Motivations for Tipping:

How They Differ across More and Less Frequently Tipped Services

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Abstract

Analyses of survey data from U.S consumers found that the average frequency with which an occupation is tipped reliably affects motivations for tipping members of that occupation such that (i) people reporting stronger service/esteem motives for tipping are more likely to tip rarely or occasionally tipped occupations, but not frequently tipped occupations, (ii) people reporting stronger altruistic motives for tipping are more likely to tip all occupations, but especially those that others tip only occasionally, and (iii) people reporting a stronger duty motive for tipping are more likely to tip frequently tipped occupations, but not rarely or occasionally tipped occupations. It also found that people reporting stronger reciprocity motives for tipping are not more likely to tip any occupation, but surprisingly are even less likely than others to tip rarely tipped occupations. The theoretical and practical implications of these findings are discussed in 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 leave gifts of money (aka, tips) to the workers who served them. Among the workers receiving tips are airport porters, baristas, concierges, doormen, golf caddies, hotel maids, pizza delivery drivers, restaurant musicians, sports instructors, taxi drivers, valet parking attendants, and waiters (Star, 1988). These voluntary payments increase the costs of services by non-trivial amounts. For example, tips to restaurant waiters and waitresses in the U.S. often exceed 15 percent of the bill (Lynn, Jabbour & Kim, 2012) and collectively amount to an estimated $47 billion a year (Azar, 2011). As an expense that consumers can legally avoid, tipping has puzzled economists, who regard it as "irrational" or "mysterious" (Ben-Zion & Karni, 1977; Frank, 1987; Landsburg, 1993; Mankiw, 2007). Typically, consumers try to pay as little as possible for things in order to conserve money for other uses, but tipping is a notable exception to this general rule. Thus, as Azar (2008) writes, "one of the most interesting and central questions about tipping is why people tip."

In an effort to answer this question, scholars have identified and tested numerous potential reasons or motivations for tipping (see Azar, 2010; Becker, Bradley and Zantow, 2012; Lynn, 2009, 2015a, 2015b; Whalen, Douglas & O'Niel, 2014). Among the most commonly hypothesized tipping motives are desires to: (1) gain better service in the future, (2) reward good service, (3) make service workers better off, (4) gain social approval/esteem or avoid loss of the same, and (5) fulfill felt obligations – i.e., conform with internalized social norms (see Lynn, 2015a). However, researchers examining the

relationships of self-reported measures of these motives with the likelihood or frequency of tipping various service providers as well as the average size of tips given to those workers have produced decidedly mixed results (see Table 1). These findings suggest that the motives for tipping may vary across situations as well as individuals and some researchers have begun looking for situational moderators of the effects of individual differences in tipping motives. For example, Becker, et. al. (2012) found that stronger future-service and reward motives for tipping were associated with reliably larger tip sizes when the service was good but not when it was bad. In fact, stronger reward motives for tipping were associated with reliably smaller tip sizes when the service was bad. Similarly, Lynn (2015b) found reliable occupational differences in the motives underlying tipping such that stronger future-service motives were associated with a greater likelihood tipping bartenders but not other service providers and that stronger duty motives were associated with a greater likelihood of tipping bartenders, taxi drivers, parking valets and pizza delivery drivers but not hotel doormen or hotel maids. This paper expands these searches for moderators of tipping motivation effects by asking how the motives for tipping vary across more and less frequently tipped service occupations. More specifically, it asks and attempts to answer the question: "How do individual differences in the motives for tipping affect the likelihood of tipping differently for more and less frequently tipped service occupations?"

2. Theoretical Background and Literature Review

In an attempt to develop a theory of tipping norm development, Lynn (2015a) ventured a number of hypotheses about how the motives for tipping may vary with occupational differences in the frequency of being tipped. Noting that the more people tip

an occupation, the more likely workers in that occupation are to dislike poor tippers and to discriminate in service delivery to them, he hypothesized that tipping to avoid loss of future service and social-esteem should increase with the occupational frequency of being tipped. He also argued that feelings of social obligation or duty to tip arise from expectations created by widespread tipping behavior, so that these motives are more likely to drive tipping of workers in occupations that many other people tip.

While Lynn (2015a) hypothesized that several motives for tipping increase in strength with occupational differences in the frequency of being tipped, he argued that several other motives for tipping should be unaffected. Specifically, he argued that tipping can help servers, reward good service, gain servers' esteem and buy preferential service in the future even if no one else tips, so these motives should affect tipping independently of occupational differences in the likelihood of being tipped. However, Lynn overlooked several processes that could produce an effect of occupational likelihood of being tipped on these other motives too. First, seeing others tip the members of some occupation may signal that those service workers need help, deserve additional compensation, are happy to accept tips, etc. … , so occupational differences in tipping likelihood may increase all the commonly perceived motives for tipping via social signaling and modeling. Second, extrinsic motives have been shown to decrease intrinsic motivation (Frey and Jegen, 2001; James, 2005), so if Lynn is correct that avoidance motives for tipping increase with the occupational likelihood of receiving tips, then those extrinsic motives may drive out intrinsic motives to help servers and reward service. Finally, the sizes of tips necessary to gain and keep servers' esteem and buy preferential future service should increase with the number of others tipping, because esteem and

preferential service are positional goods and increased competition will bid up the costs of these positional goods. Such an increase in costliness may in turn reduce the strength of these positional motives for tipping -- resulting in a negative effect of occupational tipping likelihood on these motives. The opposing effects of these different processes make a-priori predictions difficult, so this paper takes an exploratory rather than a hypothesis testing approach to the study of these issues.

2. Method

2.1. Sample

Three-hundred, seventy-eight Amazon.com Mechanical Turk Workers completed an online survey about tipping and other forms of voluntary payment in exchange for a small monetary reward. However, twenty-two of these participants failed to: (i) respond as instructed on one item designed to see if people were reading questions carefully, and/or (ii) agree that they took the survey seriously, read questions carefully, answered questions honestly, and tried to be as accurate as possible. The responses of these people were deleted, leaving data from only three-hundred, fifty-six respondents for use in this study. Those participants whose responses were retained for analysis ranged in age from 19 to 71 with a mean of 35. Seventy-seven percent were white, 51 percent were male, and 50 percent had a four-year college degree or better. Twenty-nine percent earned less than $20,000 per year and 30 percent earned $50,000 or more per year. Thus, though not representative of the U.S. population, the sample was heterogeneous.

2.2. Propensity to Tip Various Service Occupations

As part of a larger survey, participants were asked to indicate on a 5-point scale (1 = never, 5 = all of the time) “how often you tip the following service providers when they

give you good service" – airport porters, appliance delivery and installation men, baristas at coffee shops, bartenders, car mechanics, casino dealers, counterworkers at places with tip jars, dental hygienists, golf caddies, hairstylists/barbers, hotel bellmen/porters, hotel doormen, hotel maids, hotel room service delivery persons, parking valets, pizza delivery drivers, restaurant waiters/waitresses, restaurant workers who hand you the food when pick up take-out orders, taxi drivers, tour guides, and veterinarians. The order of presentation of these occupations was randomized for each participant. For each occupation, participants also had a "Not Applicable (because I never use this service)" response option, which was coded as a missing value when used. Although the likelihood of tipping waiters and waitresses was measured, it was not included in the analyses, because tipping motives were measured for this service occupation so those motives might be more strongly related to tipping of this service occupation for that reason alone. Omitting waiters/waitresses from the analyses kept this methodological artifact from confounding the results.

Those occupations whose mean likelihood of being tipped was below 2.5 were classified as rarely tipped occupations, those whose mean likelihood of tipping was between 2.5 and 3.5 were classified as occasionally tipped occupations, and those whose mean likelihood of tipping exceeded 3.5 were classified as frequently tipped occupations. These semi-round cutoff-points occurred at relatively wide gaps or breaks in the average occupational likelihood of tipping and produced roughly equal numbers of occupations classified as rarely, occasionally, and frequently tipped (see Table 5).[1] Within each

[1] Analyses were also done with alternative indices of tipping likelihood for very rarely, rarely, occasionally, frequently and very frequently tipped occupations – with 3, 5, 5, 4 and 3 occupations in each index respectively (see Table 5 to figure out which occupations were in each index). The results of these analyses were broadly consistent with those reported in the main text. Esteem motives predicted tipping likelihood

classification, ratings of the likelihood of tipping were averaged across occupation to form indices of the respondents' likelihood of tipping rarely tipped, occasionally tipped and frequently tipped service workers. When constructing the indices, missing values on one or more component scores were replaced with the mean of those that were available as advocated by Roth, Switzer and Switzer (1999).

2.3. Motives for Tipping

After indicating how often they tipped each of the service providers listed above, participants were given a list of "potential motives/reasons for tipping waiters and waitresses in restaurants" and were asked to indicate on a 6-point scale (1 = no effect at all, 6 = very strong effect) "how strong an effect each motive/reason has on YOUR restaurant tipping decisions." The listed motives/reasons, whose order was randomized for each participant, were:

- to make up for the server's low wages,
- to gain the liking of the server,
- to reward good service,
- to avoid upsetting the server,
- to help the server earn a living,
- to comply with tipping norms,

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for very rarely (B = .24, S.E. = >05, p < .001), rarely B = .22, S.E. = .09, p < .02), and occasionally (B = .21, S.E. = .07, p < .003) tipped occupations, but not for frequently (B = .16, S.E. = .10, p = .11) or very frequently (B = -.07, S.E. = .05, p = .15) tipped occupations. Altruism motives predicted tipping likelihood for rarely (B = .19, S.E. = .08, p < .02), occasionally (B = .27, S.E. .06, p < .001), and very frequently (B = .19, S.E. = .05, p < 001) tipped occupations, but not for very rarely (B = -.004, S.E. = .04, p = .91) or frequently (B = .12, S.E. = .07, p = .11) tipped occupations. Duty motives predicted the likelihood of tipping for very frequently tipped occupations (B = .17, S.E. = .06, p < .003), but not for very rarely (B = -.05, S.E. = .04, p = .19), rarely (B = -.004, S.E. = .07, p = .96), occasionally (B = -.004, S.E. = .06, p = .95), or frequently (B = .08, S.E. = .08, p = .33) tipped occupations. Finally, reciprocity motives predicted the likelihood of tipping rarely tipped occupations (B = -.21, S.E. = .06, p < .002), but not for very rarely (B = -.05, S.E. = .04, p = .24), occasionally (B = -.03, S.E. = .05, p = .50), frequently (B = .03, S.E. = .07, p = .67), or very frequently (B = .07, S.E. = .05, p = .10) tipped occupations.

- to get the server's respect,
- to have the server remember me,
- to repay the server for his/her efforts,
- to make a good impression on others,
- to avoid having the server think badly of me,
- to make the server happy,
- to get better service next time, and
- to fulfill a social obligation.

Participants were asked about their motives for tipping waiters and waitresses rather than about more generic tipping motives in the hope that the concrete and frequently encountered restaurant context would serve as a retrieval cue that facilitated more accurate recall of motivation. Since the context was the same across participants, differences in these ratings should reflect individual differences in the strength of the motives and those individual differences should affect tipping in other contexts as well.

Principle components analysis of these data produced four factors with eigen values greater than one that were then rotated with Promax rotation (see Table 2). Factor one loaded highly on gain liking of the server, get better service next time, make good impression on others, get the server's respect, and have the server remember me, so it was labeled "service/esteem motives." Factor two loaded highly on repay server effort, help the server, make the server happy, and make up for low wages, so it was labeled "altruistic motives." Factor three loaded highly on fulfill a social obligation and comply with tipping norms, so it was labeled "duty motives." Factor four loaded highly on reward good service and repay server effort, so it was labeled "reciprocity motives."

Indices for each of these factors were generated by averaging the standardized scores for those motives loading .60 or more on that factor and no other (see Table 2). As before, when constructing the indices, missing values on one or more component scores were replaced with the mean of those that were available as advocated by Roth, Switzer and Switzer (1999).

2.4. Demographics

Participants were asked about their birth year (used to calculate age), sex (male = 1, female =2), race (recoded to white =1, non-white = 0), education (less than high school = 1, high school/GED = 2, some college = 3, 4-year college degree = 4, graduate/professional degree = 5), income (below $20,000 = 1, $20,000-$29,000 = 2, $30,000 - $39,000 =3, ..., $100,000 or more = 10), and history of working for tips (yes =1, no =2).

3. Results

Descriptive statistics for the variables in this study are presented in Table 3. Regression analyses predicting the frequency of tipping from individual differences in subjects' motivations for tipping and demographic characteristics as well as from occupation and the interaction of motivations for tipping with occupational level of tipping-frequency and the squared value of occupational level of tipping frequency are presented in Table 4. This analysis used error terms clustered within subjects. The key findings from this analysis are that service/esteem motives have reliably weaker effects on tipping likelihood for frequently tipped occupations than for infrequently tipped occupations while altruism, duty and reciprocity motives all have reliably stronger effects on tipping likelihood for frequently tipped occupations than for infrequently

tipped occupations. Furthermore, the negative effect of service/esteem motives was marginally increasing while the positive effect of altruistic motives was marginally decreasing. These reliable interactions of motivations for tipping with occupational-level of tipping-frequency were further explored in (i) individual-level regression analyses predicting the indices of tipping likelihood for rarely, occasionally and frequently tipped occupations using robust standard errors, (ii) individual-level regression analyses predicting tipping likelihood for each occupation separately using robust standard errors, and (iii) regression analyses using occupation as the unit of analysis. The results of those analyses are summarized in Tables 5 thru 8, depicted in Figures 1 thru 4, and discussed below.

3.1. Service/Esteem Motives

Separate individual-level analyses for each index and occupation indicate that the effect of service/esteem motives for tipping was similar and often reliable across occupations with a low to moderate frequency of being tipped, but was lower and generally unreliable for occupations with high frequencies of being tipped (see Table 5). Occupation-level analyses of the service/esteem motive coefficients support the previously reported interactions indicating that the strength of service/esteem motives for tipping decrease at a marginally increasing rate with greater occupational frequency or likelihood of being tipped (see Table 6 and Figure 1). This pattern of results could have been produced because very large numbers of frequent tippers produced normative pressures to tip that crowded out service/esteem motives for tipping at the individual-level. However, all of the tipping motives were positively correlated with one another at the individual-level (see Table 7), so motivational crowding-out does not appear to have

occurred. Another possibility is that the increasing competition for preferential service and esteem represented by increasing numbers of tippers raises the costs of these positional goods at a marginally increasing rate and those increasing costs decrease efforts to secure these goods thru tipping (in other words, decrease service/esteem motives for tipping).

3.2. Altruistic Motives

Separate individual-level analyses for each index and occupation indicate that stronger altruistic motives increased the likelihood of tipping for all occupations, though a number of the positive coefficients were not reliable (see Table 5). Occupation-level analyses of the altruistic motive coefficients support the previously reported interaction indicating that the strength of altruistic motives for tipping increase at a marginally decreasing rate with greater occupational frequency or likelihood of being tipped (see Table 6 and Figure 2). Altruistic motives increased the likelihood of tipping more for occasionally tipped occupations than for rarely or frequently tipped occupations. One potential explanation for this pattern of results is that social signaling and learning processes produce stronger altruistic motives for tipping as the behavior becomes less rare while growth in service worker income weakens altruistic motives for tipping as the behavior becomes more ubiquitous.

3.3. Duty Motives

Separate individual-level analyses for each index and occupation indicate that stronger duty motives increase the likelihood of tipping only for the most frequently tipped occupations (see Table 5). Occupation-level analyses of the duty motive coefficients support the previously reported interaction indicating that the strength of

duty motives for tipping increase with greater occupational frequency or likelihood of being tipped (see Table 6 and Figure 3). These findings suggest that a sense of obligation or duty to tip arises only when large numbers of people tip frequently, which makes sense because a sense of obligation or duty typically stems from the internalization of social norms but goes beyond tautology because people can internalize social norms that only a few others adhere to or that most people adhere to only infrequently.

3.4. Reciprocity Motives

Separate individual-level analyses for each index and occupation indicate that stronger reciprocity motives do not reliably increase the likelihood of tipping (except for bartenders), but do decrease the likelihood of tipping some infrequently tipped occupations (see Table 5). Occupation-level analyses of the reciprocity motive coefficients support the previously reported interaction indicating that the positive effects of duty motives on tipping reliably increase with greater occupational frequency or likelihood of being tipped (see Table 6 and Figure 4). This linear occupation-level relationship suggests that reciprocity motives are influenced by social modeling, but any interpretation of this relationship is questionable given the fact that few of the regression coefficients used as dependent measures of reciprocity motives were reliably different from zero. The many unexpected null-effects of reciprocity motives at the individual level of analysis are puzzling, but may reflect a lack of generalizability for this particular measure as discussed in section 4.3.

4. Discussion

This study found that the average frequency with which an occupation is tipped reliably affects consumers' motivations for tipping members of that occupation such that (i) people reporting stronger service/esteem motives for tipping are more likely to tip rarely or occasionally tipped occupations, but not frequently tipped occupations, (ii) people reporting stronger altruistic motives for tipping are more likely to tip all occupations, but especially those that others tip only occasionally, (iii) people reporting a stronger duty motive for tipping are more likely to tip frequently tipped occupations, but not rarely or occasionally tipped occupations. It also found that people reporting stronger reciprocity motives for tipping are not more likely to tip any occupation other than bartenders, but surprisingly are even less likely than others to tip rarely tipped occupations. The theoretical and practical implications of these findings are discussed in the paragraphs below along with directions for future research.

4.1. Level and Direction of Causality

The data in this study is correlational, so does not support strong causal inferences. Nevertheless, the value of the findings lies in their consistency with (and, therefore, suggestion and support of) possible causal relationships. The current findings are consistent with the possibility that the frequency with which others tip an occupation causally affects the motives that drive tipping of that occupation. In particular, more frequent tipping of an occupation by others may (i) decrease service/esteem motives for tipping at a marginally increasing rate, (ii) non-linearly increase and then decrease altruistic motives for tipping, and (iii) linearly increase duty motives via processes

described in Section 3. However, two sets of alternative causal processes deserve discussion.

First, the occupation-level effects in this study could be aggregations of different individual-level, motivation-effects on different levels of tipping likelihood. For example, stronger service/esteem motives could increase individuals' tendencies to occasionally tip and decrease their tendencies to rarely or always do so. Such an individual-level, service/esteem-motive effect would produce positive service/esteem coefficients for rarely tipped occupations, near-zero coefficients for occasionally tipped occupations, and negative coefficients for frequently tipped occupations – thus creating a negative occupation-level relationship between strength of service/esteem motives and tipping likelihood. To test for such different individual-level motivation effects on different levels of tipping likelihood, the index of likelihood of tipping occasionally tipped occupations was used as a dependent variable in a simultaneous quantile regression (with 20^{th}, 50^{th} and 80^{th} quantiles and 1000 bootstrap replications) with the tipping motives and demographic variables as predictors. The results are summarized in Table 8. Service/esteem motives and altruistic motives reliably increased the 20^{th}, 50^{th} and 80^{th} quantiles of tipping likelihood for occasionally tipped occupations while duty motives and reciprocity motives had no reliable effects on any quantile of tipping likelihood for occasionally tipped occupations. Post-hoc comparisons indicated that none of the motivations' coefficients varied reliably or sizably across quantiles (all F's $(2, 330) < 1.50$, n.s.). These findings are inconsistent with the idea that different individual-level, motivation-effects on different levels of tipping likelihood underlie the occupation-level effects in this study.

Second, occupation-level differences in motivations for tipping could cause the occupation-level differences in likelihood of being tipped rather than the reverse. In fact, Lynn (2015a) theorized that occupational differences in the likelihood of being tipped were caused by occupational differences in the strength of tipping motives, which in turn were caused by other occupational characteristics (such as level of service customization or worker income). Consistent with this theory, Lynn (2016) found that occupational characteristics likely to enhance tipping motivations did enhance the occupational likelihood of being tipped. However, this counter-explanation/theory would predict only positive occupation-level motivation effects on tipping likelihood. It cannot explain the negative occupation-level relationship between service/esteem motives and tipping likelihood or the non-linear (inverted-U) occupation-level relationship between altruism motives and tipping likelihood. Nor can it explain the finding that duty motives reliably predict tipping only for frequently tipped occupations. Thus, the most parsimonious explanation for the current findings is that occupational differences in the frequency of being tipped affect the motives underlying tipping (i.e., moderate motivational effects on tipping likelihood).

4.2. Implications about the Evolution of Tipping Behavior and Norms

Tipping norms are not imposed by some authority. Nor do they emerge full-grown. Rather, tipping a particular occupation starts out as a rare activity of a few people and sometimes grows to become a more frequent activity of many people. The current study's findings that the motives for tipping vary with occupational frequency or likelihood of being tipped suggest that these motives are likely to change as tipping for a particular occupation evolves from infrequent to normative. Some of the motivational

changes over time suggested by the findings are consistent with a theory of tipping evolution proposed by Lynn (2015a) but others are inconsistent with it. Specifically, they support Lynn's hypotheses that pre-normative tipping is driven by desires to help service workers and to buy status and preferential future service and that feelings of obligation or duty to tip arise only after tipping has become very common. However, they disconfirm his hypotheses that service/esteem motives for tipping remain stable (for acquisitive variants of these motives) or grow (for loss-avoidant variants of these motives) as tipping becomes more common over time and that altruistic and reciprocity motives for tipping remain constant as tipping grows from less to more common.

More importantly, the current findings suggest that several new processes not identified by Lynn (2015a) are important in the evolution of tipping behavior and norms. Specifically, the non-linear effects of occupation-level tipping likelihood on altruistic motives suggest that social signaling and learning processes produce stronger altruistic motives for tipping as the behavior becomes less rare and that growth in service worker income weakens altruistic motives for tipping as the behavior becomes more ubiquitous. In addition, the marginally increasing decline in service/esteem motives for tipping as tipping becomes more common suggests that rising costs reduce and eventually eliminate service/esteem motives for tipping as the size of tips necessary to positively differentiate the self grows with the frequency of tipping. Finally, the negative effects of reciprocity motives for tipping on the likelihood of tipping rarely tipped occupations suggests that this motivation can impede tipping of those occupations (perhaps because the rarity of tipping signals that service workers are already fairly compensated for their labor).

4.3. Validity of Self-Reported Individual Differences in Tipping Motives

The complex and theoretically intelligible relationships observed in this study not only advance our understanding of the motivational processes underlying tipping, but also provide evidence for the validity of individual differences measures of those motives. Psychologists have found that often people do not know why they do the things they do, so self-reported motivations may not be valid (Wilson, 2002). The positive correlations previous researchers found between self-reported motives and tipping are not dispositive because more frequent and bigger tippers may simply infer and report more widespread motivations for their tipping behavior than do others. The current findings of theoretically intelligible moderators of the relationships between self-reported service/esteem, altruism and duty motivations and tipping behavior are not so easily explained as self-perception artifacts, so they provide stronger evidence for the validities of those self-reported motivations for tipping.

On the other hand, the failure to find many positive effects of self-reported reciprocity motives for tipping raises questions about the validity and/or generalizability of that measure of tipping motives. Previous studies have found positive relationships with tipping of self-reported reciprocity motives (Azar, 2010; Becker, et. al., 2012; Lynn, 2015b), so the problem may be specific to the current measure. Perhaps individual differences in reciprocity motives for tipping are less consistent across service contexts than are individual differences in other motives for tipping. If so, the current measure of reciprocity motives for tipping waiters and waitresses may capture individual differences in that motive that operate only in restaurant contexts. This possibility would explain why the measure produced reliable relationships with tipping likelihood for two

restaurant occupations (bartenders and take-out workers) but not for other occupations. The measure may be positively related to tipping of bartenders because bartending involves taking, filling and delivering orders for on-premise consumption that is similar to the services provided by waiters and waitresses in a context that highlights this similarity. The measure may be negatively related to tipping for restaurant takeout because takeout involves less extensive and personalized service than that provided by waiters and waitresses in a common context that highlights this difference in service levels.

4.4. Strategies for Increasing Tips

Differences in the motives for tipping across more and less frequently tipped services mean that the best strategies for increasing tips also differ across those services. Thus, the results of this study could also help service industry workers and their managers to more effectively and efficiently increase the tips from their customers (Lynn, 1996, 2005). Specifically, the results of this study suggest that workers in rarely and occasionally tipped occupations might benefit from customer-directed messages indicating that good tippers get better service and more service-worker esteem than do poor tippers and that tips are a valued supplement to the service-workers' low wages, but are unlikely to benefit from messages indicating that tips are expected. In contrast, workers in commonly tipped occupations might benefit from customer directed messages indicating that tips are a valued supplement to the service-workers' low wages and are expected, but are unlikely to benefit from messages indicating that good tippers get better service and more service-worker esteem than do poor tippers.

4.5. Study Limitations and Directions for Future Research

The current findings that the strength of tipping motives varies with occupational differences in the likelihood or frequency of being tipped together with the limitations of the research methodology employed raise numerous questions for future research. First, as previously discussed, the most parsimonious explanation for the current findings is that occupational differences in the frequency of being tipped affect the motives underlying tipping (i.e., moderate motivational effects on tipping likelihood). However, the current data is only correlational, so do not permit strong causal inferences. Thus, future researchers should try to obtain stronger evidence regarding the direction of causality – perhaps by manipulating the perceived frequency that some ambiguous or obscure service occupation is tipped and asking respondents how likely they would be to tip a worker in that occupation as well as their motivations for tipping.

Second, the explanations for the moderation effects observed in this study were largely post-hoc conjectures. Only the moderation of duty-motivation effects was predicted a-priori (by Lynn, 2015a). Future researchers should find ways to test these and perhaps other explanations for why frequent tipping of an occupation by others (i) decreases service/esteem motives for tipping at a marginally increasing rate, (ii) non-linearly increases and then decreases altruistic motives for tipping, and (iii) linearly increases duty motives.

Third, the use of cross-sectional data to gain insight into the development and evolution of tipping norms and behavior is less than ideal. Cross-sectional data does contain some information about those processes and is certainly better than no data at all. The idea here is analogous to looking at cross-sectional age differences in behavioral and

cognitive development to get some idea of how that development occurs over time. Nevertheless, longitudinal data would provide stronger evidence of developmental and evolutionary processes. Hopefully, the ideas about the evolution of tipping norms and behavior suggested by the current data will prompt additional historical research to test the ideas and to establish them on firmer empirical ground.

Finally, the implications of the current findings regarding ways to best increase servers' tip incomes go well beyond the data. The current data do tell us when different motives for tipping are most and least powerful and it is logical to assume that messages appealing to different motives will be more effective the stronger those motives are. However, the current data do not speak to the effectiveness of any messages designed to increase tips. Thus, testing the effects of messages appealing to different tipping motives as well as the differences across occupations in those effects is another potentially worthwhile direction for future research.

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Table 1. Summary of self-reported tipping motivation effects on tip size and tip frequency/likelihood in the existing literature.

	Self-Reported Motivation for Tipping				
	Future Service	Status/ Esteem	Altruism /Helping	Duty/Guilt /Pride	Gratitude/ Reward
Lynn (2008)					
- Tip Size[a]	*n.s.*	*n.s.*	+	+	*n.s.*
Lynn (2009)					
- Tip Frequency[b]	+	*n.s.*	+	*n.s.*	*n.s.*
- Tip Size[a]	*n.s.*	+	+	*n.s.*	*n.s.*
Azar (2010)					
- Tip Size in U.S.[a]	n.s.	n.s.	n.s.	+	+
- Tip Size in Israel[a]	n.s.	n.s.	+	n.s.	+
Becker, et. al. (2012)					
- Tip Size for Good Service[a]	+	n.s.	n.s.	-	+
- Tip Size for Bad Service[a]	n.s.	n.s.	n.s.	n.s.	-
Lynn (2015b)					
- Tip Likelihood[b]	*n.s.*	*n.s.*	+	+	+
- Tip Size[c]	*n.s.*	*n.s.*	+	-	+

[a] Tip size given to restaurant servers, [b] Index of past frequency or hypothetical likelihood of tipping service workers in various occasionally and frequently tipped occupations [c] Index of size of hypothetical tips to service workers in various occasionally and frequently tipped occupations

Table 2. Means, and pattern loadings from a principle components analysis with Promax rotation, of rated strength of various motives' effect on participants' decisions about tipping restaurant waiters and waitresses.

		Component			
	Mean Rating	1 Service/ Esteem Motives	2 Altruistic Motives	3 Duty Motives	4 Reciprocity Motives
Get Server to Remember Me	2.9	.969	-.088	-.219	.178
Get Better Service Next Time	3.2	.877	-.148	-.127	.290
Gain Server's Liking	2.8	.827	.062	-.042	-.003
Get Server's Respect	2.8	.733	.184	-.056	-.100
Make Good Impression	2.8	.609	-.153	.353	-.101
Make Up for Low Server Wages	4.4	-.078	.956	-.042	-.106
Help Server	4.7	-.070	.945	-.036	.026
Comply with Tipping Norms	4.4	-.184	-.018	.945	.298
Fulfill Obligation	4.0	.010	-.018	.859	.063
Reward Service	5.2	.073	-.020	.222	.895
Repay Server's Effort	4.9	.057	.500	.060	.507
Make Server Happy	4.1	.303	.538	.050	.157
Avoid Upsetting Server	3.0	.485	.152	.249	-.246
Avoid Making a Bad Impression	3.0	.547	.016	.316	-.252
Coefficient Alpha of Index Formed by Items in Grey		.85	.87	.69	NA

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

	N	Minimum	Maximum	Mean	Std. Deviation
Motivational Predictors					
- Service/Esteem Motives	356	-1.21	1.99	.00	.79
- Altruistic Motives	356	-2.44	1.03	.00	.94
- Duty Motives	356	-2.38	1.31	.00	.87
- Reciprocity Motives	355	-4.59	.85	.00	1.00
Likelihood of Tipping					
- Veterinarian	256	1	4	1.17	.587
- Dental Hygienist	321	1	5	1.18	.644
- Car Mechanic	296	1	5	1.50	.985
- Restaurant Takeout	347	1	5	2.26	1.407
- Appliance Delivery/Installation	276	1	5	2.30	1.425
- Tour Guide	210	1	5	2.49	1.448
- Hotel Doormen	223	1	5	2.63	1.365
- Casino Dealer	162	1	5	2.75	1.508
- Airport Porter	185	1	5	2.96	1.587
- Counter Help with Tip Jar	348	1	5	2.98	1.097
- Hotel Maids	302	1	5	2.98	1.374
- Golf Caddie	81	1	5	3.00	1.581
- Barista	310	1	5	3.07	1.305
- Hotel Bellmen	228	1	5	3.52	1.349
- Hotel Room Service	246	1	5	3.81	1.311
- Parking Valet	226	1	5	3.99	1.277
- Taxicab Driver	267	1	5	4.00	1.305
- Bartender	291	1	5	4.31	1.142
- Hairstylist/Barber	332	1	5	4.39	1.122
- Pizza Delivery	337	1	5	4.72	.670
- Restaurant Waiter/Waitress	347	2	5	4.83	.546
Demographic Controls					
- Sex	353	1	2	1.49	.501
- Age	354	19.00	71.00	34.61	11.93
- Education	354	1	5	3.52	.84
- Income	355	1	10	3.46	2.43
- White	356	.00	1.00	.77	.42
- Worked for Tips	353	1	2	1.61	.49

Table 4. Coefficients (and robust standard errors clustered within subject) from regression analyses predicting frequency of tipping (n = 5,074).

	Model 1	Model 2	Model 3
(Constant)	.48*	.49*	.49*
	(.24)	(.24)	(.24)
Service/Esteem Motives (SEM)	.14**	.44***	.15***
	(.05)	(.08)	(.17)
Altruistic Motives (AM)	.17***	.01	-.45
	(.04)	(.06)	(.12)
Duty Motives (DM)	.04	-.18**	-.02
	(.04)	(.06)	(.14)
Reciprocity Motives (RM)	-.02	-.23**	-.15
	(.04)	(.08)	(.13)
SEM*ALTO		-.10***	.13
		(.02)	(.14)
AM*ALTO		.05**	.42
		(.02)	(.11)
DM*ALTO		.07**	-.06
		(.02)	(.12)
RM*ALTO		.07**	.01
		(.02)	(.11)
SEM*ALTO^2			-.04§
			(.02)
AM*ALTO^2			-.06**
			(.02)
DM*ALTO^2			.02
			(.02)
RM*ALTO^2			.01
			(.02)
Sex	.02	.02	.02
	(.07)	(.07)	(.03)
Age	.01**	.01**	.01**
	(.003)	(.003)	(.003)
Education	.08*	.08*	.08*
	(.04)	(.04)	(.04)
Income	.003	.003	.003
	(.01)	(.01)	(.01)
White	-.02	-.02	-.02
	(.09)	(.09)	(.09)
Worked for Tips	.01	.01	.01
	(.07)	(.07)	(.07)
Occupation Dummy	included	included	included
R^2	.46***	.47***	.47***

§ p < .10, * p < .05, ** p < .01, *** p < .001 ; ALTO = average likelihood of tipping the occupation across all subjects

Table 5. Coefficients from separate regression analyses predicting the likelihood of tipping for each occupation and for groups of occupations, after controlling for demographic variables.

		Regression Coefficients for			
	Average Likelihood of Tipping	Service/ Esteem Motives	Altruistic Motives	Duty Motives	Reciprocity Motives
Rarely Tipped Occupations[a]	1.82	.25***	.10*	-.00	-.18**
-Veterinarian	1.17	.16**	.03	-.10**	-.06
-Dental Hygienist	1.18	.18***	.01	-.05§	-.10*
-Car Mechanic	1.50	.37***	.00	-.04	-.02
-Restaurant Takeout	2.26	.30*	.15§	.04	-.21**
-Appliance Delivery/Installation	2.30	.21	.33**	-.10	-.08
-Tour Guide	2.49	.06	.18	.10	-.17
Occasionally Tipped Occupations[b]	2.97	.24***	.24***	-.03	-.05
-Hotel Doormen	2.63	.28*	.11	-.12	-.04
-Casino Dealer	2.75	.36§	.19	.07	-.06
-Airport Porter	2.96	.24	.24*	-.06	-.19
-Counter Help with Tip Jar	2.98	.18*	.29***	.02	.01
-Hotel Maids	2.98	.24*	.31**	-.03	-.12
-Golf Caddie	3.00	.14	.12	.15	-.17
-Barista	3.07	.27**	.19*	-.02	.05
Frequently Tipped Occupations[c]	4.20	.03	.16**	.15*	.05
-Hotel Bellmen	3.52	.08	.16	.12	.07
-Hotel Room Service	3.81	.00	.23*	.17	.15
-Parking Valet	3.99	-.16	.16	.08	.06
-Taxicab Driver	4.00	.25*	.12	.10	-.09
-Bartender	4.31	-.04	.27**	.09	.16*
-Hairstylist/Barber	4.39	-.09	.16*	.26**	.05
-Pizza Delivery	4.72	-.08§	.13**	.15**	.06

§ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$, p-values based on robust standard errors.

[a] Index averaging likelihood of tipping veterinarians, dental hygienists, car mechanics, restaurant takeout workers, appliance delivery people, and tour guides.

[b] Index averaging likelihood of tipping doormen, casino dealers, porters, counter help, maids, caddies and baristas.

[c] Index averaging likelihood of tipping bellmen, room service workers, parking valets, cab drivers, bartenders, hairstylists, and pizza delivery workers.

Table 6. Coefficients (and standard errors) from occupation-level regression analyses predicting the strength of various tipping motives (n = 20 occupations).

	Strength of							
	Service/Esteem Motives (B_{SEM})		Altruism Motives (B_{AM})		Duty Motives (B_{DM})		Reciprocity Motives (B_{RM})	
Constant	.44***	.04	.06	-.28*	-.18**	-.10	-.21**	.01
	(.09)	(.17)	(.06)	(.12)	(.05)	(.12)	(.07)	(.15)
Average Likelihood of Tipping Occupation (ALTO)	-.10**	.22§	.04§	.30**	.07***	.01	.06*	-.12
	(.03)	(.13)	(.02)	(.08)	(.02)	(.09)	(.02)	(.11)
$ALTO^2$		-.05*		-.05**		.01		.03
		(.02)		(.01)		(.02)		(.02)
R^2	.42**	.58**	.16§	.48**	.52***	.54**	.30*	.40*

§ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7. Individual-level (below diagonal) and occupation-level (above diagonal) correlations among motives for tipping.

	Service/Esteem Motives	Altruism Motives	Duty Motives	Reciprocity Motives
Service/Esteem Motives	1	-.12	-.63**	-.56**
Altruism Motives	.29***	1	.06	.11
Duty Motives	.33***	.30***	1	.36
Reciprocity Motives	.06§	.23***	.15***	1

§ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 8. Coefficients (and standard errors from 1000 bootstrap replications) from quantile regression analyses predicting index of tipping likelihood for occasionally tipped occupations (n = 341).

	20th Quantile	50th Quantile	80th Quantile
(Constant)	1.35*	2.31***	3.11***
	(.66)	(.40)	(.54)
Service/Esteem Motives	.36**	.24**	.28**
	(.13)	(.09)	(.09)
Altruistic Motives	.22**	.33***	.23*
	(.08)	(.08)	(.11)
Duty Motives	-.17§	-.02	.04
	(.09)	(.09)	(.12)
Reciprocity Motives	.01	-.06	-.08
	(.09)	(.08)	(.07)
Sex	-.05	-.02	.02
	(.15)	(.14)	(.18)
Age	.02*	.02***	.03***
	(.01)	(.01)	(.01)
Education	.04	-.01	-.001
	(.09)	(.10)	(.09)
Income	-.01	-.003	-.06*
	(.04)	(.03)	(.02)
White	-.16	-.08	-.36§
	(.20)	(.19)	(.19)
Worked for Tips	.16	-.04	-.05
	(.18)	(.14)	(.16)
Pseudo R^2	.11	.11	.13

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

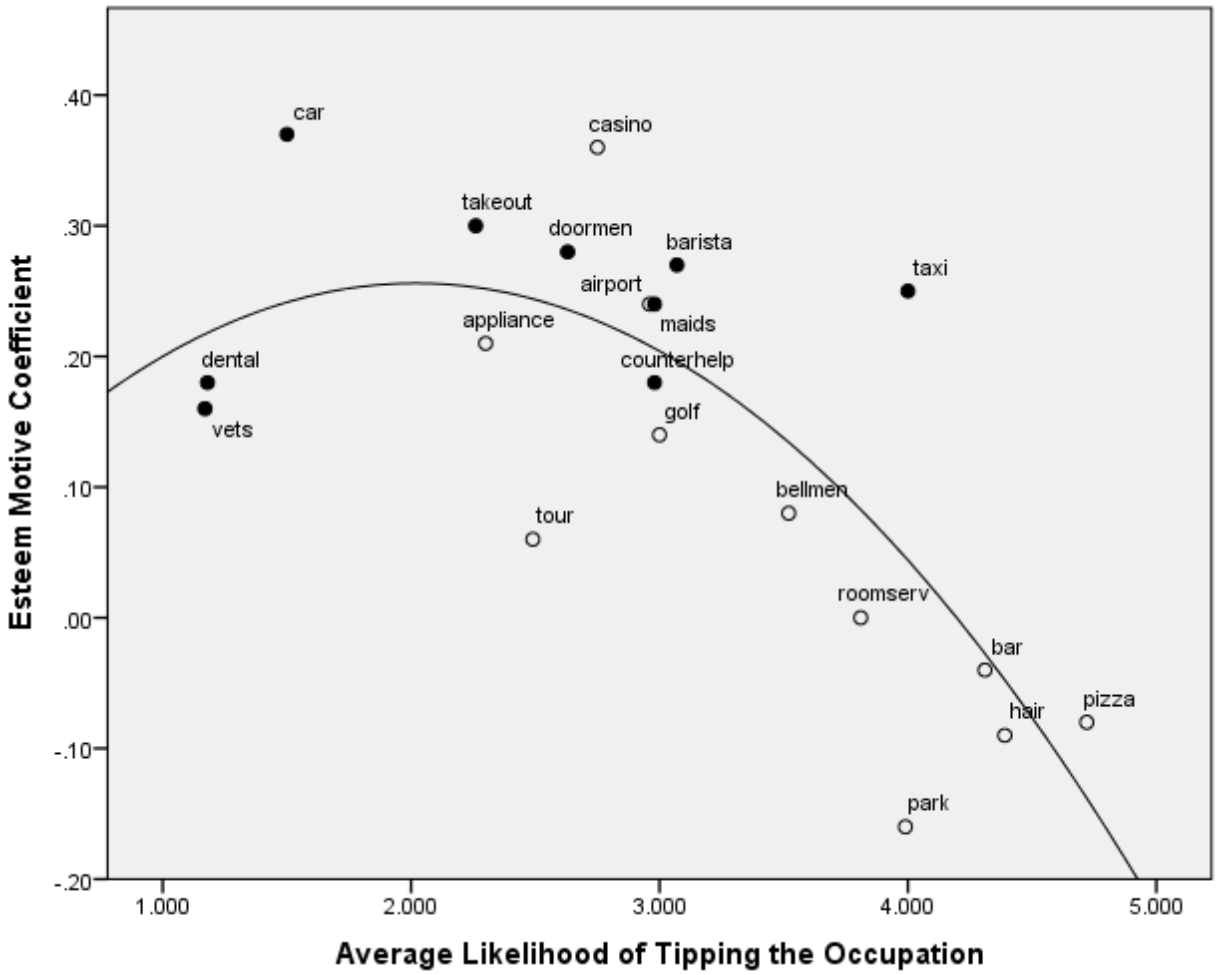

Figure 1. Occupational differences in the strength of service/esteem motives for tipping as a function of average likelihood of tipping the occupation. [Note: Solid dots mark esteem motive coefficients that are reliably different from zero.]

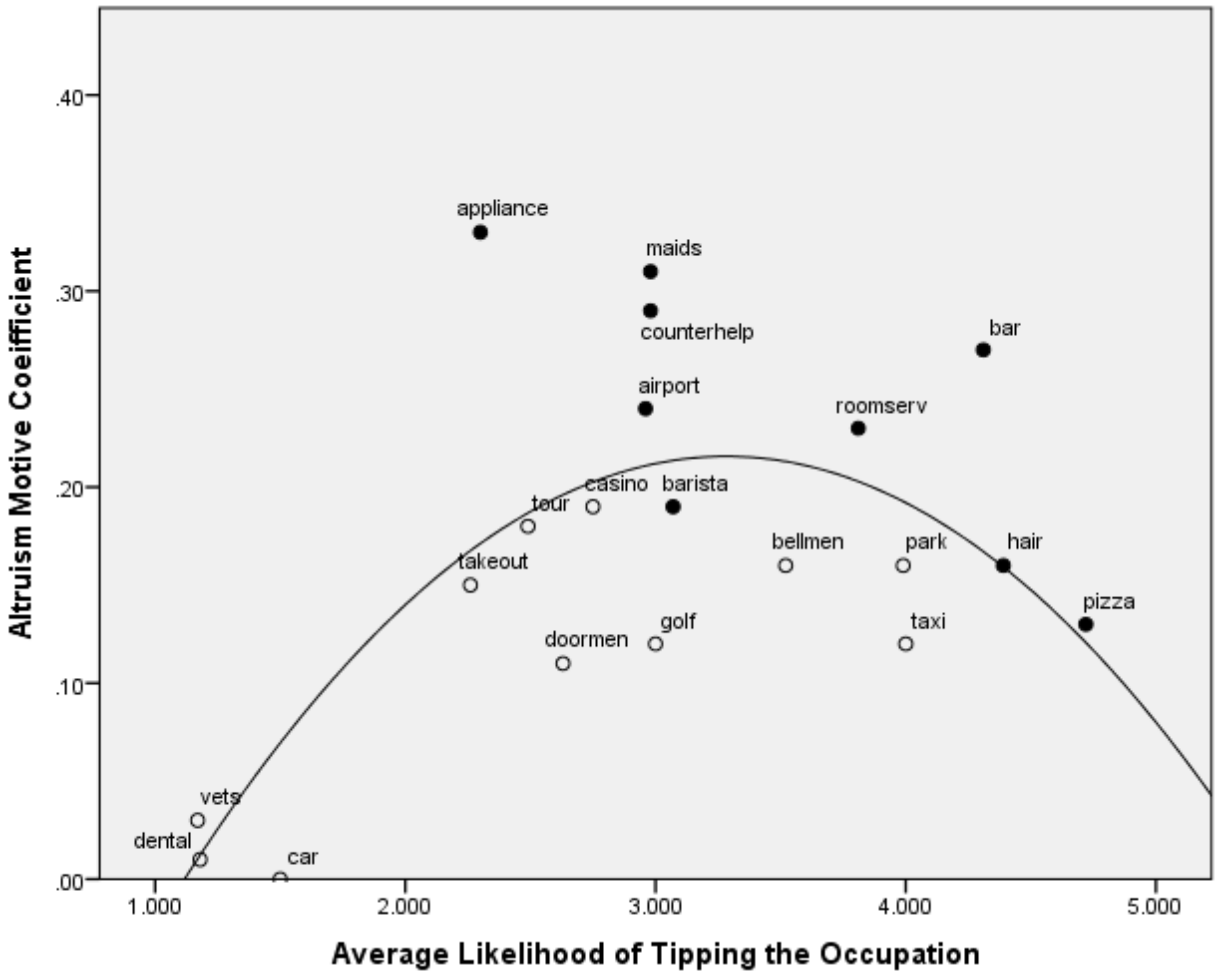

Figure 2. Occupational differences in the strength of altruistic motives for tipping as a function of average likelihood of tipping the occupation. [Note: Solid dots mark altruism motive coefficients that are reliably different from zero.]

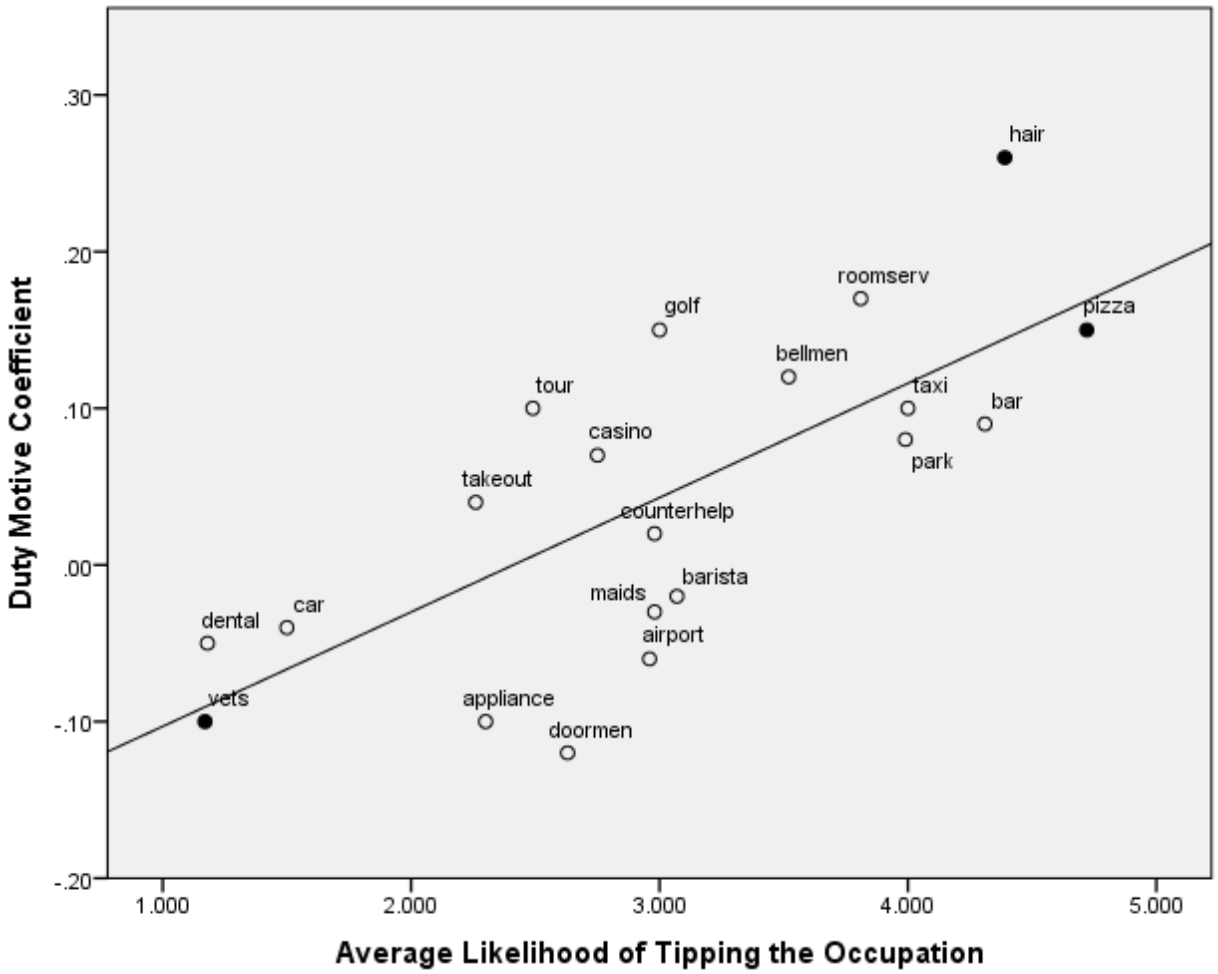

Figure 3. Occupational differences in the strength of duty motives for tipping as a function of average likelihood of tipping the occupation. [Note: Solid dots mark duty motive coefficients that are reliably different from zero.]

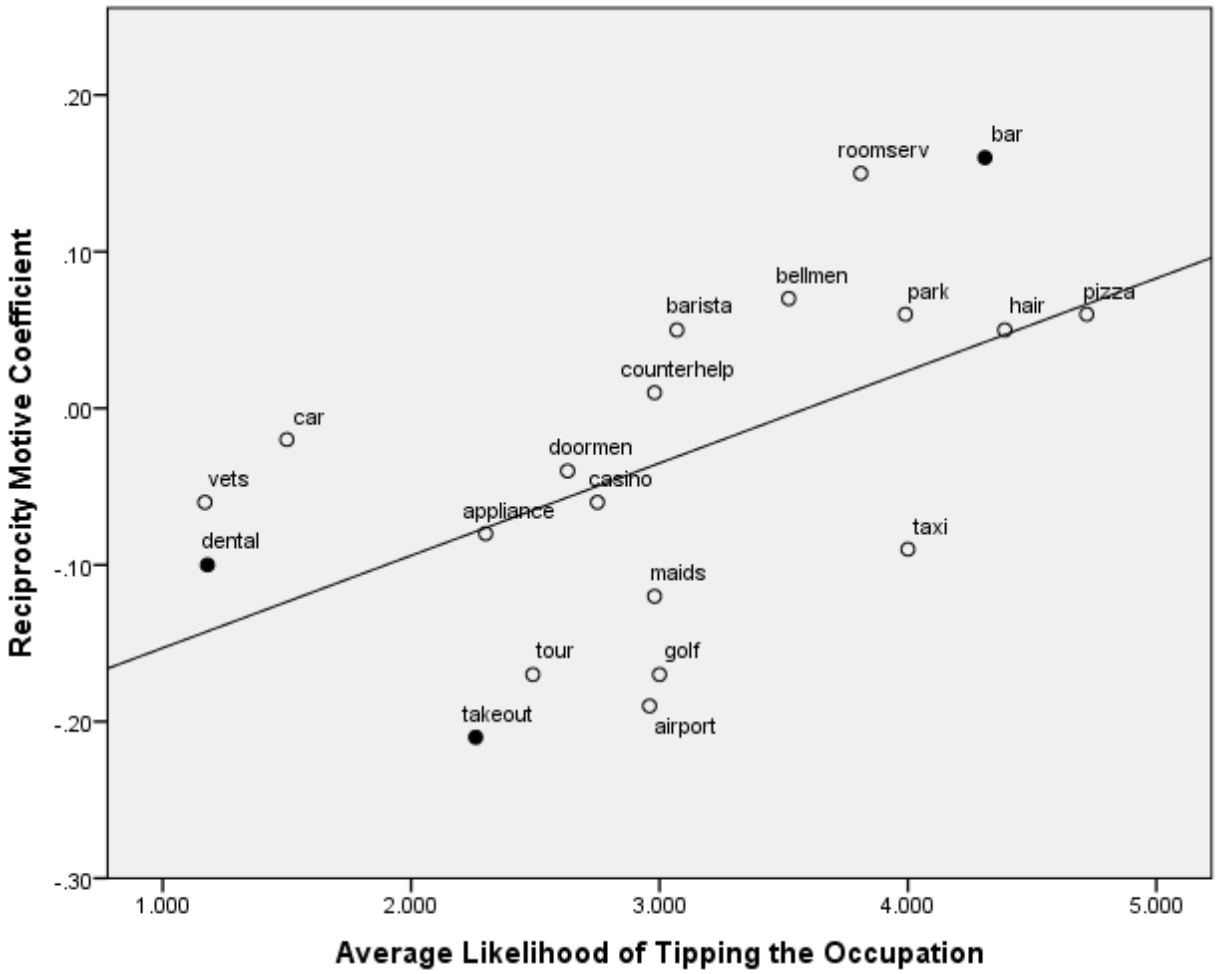

Figure 4. Occupational differences in the strength of reciprocity motives for tipping as a function of average likelihood of tipping the occupation. [Note: Solid dots mark reciprocity motive coefficients that are reliably different from zero.]