

Explanations of Service Gratuities and Tipping:
Evidence from Individual Differences in Tipping Motivations and Tendencies

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Abstract

Consumers often give service workers gifts of money in the form of tips. Desires to help servers, reward service, buy future service, buy social status/esteem, avoid social sanctions, and fulfill internalized social obligations have all been proposed as possible explanations for this behavior, but surprisingly little research has documented the effects of these desires/motives. Results of an online survey indicate that self-reported individual differences in each of these motives for tipping predict the likelihood of tipping, uncertainty about the general likelihood of tipping, and/or tip sizes among those who tip. Results also indicate that the effects of future-service and duty motives on tipping likelihood vary across service occupations and that duty motives have opposite effects on the likelihood of tipping and on the size of tip left by those who do tip – increasing the former while decreasing the latter. Finally, results indicate that reward, altruistic, and esteem motives for tipping are positively related to attitude toward tipping while avoidance and duty motives for tipping are negatively related to attitude toward tipping. The theoretical and practical implications of these findings are discussed along with directions for future research.

KEY WORDS: Tipping; Motivation; Social Norms

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1. Introduction

After receiving services, many consumers around the world give voluntary payments of money (aka, tips) to the workers who served them. Among the workers commonly receiving tips are bartenders, casino croupiers, doormen, golf caddies, hair stylists, masseuses, parking attendants, restaurant musicians, sports instructors, taxicab drivers, and waiters (Star, 1988). The voluntary payments to these workers increase the costs of services by non-trivial amounts. For example, tipping often increases the costs of restaurant meals and of taxicab rides by ten to fifteen percent (Lynn & Lynn, 2004). Collectively, these voluntary payments transfer an estimated \$40 billion a year to service workers in the United States alone (Azar, 2008).

Traditional economic explanations for tipping center around strategic attempts of homo-economicus to ensure good service in future encounters with the service provider. Rational consumers who are regular patrons of an establishment can get better service on future service occasions either by: (i) tipping contingent on service and thereby motivating servers who are aware of the contingency and desirous of larger tips (Azar & Tobol, 2008; Ben-Zion & Karni, 1977; Lynn & Grassman, 1990), or (ii) tipping generously regardless of service quality and thereby obligating servers to repay their generosity with better service in the future (Bodvarsson & Gibson, 1994; Frank, 1988; Sisk & Gallick, 1985). Unfortunately, existing empirical research provides little support for either version of this explanation. Numerous studies have failed to find the service quality by patronage interaction effect on tip sizes that is predicted by the first version (Azar, 2010a, 2010b; Lynn & McCall, 2000; Saunders & Lynn, 2010). Those studies do find a patronage frequency main effect on tipping as predicted by the second version, but this

effect need not reflect a concern with future service; it could be attributable to the greater incomes of frequent than infrequent restaurant patrons (Azar, 2010) and/or the greater satisfaction that brings frequent more than infrequent patrons back to the same restaurant (Lynn & McCall, 2000a).

Behavioral economic explanations of tipping center on attempts by homo-psychologicus to enjoy benefits that go beyond future service. Social consumers are thought to derive utility from tipping because they want to help servers, reward service, gain social status/esteem, avoid social sanctions, and/or fulfill internalized social obligations as well as motivate future service (see Azar, 2007a; Lynn, 2015; Lynn & Grassman, 1990; Regner, 2014; Saunders & Lynn, 2010). Unfortunately, empirical support for these theorized motives for tipping is also scant. There are several situational predictors of tip size consistent with these motives, but most of those effects could be explained by more than one motive for tipping. For example, server attractiveness could increase tip sizes because it: (i) biases perceptions of service quality and thereby enhances reward motives for tipping, (ii) increases customer liking and empathy for the server and thereby enhances altruistic motives for tipping, or (iii) increases customer desire for the server's approval and liking and thereby enhances esteem motives for tipping. Some studies have begun to examine the effects on tipping of individual differences in motivations, but those studies have produced mixed results at best (see Table 1). Moreover, most of these studies have measurement problems that complicate the interpretation of their results – Azar (2010) and Lynn (2008, 2009) employed single-item measures of questionable reliability and/or validity while Becker, et. al. (2012) employed multiple-item measures that confounded tipping motivations with tipping habits. Only Saunders and Lynn (2010) employed validated, multi-item measures and only for two motives – altruistic and esteem motives.¹ Thus, there is a need for more research testing the various psychological motivations for tipping.

¹ Saunders and Lynn (2010) also used attitude toward tipping as a measure of the internalization of tipping norms (or duty motives), but as the results of the current study indicate, liking of tipping and accepting a social responsibility to tip are two different constructs that are negatively rather than positively correlated.

Insert table 1 about here

In this paper, I test both the traditional and behavioral economic explanations for why people tip by examining the effects of individual differences in the strength of various motives on the likelihood of tipping and the size of tips when given. In addition, I test the generalizability of these motivations' effects across service occupations as well as the effects of these motivations on attitudes toward tipping.

2. Method

An online survey asked participants to: (i) indicate how likely they would be to tip, and how much they would tip, each of seven different service providers for good service, (ii) agree or disagree with statements reflecting different motives for, and attitudes toward, tipping, (iii) provide demographic information about themselves, and (iv) agree or disagree with statements reflecting the seriousness, honesty, carefulness and accuracy with which they completed the survey. More details about the methodology are presented below.

2.1. Sample

Participants in this study were recruited from Amazon Mechanical Turk workers residing in the United States and were paid a small sum (less than a dollar) for their participation. Five hundred sixty-five people completed the survey, but 31 of them were dropped from analyses because they failed to agree that they were serious, honest, careful and accurate when completing the survey and/or failed to follow directions on a question designed to identify those who were and were not reading the questions. Furthermore, many of the remaining 534 participants failed to answer one or more questions so the sample size varies from one analysis to another depending on the variables involved.

2.2. *Tipping frequency and tip size*

Participants were asked two randomly ordered questions about their tipping behavior. One question asked: “How likely would you be to tip each of the following service providers for good service under the conditions specified?” Responses to this question were made on a six point scale ranging from 1 = “very unlikely” to 6 = “very likely.” The other question was open ended and asked: “How much would you tip each of the following service providers (in dollars and cents) for good service under the conditions specified?” The service providers and conditions for both questions were: bartender (for 1 drink), taxi driver (on a fare of \$20.00), parking valet (for retrieving your car once), hotel bellman (for delivering 2 bags to your room), hotel doorman (for hailing a cab), hotel maid (for 1 night’s stay), and pizza delivery driver (for 1 pizza). For the tip size question, all reported tip amounts of 10 dollars or more were dropped as outliers of questionable validity. The largest remaining tip size was eight dollars.

Responses to the two questions were used to generate five tipping measures – (i) Tipping Likelihood Index - average standardized likelihood of tipping across the different occupations (coefficient alpha = .85), (ii) Tipping Likelihood Uncertainty Index - average standardized uncertainty about the likelihood of tipping across the different occupations (recoded from likelihood ratings such that “very unlikely” and “very likely” were recoded as 1, “unlikely,” and “likely” were recoded as 2, and “somewhat unlikely” and “somewhat likely” were recoded as 3) (coefficient alpha = .82), (iii) Tip Amount Index - average standardized tip amounts (including tips of zero) across the different occupations (coefficient alpha = .77), (iv) Tipping Probability index - probability of leaving a non-zero tip size across the different occupations (coefficient alpha = .75), and (v) Non-Zero Tip-Size Index - average standardized non-zero tip sizes across the different occupations (coefficient alpha = .79). Indices were formed by averaging the component items that were available; effectively replacing missing items with the mean of those available as advocated by Roth, Switzer and Switzer (1999).

2.3. *Tipping Attitude and Motives*

Participants were also asked to use a seven point scale to indicate how strongly they disagreed or agreed with two statements reflecting attitude toward tipping and 37 statements reflecting different motives for tipping. The two attitude statements (“I like the custom of tipping” and “I would like to see tipping abolished”) were averaged after reverse coding of the later item to form an attitude index with a coefficient alpha of .83. A principle components analysis of the 37 motivation statements produced six factors with eigen values greater than one. After varimax rotation, factor one loaded on items reflecting future service motives for tipping, factor two loaded on items reflecting gratitude and reward-for-service motives for tipping, factor three loaded on avoidance motives for tipping, factor four loaded on duty motives for tipping, factor five loaded on altruistic motives for tipping, and factor six loaded on impression-management or social-esteem motives for tipping. An index for each of these factors/motives was constructed by averaging those items that loaded .65 or better on the indexed factor and .35 or less on the other five factors (see Table 2 for the items in each index). The resulting indices had coefficient alphas of .94, .91, .82, .91, .68, and .89 respectively. When constructing each index, missing values on one item were replaced with the mean of the available items as advocated by Roth, Switzer and Switzer (1999), but missing values on two or more items resulted in a missing value for that index.

Insert table 2 about here

2.4. Demographic Variables

Toward the end of the survey, participants were asked a number of questions about their demographic characteristics and attitude and approach to answering questions in the survey. Responses to the latter questions were used to identify and drop participants who were non-serious, dishonest, careless, and/or inaccurate as described previously. The demographic questions were used as control variables and included the participants’ birth year (used to calculate age), sex (M=1, F =2), education (1 = less than high school, 2 = high school/GED, 3 = some college, 4 = 4-year college degree, and 5 = graduate/professional degree), annual income (1 = below \$20,000, 2 = \$20,000 - \$29,000, ..., 9 = \$90,000 - \$99,000, 10 = \$100,00 or more), race (coded as white = 1, non-white = 0), and religion (coded as Christian = 1 , other = 0). These variables were used as controls because each has been found to predict tipping in at least one previous study (see Lynn, 2009; Lynn & Thomas-Haysbert, 2003; Lynn & Katz, 2013).

3. Results

Descriptive statistics for the variables in this study are presented in Table 3. Analyses of these data are presented in Tables 4 and 5 and are discussed in the sections that follow.

Insert tables 3 thru 5 about here

4.1. Motivation effects on the likelihood of tipping

Regression analyses predicting the tipping likelihood index and the tipping probability index from the demographic controls and tipping motives are presented in Table 4. In these analyses, both measures of tipping propensities increased with reward, duty and altruistic motives for tipping, but were unrelated to future-service, avoidance, or esteem motives for tipping.² Thus, only reward, duty, and altruistic motives

² The effect of duty motives on the tipping probability index was only marginally significant using a two-tailed test ($p < .08$), but was in the expected direction and was significant using a one-tailed test.

appear to drive tipping across a variety of different service occupations. Future-service, avoidance, and esteem motives do not appear to be widespread drivers of tipping, but it is possible that they affect the propensity to tip some service occupations even if not the propensity to tip most service occupations.

The motivations for tipping could vary across service occupations/settings, so additional analyses were run using raw tipping likelihood ratings for each of the service providers as dependent variables. These analyses also retained the demographic control variables used previously. Tests of the within-subjects motive by service-provider interactions indicated that the effects of future service motives ($F(6, 2982) = 4.22, p < .001$) and duty motives ($F(6, 2982) = 3.30, p < .004$) reliably differed across service occupations while the effects of avoidance motives ($F(6, 2982) = 1.17, p > .31$), reward motives ($F(6, 2982) = 1.68, p > .12$), altruistic motives ($F(6, 2982) = .82, p > .55$), and esteem motives ($F(6, 2982) = 2.07, p > .05$) did not.

Examination of the reliable future-service motive by service-occupation interaction using separate regression analyses for each service occupation indicated that future-service motives increased the likelihood of tipping bartenders, but not other service providers (see Table 5). This suggests that there is something about bartenders or bartending that strengthens future service motives for tipping. Perhaps consumers perceive that bartenders are more likely than other service providers to note and remember their customers' tipping behavior and/or to believe that bartenders can more easily reduce service levels for non-tippers than can other service providers. Such perceptions and beliefs would not be unreasonable given bartenders' repeated interactions with customers on a given night and the ease with which bartenders can vary the amount of alcohol in the drinks given to tipping and non-tipping customers.

Examination of the reliable duty motive by service-occupation interaction using separate regression analyses for each service occupation indicated that duty motives increased the likelihood of tipping all the service providers except hotel doormen and hotel maids (see Table 5). This suggests that

consumers feel a sense of duty/obligation to tip bartenders, taxi drivers, parking valets, hotel bellmen and pizza delivery drivers, but not hotel doormen and maids. Perhaps consumers are less aware of the norms about tipping hotel doormen and maids than the norms about tipping other service workers or perhaps they are less likely to agree with and internalize the former norms.

4.2. Motivation effects on uncertainty about tipping likelihood

Avoidance and esteem motives for tipping were unrelated to the likelihood of tipping any of the seven service providers in this study. These findings suggest that these two motives do not drive a general tendency to tip any service occupation. However, it is possible that the effects of these motives on the tipping of a service occupation are highly situation dependent, with some settings evoking stronger concerns about servers' and others' reactions to tips than do others. If so, then stronger dispositional avoidance and/or esteem motives for tipping should be associated with greater variability in tipping and, hence, greater uncertainty about the general likelihood of tipping. This possibility was tested by recoding the likelihood-of-tipping ratings into a measure reflecting greater uncertainty about the general likelihood of tipping (i.e., "very unlikely" and "very likely" were recoded as 1, "unlikely," and "likely" were recoded as 2, and "somewhat unlikely" and "somewhat likely" were recoded as 3), averaging the standardized values from this recoding into an index of tipping-likelihood uncertainty, and analyzing this new dependent variable in a regression analysis like that used to analyze the original tipping likelihood index (see Table 4). In this analysis, stronger avoidance and esteem motives for tipping were reliably or nearly reliably associated with greater uncertainty about the likelihood of tipping.³ These findings suggest that avoidance and esteem motives do affect tipping but that those effects are highly variable and situation specific.

³ In addition, reward and altruistic motives were reliably associated with a reduced uncertainty about the likelihood of tipping, which is consistent with their positive effects on the absolute likelihood of tipping.

4.3. *Motivation effects on the size of tips*

Regression analyses predicting the tip amount index and non-zero tip size index from the demographic controls and tipping motives are presented in Table 4. Stronger reward and altruistic motives reliably increased both measures of tip size while stronger duty motives reliably decreased non-zero tip sizes but did not affect tip amounts that included tips of zero. There were no other reliable motivation effects on these dependent measures. The positive effects of reward and altruistic motives on tip sizes replicate and extend the positive effects of those motives on the likelihood of tipping. The negative effect of duty motives on non-zero tip sizes is opposite to the positive effect of that motive on the likelihood of tipping discussed earlier and these opposite effects combine to produce the null effect observed on tip amounts that include zero. This pattern of data indicates that duty motives lead people to leave small, but non-zero, tip amounts.

4.4. *Motivation effects on attitude toward tipping*

A regression analysis predicting attitude toward tipping from the demographic controls and tipping motives produced significant or nearly significant positive effects of future-service motives ($B = .08$, $t(500) = 1.41$, $p < .16$), reward motives ($B = .49$, $t(500) = 6.28$, $p < .001$), altruistic motives ($B = .32$, $t(500) = 4.33$, $p < .001$), and esteem motives ($B = .18$, $t(500) = 2.97$, $p < .004$) as well as significant negative effects of avoidance motives ($B = -.22$, $t(500) = -3.06$, $p < .003$) and duty motives ($B = -.24$, $t(500) = -3.93$, $p < .001$).⁴ These findings suggest that tippers motivated by positive benefits of tipping (pleasures or satisfactions gained) like tipping more than those motivated by negative benefits of tipping (pains or dissatisfactions avoided). Furthermore, the negative duty motivation effect suggests that duty motives for tipping reflect a greater focus on avoiding guilt than on feeling pride, which is consistent with the negative effect of duty motives on tip size and with other psychological research finding that focusing

⁴ The only demographic variable related to attitude toward tipping was religion – Christians liked tipping more than did non-Christians ($B = .53$, $t(500) = 3.41$, $p < .001$).

on responsibilities and duties leads to avoidance motivation and behavior more than approach motivation and behavior (Higgins, Roney, Crowe & Hymes, 1994).

5. Discussion

The results of this study indicate that:

- (i) individual differences in future-service, avoidance, reward, duty, altruistic and esteem motives for tipping each predict some aspect of tipping behavior – i.e., the likelihood of tipping, uncertainty about the general likelihood of tipping, and/or non-zero tip sizes,
- (ii) future-service and duty motives have reliably different relationships with tipping likelihood across different service occupations,
- (iii) stronger duty motives for tipping are associated with a greater likelihood of tipping, but a smaller size of tips left by those who tip, and
- (iv) reward, altruistic, and esteem motives for tipping are positively related to attitude toward tipping while avoidance and duty motives for tipping are negatively related to attitude toward tipping.

One could question the validity of these findings because the tipping data in this study are self-reported behavioral tendencies or responses to hypothetical scenarios and there is no published study (or unpublished study that I am aware of) directly comparing self-reported tipping tendencies and/or hypothetical tipping intentions with objective measures of tipping behavior. However, tipping is a conscious and deliberate behavior, so people should have some awareness of their actual tipping tendencies and intentions. Furthermore, participants completed the current online survey anonymously, so there was little reason for them to lie about those tipping tendencies and intentions. Finally, researchers using similar online surveys have replicated race differences in tipping found with other methodologies (Lynn & Brewster, 2015; Lynn, 2006). Thus, there is good reason and some evidence supporting the

validity of our self-reported tipping measures and of the relationships we observed. With that in mind, the theoretical and practical implications of these findings are briefly discussed below along with directions for future research.

5.1. Support for motivational theories of tipping

The finding that each of the self-reported motives for tipping predicted unique variance in the likelihood of tipping, uncertainty about the general likelihood of tipping, and/or tip size provides empirical support for previous scholars' theories about the motives underlying tipping (see Azar, 2010; Lynn, 2009; 2015; Lynn & Grassman, 1990; Regner, 2014; Saunders & Lynn, 2010; Whaley, Douglas & O'Neill, 2014). The correlational nature of the data precludes strong causal inferences, but the consistency of the data with expectations nevertheless buttresses the theories from which those expectations were derived. Although the current findings support the validities of future-service, avoidance, reward, duty, altruistic and esteem motives for tipping, these motives were not equally powerful determinants of tipping. Desires to help servers, reward good service, and fulfill obligations emerged from the current analyses as the main drivers of tipping because they predicted the likelihood of tipping more strongly and for more service occupations than did the other motives for tipping. Accordingly, service managers and others seeking to improve employee tip income should focus on enhancing these motives. The desire for future service emerged as strong predictor of tipping likelihood, but only for one of the service workers in this study, namely bartenders. Desires to avoid sanctions and to bolster one's status/esteem were unrelated to the likelihood of tipping any of the service occupations studied. These two motives did predict greater uncertainty about the general likelihood of tipping, so they do affect tipping, but those effects are apparently variable and situation dependent. Further supporting this general ordering of the motives' predictive power is the fact that it roughly parallels the survey participants' level of agreement that those motives drive their tipping behavior (see Table 3). Overall, these findings point to the greater explanatory

power of behavioral economic explanations of tipping that encompass psychological sources of utility and motivation over more traditional economic explanations that rely on future service as the sole source of utility and motivation for this behavior.

5.2. Evidence of occupational differences in motives for tipping

The finding that future-service and duty motives had different relationships with tipping likelihood across different service occupations provides the first available evidence that there are occupational boundary conditions to the effects of those motives. This finding that the predictors/determinants of tipping do not always generalize across different occupations suggests that it is important to study tipping in a variety of different contexts and not just in the restaurant setting that has dominated most of the research in this area. It also points to possible explanations for why some service workers are more likely to be tipped than others. The frequency with which different service occupations are tipped may be a function of occupational differences in the number and strength of the motives for tipping. Consistent with this idea, Azar's (2005) found that tipping is more prevalent in occupations where workers have low incomes and customers have high incomes (which should promote altruistic motivations). The current findings suggest that other occupational characteristics that strengthen or weaken one or more motives for tipping (such as the potential of service workers to remember and reward tippers and the salience of tipping norms for that occupation) may also help to explain why it is customary to tip some service workers and not others. This possibility deserves investigation in future research.

5.3. Evidence of opposite duty effects on tipping likelihood and non-zero tip-size

The finding that duty motives were associated with a greater likelihood of tipping, but a smaller size of tips left by those who tipped adds to a growing body of research indicating that these two measures of tipping often have different relationships to other variables (see Lynn, 2009; Lynn, Pugh & Williams, 2012; Saunders & Lynn, 2010; Schwer & Daneshvary, 2000). In this case, the opposite effects are most

easily explained in terms of duty motivating people to leave small, but non-zero, tips. Other variables may have similar effects on tipping, so future researchers should at least explore possible differences in the effects of their independent variables on the decision to tip or not and (given a tip) on the size of tip left before testing and reporting the effects of those independent variables on an overall measure of tip size that includes tips of zero. Failure to do so, may hide effects like those of duty motives in this study. On a more mundane level, the different observed effects of duty motives in this study suggest that appealing to a sense of obligation to tip may be an effective way to increase customers' likelihood of tipping, but that such appeals should be targeted only at people who would otherwise not tip because such appeals may decrease tips among those who would have tipped anyway.

The finding that duty motives were associated with a greater likelihood of tipping, but a smaller size of tips left by those who tipped is inconsistent with Lynn and Starbuck's (2015) discovery that national sensitivity to duty was positively related to national attitude toward tipping and to customary restaurant tip amounts. However, these conflicting findings may be due to the studies' different measures of duty motivation. The current study measured felt obligation to tip while Lynn and Starbuck measured a sense of moral obligation to do volunteer work. Researchers have found that thinking in concrete terms is associated with a prevention focus while thinking in abstract terms is associated with a promotion focus (Lee, Keller & Sternthal, 2010), so the current study's narrower and more concrete measure of duty motivation may have reflected avoidance of guilt while Lynn and Starbuck's broader and more abstract measure of duty motivation may have reflected a pursuit of pride. However, research that measures and compares the effects on tipping of broad/abstract vs narrow/concrete duty motives at the same level of analysis (individual or national) is needed to test these ideas further.

5.4. Evidence of motivational effects on attitudes toward tipping

The findings that reward, altruistic, and esteem motives for tipping were positively related to attitude toward tipping while avoidance and duty motives for tipping were negatively related to attitude toward tipping suggests that motives involving positive benefits (pleasures or satisfactions gained) increase liking for the motivated behavior while motives involving negative benefits (pains or dissatisfactions avoided) decrease liking for the motivated behavior. They also suggest that attitudes toward tipping reflect its subjective utility to tippers and, thus, are a reasonable indicator of the custom's effects on social welfare.

The interpretation of motivational effects on attitude toward tipping above assumes that duty motives reflect an avoidance of guilt rather a pursuit of pride. This assumption is consistent with psychological research finding that focusing on responsibilities and obligations enhances avoidance goals and behaviors (Higgins, Roney, Crowe & Hymes, 1994). The fact that duty motives were associated with smaller non-zero tip-sizes provides additional support for this assumption, because psychologists have found that a prevention or avoidance focus leads to pursuing minimal goals and doing only what is necessary (Shah & Higgins, 1997). It is inconsistent with Lynn and Starbuck's (2015) finding that national sensitivity to duty was positively related to customary restaurant tip amounts, but that study's measure of duty motives was very different than the one used in this study and different types of duty measures might lead to different prevention versus promotion mind sets (as discussed previously).

6. Conclusion

Consumers around the world often leave voluntary tips for various service providers. This behavior is inconsistent with traditional models of Homo economicus, but it is not irrational or mysterious. Tipping is easily understood using a model of Homo psychologicus that recognizes server welfare, expressions of gratitude, equitable relationships, social status/esteem, fulfillment of duty, and avoidance of social

sanctions as well as future service as sources of utility. The validity and usefulness of this expanded utility function was supported by the relationships among individual differences in tipping tendencies, motivations and attitudes observed in the current study. Hopefully, the partial validation of this motivational framework will encourage other researchers to use the framework to generate and test hypotheses about other individual differences in tipping as well as situational effects on tipping, occupational characteristics that affect the likelihood of receiving tips, and national characteristics that affect tipping customs.

References

- Ayres, I., Vars, F. & Zakariya, N. (2005). To insure prejudice: racial disparities in taxicab tipping. *Yale Law Journal*, 114, 1613-1674.
- Azar, O.H. (2005). Who do we tip and why? *Applied Economics*, 37, 1871-1879.
- Azar, O.H. (2007). Do people tip strategically, to improve future service? Theory and evidence. *Canadian Journal of Economics*, 40, 515-527.
- Azar, O. (2008). Strategic behavior and social norms in tipped service industries. *The B.E. Journal of Economic Analysis and Policy*, 8, Article 7.
- Azar, O. (2010). Tipping motivations and behavior in the U.S. and Israel. *Journal of Applied Social Psychology*, 40, 421-457.
- Ben-Zion, U. & Karni, E. (1977). Tip payments and quality of service. In O.C. Ashenfelter & W.E. Oates (eds.), *Essays in labor market analysis* (pp. 37-44). New York, NY: John Wiley & Sons.
- Conlin, M., Lynn, M., & O'Donahue, T. (2003). The norm of restaurant tipping. *Journal of Economic Behavior and Organization*, 52, 297-321.
- Frank, R.H. (1987). If homo-economicus could choose his own utility function, would he want one with a conscience? *American Economic Review*, 77, 593-604.
- Green, L., Myerson, J. & Schneider, R. (2003). Is there a magnitude effect in tipping? *Psychonomic Bulletin & Review*, 10, 381-386.
- Gueguen, N. & Legohérel, P. (2000). Effect of barman drawing a sun on the bottom of customers' checks. *Psychological Reports*, 87, 223-226.
- Haggag, K. & Paci, G. (2013). Default tips. *American Economic Journal: Applied Economics*, 6, 1-19.

- Heffetz, O. (2011). A test of conspicuous consumption: Visibility and income elasticities. *Review of Economics and Statistics*, 93, 1101-1117.
- Higgins, E.T., Roney, J.R., Crowe, E. & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance: Distinct self-regulatory systems. *Journal of Personality and Social Psychology*, 66, 276-286.
- Idson, L.C., Liberman, N. & Higgins, E.T. (2000). Distinguishing gains from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology*, 36, 252-274.
- Karen, R. (1962). Some factors affecting tipping. *Sociology and Social Research*, 47, 68-74.
- Kerr, P. & Domazlicky, B.R. (2009). Tipping and service quality: Results from a large database. *Applied Economics Letters*, 16, 1505-1510.
- Landsburg, S. E. (1993). *The armchair economist*. New York: Free Press.
- Lee, A.Y., Keller, P.A. & Sternthal, B. (2010). Value from regulatory construal fit: The persuasive impact of fit between consumer goals and message concreteness. *Journal of Consumer Research*, 36, 735-747.
- Lynn, M. (2003). Tip levels and service: An update, extension and reconciliation. *Cornell H.R.A. Quarterly*, (December), 139-148.
- Lynn, M. (2006). Race differences in restaurant tipping: A literature review and discussion of practical implications. *Journal of Foodservice Business Research*, 9 (4), 99-113.
- Lynn, M. (2008). Personality effects on tipping attitudes, self-reported behaviors and customs: A multi-level inquiry. *Personality and Individual Differences*, 44, 989-999.

- Lynn, M. (2009). Individual differences in self-attributed motives for tipping: Antecedents, consequences, and implications. *International Journal of Hospitality Management*, 28, 432-438.
- Lynn, M. & Brewster, Z. (2015). Racial and ethnic differences in tipping: The role of perceived descriptive and injunctive tipping norms. *Cornell Hospitality Quarterly*, 56 (1), 68-79.
- Lynn, M., & Grassman, A. (1990). Restaurant tipping: An examination of three 'Rational Explanations'. *Journal of Economic Psychology*, 11, 169-181.
- Lynn, M. & Gregor, R. (2001). Tipping and service: The case of hotel bellmen. *International Journal of Hospitality Management*, 20, 299-303.
- Lynn, M., Jabbour, P. & Kim, W.G. (2012). Who uses tips as a reward for service and when? An examination of potential moderators of the service-tipping relationship. *Journal of Economic Psychology*, 33, 90-103.
- Lynn, M. & Katz, B. (2013). Are Christians/religious people poor tippers? *Journal of Applied Social Psychology*, 43, 928-935.
- Lynn, M., Kwortnik, R.J. & Sturman, M. (2011). Voluntary tipping and the selective attraction and retention of service workers in the United States: An application of the ASA Model. *International Journal of Human resources Management*, 22, 269-275.
- Lynn, M. & Lynn, A. (2004). National values and tipping customs: A replication and extension. *Journal of Hospitality and Tourism Research*, 28, 356-364.
- Lynn, M., & McCall, M. (2000a). Gratitude and gratuity: A meta-analysis of research on the service-tipping relationship. *Journal of Socio-Economics*, 29, 203-214.
- Lynn, M., Pugh, C.C. & Williams, J. (2012). Black-White differences in tipping: Moderated by socio-economic status? *Cornell Hospitality Quarterly*, 53, 286-294.

- Lynn, M. & Starbuck, M. (2014). Tipping customs: The effects of national differences in attitudes toward tipping and sensitivities to duty and social pressure. *Journal of Behavioral and Experimental Economics*, in press.
- Lynn, M. & Sturman, M. (2010). Tipping and service quality: A within-subjects analysis. *Journal of Hospitality & Tourism Research*, 34, 269-275.
- Lynn, M., & Thomas-Haysbert, C. (2003). Ethnic differences in tipping: evidence, explanations and implications. *Journal of Applied Social Psychology*, 33 (8), 747-1772.
- Mankiw, G. (2007). No, really, it's up to you. *Greg Mankiw's Blog*, October 1, <http://gregmankiw.blogspot.com/2007/10/no-really-its-up-to-you.html>.
- Miller, D.T. & Smith, J. (1977). The effect of own deservingness and deservingness of others on children's helping behavior. *Child Development*, 48, 617-620.
- Regner, T. (2014). Social preferences? Google Answers! *Games and Economic Behavior*, 5, 188-209.
- Rosenhan, D., Frederick, F. & Burrowes, A. (1968). Preaching and practicing: Effects of channel discrepancy on norm internalization. *Child Development*, 39, 291-301.
- Saunders, S.G. & Lynn, M. (2010). Why tip? An empirical test of motivations for tipping car guards. *Journal of Economic Psychology*, 31, 106-113.
- Schwer, R.K. & Daneshvary, R. (2000). Tipping participation and expenditures in beauty salons. *Applied Economics*, 32, 2023-2031.
- Seligman, C., Finegan, J.E., Hazelwood, J.D. & Wilkinson, M. (1985). Manipulating attributions for profit: A field test of the effects of attributions on behavior. *Social Cognition*, 3, 313-321.

- Seiter, J.S. & Dutson, E. (2007). The effect of compliments on tipping behavior in hairstyling salons. *Journal of Applied Social Psychology, 37*, 1999-2007.
- Shah, J. & Higgins, E.T. (1997). Expectancy x value effects: Regulatory focus as determinant of magnitude and direction. *Journal of Personality and Social Psychology, 73*, 447-458.
- Star, N. (1988). *The international guide to tipping*. New York, NY: Berkley Books.
- Vroom, V., Porter, L. & Lawler, E. (2005). Expectancy theories. In J.B. Miner (Ed.), *Organizational behavior: Essential theories of motivation and leadership*. Armonk, NY: M.E. Sharpe.
- Whaley, J.E., Douglas, A. & O'Neill, M. (2014). What's in a tip? The creation and refinement of a restaurant-tipping motivations scale: A consumer perspective. *International Journal of Hospitality management, 37*, 121-130.

Table 1. Summary of existing research examining the effects on tipping of individual differences in motivations.

Motive	Lynn (2008)	Lynn (2009)	Azar (2010)	Saunders & Lynn (2010)	Becker, et al. (2012)
Future Service	Not supported	Mixed support	Not supported	---	Supported
Avoidance	---	Not supported	Not supported	---	---
Gratitude/Reward	---	Not supported	Supported	---	Mixed support
Duty/Guilt/Pride	Supported	Not supported	Not supported	Not supported	Not supported
Altruism/Server-Need	Supported	Supported	Mixed support	Mixed support	Not supported
Esteem	Not supported	Mixed support	---	Mixed support	Not supported

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Table 2. Items measuring the motives for tipping.

Future-Service Motives (coefficient alpha = .94)

- I tip so the server will remember me positively the next time I encounter him/her.
- I tip in order to get better service than the typical customer.
- I tip because it improves the service I get from that server in the future.
- I tip in order to get preferential treatment on my next visit.
- I tip so that I do not get lousy service the next time I see the server.

Reward Motives (coefficient alpha = .91)

- I tip to thank servers for the time and energy they spend on my behalf.
- I tip because I am grateful for the service I receive.
- I tip out of gratitude for a positive service experience.
- I tip as a way of saying "Thank You."
- I tip in order to repay the server for his/her efforts.
- I tip because I believe in reciprocating when someone has done something for me.
- I tip to reward good service.

Avoidance Motives (coefficient alpha = .82)

- I tip to keep the server from disliking me.
- I tip to keep the server from doing something bad to me.
- I tip to avoid being looked down upon by others.
- I tip to avoid feeling indebted to the server.

Duty Motives (coefficient alpha = .91)

- I tip to obey social norms.
- I tip because it is expected.
- I tip because doing so is a social obligation.
- I tip out of a sense of duty.

Altruistic Motives (coefficient alpha = .68)

- I tip to help servers.
- I tip because servers need the money more than I do.
- I tip to make up for servers' low wages.

Esteem Motives (coefficient alpha = .89)

- I tip in order to gain social status/respect.
 - I tip in order to impress the people I am with.
 - I tip in order to appear generous.
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[Note: Items responded to using a seven point scale, with 1 = strongly disagree and 7 = strongly agree.]

Table 3. Descriptive statistics for the variables in this study.

	N	Minimum	Maximum	Mean	Std. Deviation
Likelihood of Tipping					
- Bartenders	534	1	6	4.78	1.46
- Taxi Drivers	533	1	6	4.80	1.37
- Parking Valets	533	1	6	4.68	1.25
- Hotel Bellman	534	1	6	4.78	1.18
- Hotel Doormen	533	1	6	3.83	1.52
- Hotel Maids	534	1	6	3.69	1.69
- Pizza Delivery Drivers	534	1	6	5.43	.84
Tip Amount					
- Bartenders	531	.00	5.00	1.25	.80
- Taxi Drivers	532	.00	7.50	2.94	1.42
- Parking Valets	527	.00	7.00	2.57	1.56
- Hotel Bellman	502	.00	8.00	3.03	1.66
- Hotel Doormen	527	.00	5.00	1.87	1.58
- Hotel Maids	480	.00	7.00	2.60	2.06
- Pizza Delivery Drivers	533	.00	7.00	3.12	1.28
Tipping Likelihood Index	534	-2.89	1.04	-.00	.72
Tipping Likelihood Uncertainty Index	534	-1.12	1.47	.00	.69
Tip Amount Index	534	-1.72	2.19	.02	.67
Tipping Probability Index	534	.00	1.00	.90	.18
Non-Zero Tip-Size Index	531	-1.75	2.21	.00	.71
Tip Attitude	534	1.00	7.00	3.97	1.92
Future-Service Motives	533	1.00	7.00	4.17	1.71
Avoidance Motives	534	1.00	7.00	3.07	1.43
Reward Motives	534	1.00	7.00	5.67	1.11
Duty Motives	532	1.00	7.00	5.07	1.50
Altruistic Motives	534	1.00	7.00	5.07	1.28
Esteem Motives	534	1.00	7.00	3.22	1.68
Age	524	18.00	74.00	30.89	9.83
Sex (1 = female, 0 = male)	532	0	1	.36	.48
Education	531	1	6	3.15	1.31
Income	532	1	10	3.45	2.62
Race (1 = White, 0 = non-White)	533	.00	1.00	.74	.44
Religion (1 = Christian, 0 = other)	534	.00	1.00	.39	.49

Table 4. Coefficients and robust standard errors from regression analyses predicting various tipping indices.

	Tipping Likelihood Index	Tipping Likelihood Uncertainty Index	Tip Amount Index	Tipping Probability Index	Non-Zero Tip-Size Index
(Constant)	-2.37*** (.24)	.87** (.27)	-.98*** (.22)	.44*** (.09)	-.42 (.26)
Age	.01** (.003)	-.01 [‡] (.003)	-.01* (.03)	.0006 (.0007)	-.01** (.003)
Female	-.004 (.06)	-.02 (.06)	.05 (.06)	.004 (.02)	.05 (.07)
Education	-.005 (.02)	-.01 (.02)	-.04 [‡] (.02)	.001 (.006)	-.05* (.02)
Income	.03** (.01)	-.03** (.01)	.02 (.01)	.0002 (.002)	.02 (.01)
White	-.01 (.07)	-.02 (.07)	.06 (.07)	-.02 (.02)	.09 (.07)
Christian	-.07 (.06)	.15* (.06)	-.04 (.06)	.02 (.02)	-.08 (.06)
Future-Service Motives	.02 (.02)	-.03 (.02)	-.02 (.02)	.00002 (.006)	-.02 (.06)
Avoidance Motives	-.03 (.03)	.10*** (.03)	.01 (.03)	.005 (.008)	.01 (.03)
Reward Motives	.19*** (.03)	-.08* (.04)	.15*** (.03)	.03** (.01)	.13*** (.03)
Duty Motives	.06* (.02)	-.03 (.02)	-.03 (.02)	.01 [‡] (.006)	-.06* (.02)
Altruistic Motives	.14*** (.03)	-.05* (.02)	.09*** (.02)	.03*** (.008)	.05 [‡] (.03)
Esteem Motives	-.01 (.03)	.04 [‡] (.02)	.02 (.02)	.007 (.006)	.02 (.03)
R ²	.29***	.14***	.14***	.18***	.10***
N	513	513	513	513	510

‡ p < .10, * p < .05, ** p < .01, *** p < .001

Table 5. Coefficients and robust standard errors from regression analyses predicting likelihood of tipping various service workers.

	Bartender	Taxicab Driver	Parking Valet	Hotel Bellman	Hotel Doorman	Hotel Maid	Pizza Delivery Driver
(Constant)	1.38** (.47)	1.41** (.45)	1.20** (.37)	1.28*** (.37)	1.10* (.45)	1.01* (.51)	3.20*** (.40)
Age	.005 (.01)	.01† (.01)	.01** (.01)	.02*** (.004)	.03*** (.01)	.01 (.01)	-.001 (.004)
Female	.01 (.13)	-.19 (.13)	-.09 (.11)	-.001 (.10)	.12 (.14)	.38* (.15)	-.11 (.07)
Education	.11 (.05)	.05 (.04)	-.01 (.04)	-.05 (.04)	-.08† (.05)	-.10† (.06)	.01 (.03)
Income	.02 (.02)	.05* (.02)	.05* (.02)	.06*** (.02)	.08** (.03)	.004 (.03)	.02 (.01)
White	.10 (.13)	.14 (.14)	-.03 (.12)	-.15 (.12)	-.16 (.15)	-.25 (.17)	.12 (.08)
Christian	-.21† (.12)	-.26* (.12)	-.08 (.11)	-.15 (.10)	.07 (.13)	-.03 (.15)	-.04 (.07)
Future-Service Motives	.19*** (.05)	-.02 (.05)	.02 (.04)	-.03 (.04)	.04 (.05)	.03 (.06)	.005 (.03)
Avoidance Motives	-.10† (.05)	-.07 (.06)	-.03 (.05)	-.001 (.05)	.02 (.07)	-.06 (.07)	-.03 (.04)
Reward Motives	.21** (.07)	.27*** (.07)	.28*** (.06)	.30*** (.05)	.12† (.07)	.21* (.08)	.24*** (.05)
Duty Motives	.11* (.05)	.12* (.05)	.11* (.04)	.09* (.04)	-.03 (.05)	-.01 (.06)	.11** (.03)
Altruistic Motives	.16** (.06)	.20*** (.05)	.19*** (.05)	.18*** (.04)	.22** (.06)	.20** (.07)	.11*** (.03)
Esteem Motives	-.05 (.05)	.04 (.05)	-.02 (.05)	-.01 (.04)	-.002 (.06)	.09 (.06)	-.05 (.03)
R ²	.17***	.19***	.21***	.25***	.13***	.10***	.23***
N	513	512	512	513	512	513	513

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