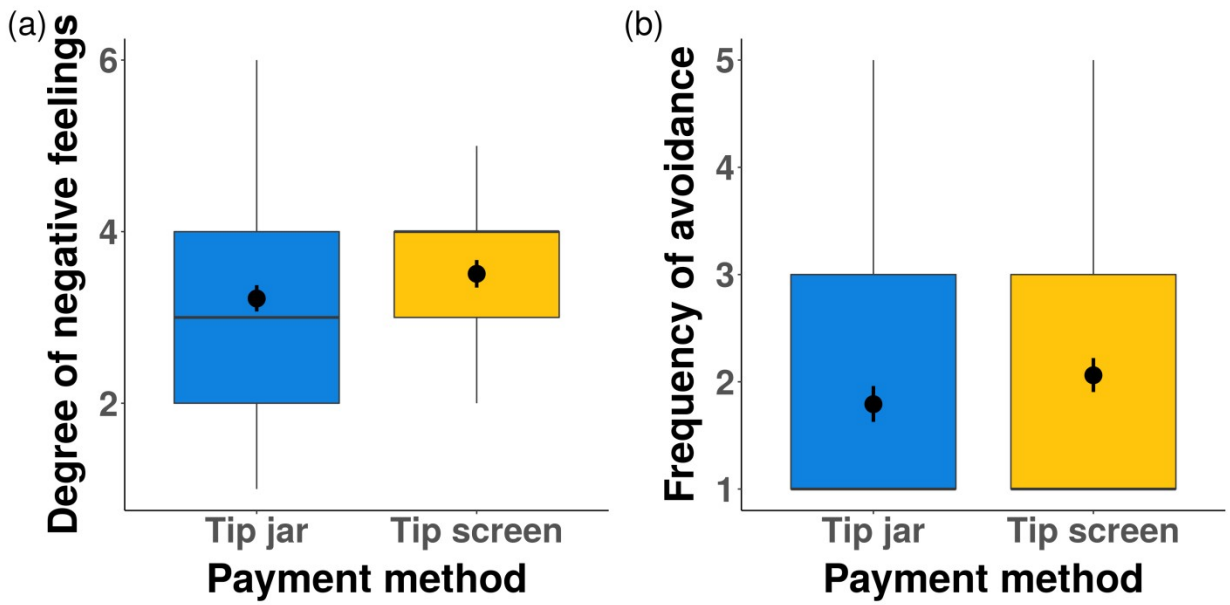


Figure 2. (a) Degree of negative feelings participants have towards establishments that utilize tip screens and tip jars. (b) Frequency of participant avoidance of establishments that utilize tip screens and tip jars. Frequency ratings are as follows: 1 = "never", 2 = "once", 3 = "2-5 times", 4 = "6-10 times", and 5 = "more than 10 times". Dots and error bars represent mean values and 95% within-subject confidence intervals respectively. For boxplots, horizontal bars represent medians, boxes represent interquartile ranges (25^{th} - 75^{th} percentile), whiskers represent 1.5 times the interquartile range. Outliers are not shown. Figure used with permission: Goh et al., 2020; available at https://doi.org/10.17605/OSF.IO/6FMVS under a CC-BY4.0 license.

Effect of payment method and barista presence on tipping behavior

We investigated whether payment method and barista presence impacted tipping behavior by measuring participants' tip sizes across tipping conditions. Results from our model testing revealed that the best-fitting random effect structure included both a random intercept for each participant to account for tip differences within participants across tipping conditions and random slopes for payment method and barista presence to account for participants experiencing these effects differently from each other (random intercept model for participant with versus without random slopes: $\chi^2(3) = 40.06$, $p < 0.001$). The inclusion of the fixed effects of barista presence ($\chi^2(1) = 59.99$, $p < 0.001$, BF > 100) and the interaction between barista presence and payment method ($\chi^2(3) = 60.62$, $p < 0.001$, BF > 100) improved the fit of the empty random effect model. In contrast, the inclusion of payment method did not improve the fit of the empty random effect model (BF < 0.01; Table S4). Thus, participants' tipping behavior did not significantly vary across payment methods when they had to leave a tip using tip screens, receipts, or cash, contradicting our prediction that tips made via tip screens would be larger than tips made via other payment methods (Figure 3a). Yet, participants tipped $0.14 more on average when a barista was present compared to when a barista was absent, thereby supporting our prediction that an image depicting a server present would yield larger tip sizes compared to one with no server (Figure 3b).

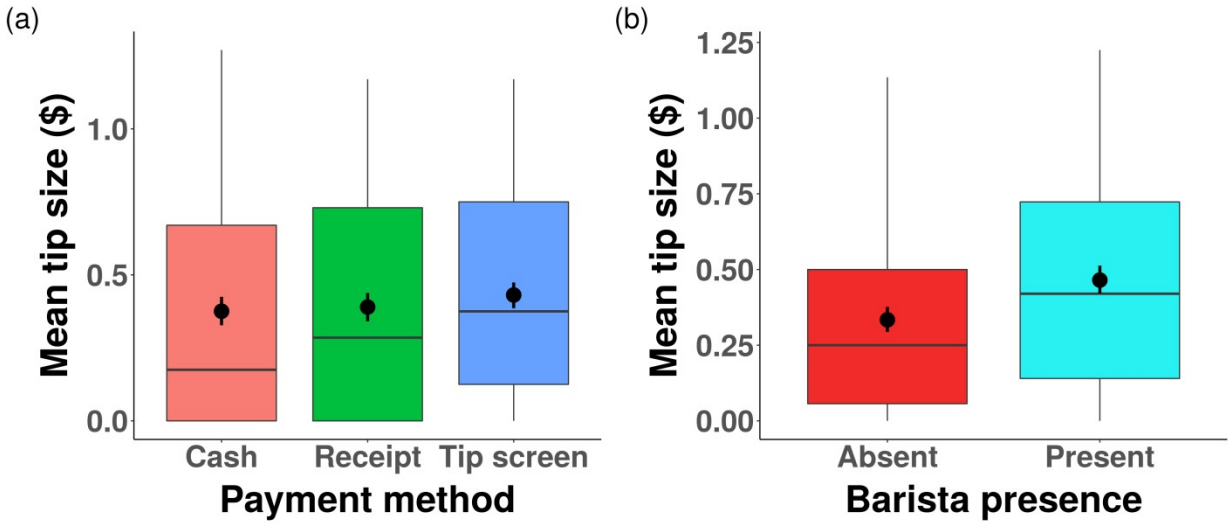


Figure 3. (a) Mean tip sizes indicated by participants for cash, receipt, and tip screen payment methods. (b) Mean tip sizes indicated by participants for the barista absent and barista present conditions. Dots and error bars represent mean values and 95% within-subject confidence intervals respectively. For boxplots, horizontal bars represent medians, boxes represent interquartile ranges (25^{th} - 75^{th} percentile), whiskers represent 1.5 times the interquartile range. Outliers are not shown. Figure used with permission: Goh et al., 2020; available at https://doi.org/10.17605/OSF.IO/6FMVS under a CC-BY4.0 license.

Effect of empathy on barista presence

We investigated how empathy moderated the effect of barista presence on tip size by examining participants' mean empathy scores and their tip sizes (Figure 4). The best-fitting random effect structure included only a random intercept for each participant to account for tip differences within participants across tipping conditions (against a null model with no random effects: $\chi^2(1) = 123.24$, $p < 0.001$). Separately, the inclusion of the fixed effect of barista presence to the model ($\chi^2(1) = 56.06$, $p < 0.001$, BF > 100) and both barista presence and empathy to the model ($\chi^2(1) = 56.06$, $p < 0.001$, BF > 100) improved the fit of the empty random effect model (Table S5). However, since the less complex model that included only the fixed effect of barista presence provided an equally good fit as that of the model with both barista presence and empathy ($\chi^2(1) = 1.89$, $p = 0.17$, BF = 0.125), we conclude that the addition of empathy did not improve the fit of the empty random effect model. This suggests that, contrary to our hypothesis, empathy did not moderate the effect of barista presence on tip size. Additionally, we examined the effect of empathy on tip size since previous studies have reported that empathy increased tip sizes. Results of this exploratory analysis showed that empathy level did not moderate tip size ($t(211) = -1.37$, $p = 0.17$, BF = 0.125).

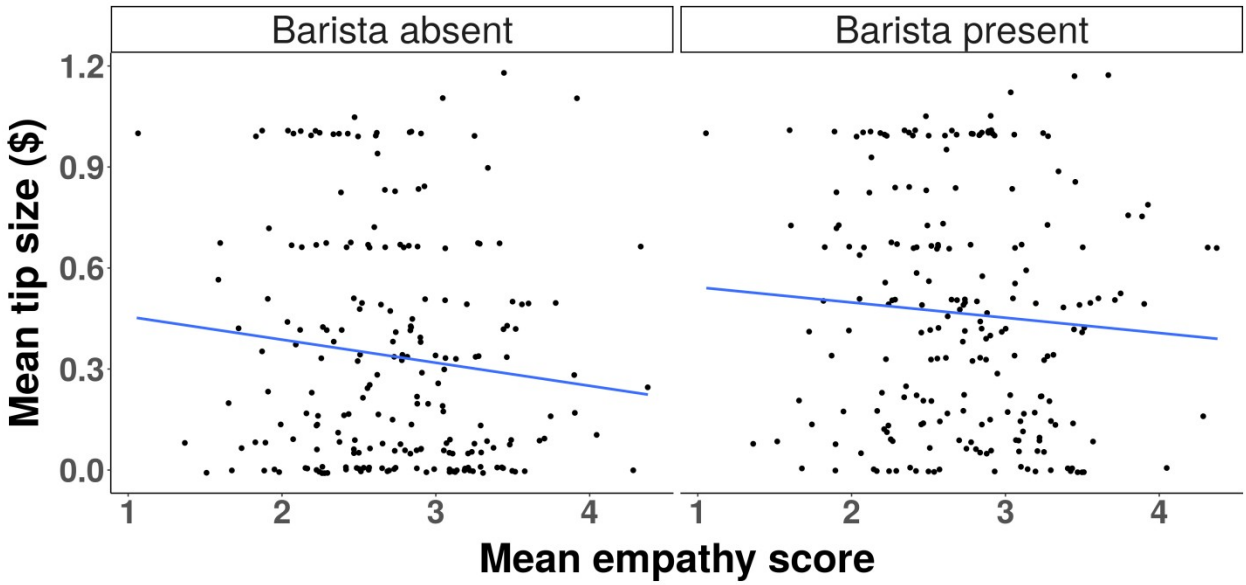


Figure 4. Mean tip sizes indicated by participants for the barista absent and barista present conditions across empathy scores (higher scores mean more empathy). Figure used with permission: Goh et al., 2020; available at https://doi.org/10.17605/OSF.IO/6FMVS under a CC-BY4.0 license.

Discussion

The present study examined the effects of payment method on tipping behavior. We found that participants indicated greater negative feelings towards establishments that use tip screens and reported avoiding such establishments more often compared to those that use tip jars. Yet, payment method did not influence tip size, suggesting that the provision of recommended tip amounts was insufficient in nudging participants to leave bigger tips. In contrast, the presence of a barista appeared to be powerful enough to prompt participants to leave larger tips. Empathy did not moderate this effect on tipping behavior. Taken together, the present research extends knowledge on how tip screens can affect consumers' feelings towards establishments that utilize this payment method and how the presence of a server outweighs payment method as a determining factor of tip size.

The finding that participants expressed greater negative feelings towards and avoidance of establishments that utilize tip screens compared to tip jars supports research showing that people tip to avoid feeling negative emotions (Parrett, 2006; Lynn, 2009; Azar, 2010; Futrell, 2015). The present study showed that participants reported feeling negatively towards establishments using tip screens. Moreover, tip screens elicited significantly greater negative feelings in participants compared to tip jars, suggesting that tip screens (compared to tip jars) could potentially increase the pressure for people to tip their server. On the other hand, the present study also found that a tip screen payment method did not cause participants to leave larger tips compared to credit card and cash payment methods, supporting previous research that found no effect of payment method on tip size for table service (Parrett, 2006).

One reason why payment method did not influence tip size could have been due to the hypothetical nature of the present study. Participants could either not have given the spending situation serious consideration since they were not actually spending any money when deciding how much they had to tip, or not have experienced the pressure to tip that is perhaps felt more

tangibly in real-life transactions. However, participants indicated larger tips in the barista present condition even though they only saw an image of a barista, suggesting that the hypothetical nature of the study did not preclude behavioral effects. Thus, it seems to be the case that suggested tip amounts are simply not powerful enough to nudge customers into increasing their tip sizes, though future researchers should consider replicating the present study in an actual counter-service establishment to affirm this conclusion.

When considered together, the findings that tip screens evoke increased negative feelings in people while having no effect on tip size suggest that a tip screen payment method may motivate people to tip solely for the purpose of adhering to internalized tipping norms and not for other reasons. Additionally, though the present study revealed that participants harbored more negative feelings towards establishments that utilize tip screens compared to those that utilize tip jars, a limitation of this finding was that we did not pinpoint the specific negative emotions felt by participants. Future replications of the present study should explicitly ask participants to rate the extent of specific negative emotions (e.g., guilt, shame, and anger) felt towards tip screens and tip jars. Doing so would allow for a better understanding of people's feelings towards establishments that utilize a tip screen payment method and how these feelings may in turn affect tipping behavior.

Another reason for the lack of tip size differences across payment methods could have been due to the nature of the service environment. Most studies on tipping behavior have been discussed in the context of establishments that provide table service where customers interact with their server over a prolonged period. The present study, on the other hand, provided participants with scenarios that featured counter service where customers typically have much shorter interactions with their server. Thus, the difference in customer-server interaction duration could have influenced the perception of the quality and subsequent evaluation of this interaction, eventually affecting the decision on how much to tip the server. Future studies should examine whether customers' perception of service quality differs between table and counter services. If such a difference exists, it would contribute to the tipping literature where studies have found that tip sizes increase with higher service quality ratings (e.g., Lynn & McCall, 2000; Azar, 2010; Saunders & Lynn, 2010).

Though in the present study payment method did not influence tip size, the presence of a barista was found to significantly increase tip size compared to when the barista was absent. This finding aligns with previous research that found people became more generous when they perceived that they were being observed by others (Haley & Fessler, 2005; Bateson et al., 2006; Burnham & Hare, 2007). On the other hand, the present study also found that individual empathy levels did not moderate this effect of perceived observation on generosity, as more empathetic participants did not leave larger tips compared to their less empathetic counterparts. Taken together, these findings suggest that participants were motivated to tip to comply with social norms to tip and gain social approval instead of the motivation to supplement server wages. Furthermore, the null effect of empathy on tip sizes contrasts previous research that found empathy increased tip sizes (e.g., Parrett, 2011; Lynn et al., 2012; Lynn, 2015). A possible explanation for the discrepancy in empathy effects on tip sizes could be the manner in which empathy was measured across the different studies. For instance, Lynn et al. (2012) and Parrett (2011) operationalized empathy by having their survey respondents indicate whether they had previous work experience as a server, where an affirmative response was taken to indicate increased self-perceived similarity between the respondent and their server and therefore empathy. Meanwhile, Lynn (2015) studied the effects of empathy on tipping behavior by having

participants answer statements that reflected altruistic motives (e.g., "I tip to help servers."). In comparison to these studies, the present study sought to measure empathy using a validated empathy scale that comprises the components of cognitive empathy, emotional empathy, and social skills (Lawrence et al., 2004). Since empathy has not been examined using a consistent measure across studies investigating empathy effects on tipping behavior, future research should delineate between the general trait of empathy and tipping-specific concepts of empathy.

Tipping is a social custom that will persist for time to come. Understanding how bill payment methods affect tipping behavior through customer motivations to tip could be beneficial to establishments that wish to continuously provide customers with satisfactory consumer experiences. The present research aimed to contribute to this knowledge by examining how the utilization of a tip screen payment method affected tip size. Though the presence of tip screens caused people to feel greater negative feelings towards, and potentially avoid, establishments that utilize this payment method, tip screens did not cause people to leave larger tips compared to more traditional modes of payment (i.e., cash and receipt). Instead, the presence of a server was found to be a greater influence on tip size, affirming previous research that found people tip to comply with the social norm to do so. Taken together, our findings suggest that while tip screens may dissuade people from patronizing counter-service establishments, its presence will unlikely affect tip size. Rather, it is keeping service staff visible during the moment of purchase that could be important to ensuring that customers tip. While customer compliance with the social norm to tip may generate tips for servers at the moment of purchase, it remains to be seen how the negative feelings experienced by customers due to pressure to tip will affect tipping behavior in the long-term.

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