

Shattering the Illusion of the Self-Earned Tip:  
The Effect of a Restaurant Magician on Co-Workers' Tips

David G. Frank

John F. Kennedy High School

Michael Lynn

School of Hotel Administration

Cornell University

Orcid id: 0000-0001-9234-1248

*Journal of Behavioral and Experimental Economics* (87, August 2020, 101560)

Key words: restaurant, magician, server, tipping

JEL: C93, D11, M12, M52

Running head: Illusion of the self-earned tip

Order of authorship is intentionally alphabetical. Address correspondence regarding the paper to the second author at: 552 Statler Hall, Cornell University, Ithaca, NY 14853-6902, or WML3@cornell.edu.

### Abstract

During a service experience, consumers often encounter numerous workers seeking tips. For example, restaurant customers may face implicit tip requests from a parking valet, lounge musician, bartender, hostess, sommelier, waiter, and/or busboy. This raises questions about how the tips given to one worker depend on the performances of their co-workers and/or on the tip amounts previously given to those co-workers. The answers to these questions have implications about the role of affective, self-perception, licensing, and resource budgeting processes in tipping, about the fairness of different tip distribution schemes, and about decisions regarding how many different service workers managers should allow to accept tips. This paper empirically examines these questions for the first time in two natural field experiments conducted by a restaurant magician. Data indicated that: (i) servers got larger tips when the magician performed at their customers' tables, and (ii) the magician (but not the servers) got substantially more in tips when he gave customers a souvenir card. The latter findings imply that the size of tips customers gave the magician had no impact on the size of tips they gave their server. The theoretical and practical implications of these findings are discussed along with directions for future research.

Key words: restaurant, magician, server, tipping

JEL: C93, D11, M12, M52

## **Shattering the Illusion of the Self-Earned Tip: The Effect of a Restaurant Magician on Co-Workers' Tips**

### **1 Introduction**

In many countries around the world, bartenders, cab drivers, doormen, hairstylists, parking valets, restaurant waiters, tour guides and other service workers derive a portion of their compensation and income from voluntary payments made by their customers (Lynn 2016). These payments (called a “tip,” “mancia,” and “punta” among other names) often increase the costs of services by 10% or more (Lynn and Lynn 2004) and collectively amount to over \$45 billion a year in the United States’ food service industry alone (Azar 2011). As a common and economically important form of voluntary pricing and employee compensation, tipping has attracted the attention of scholars in economics, human resources, marketing, psychology and other fields and there is now a substantial academic literature devoted to the determinants of this behavior (see Lynn 2015, for a review).

Most existing studies of tipping have tested the effects of characteristics of the tipper, the tip recipient, or the service encounter (c.f., Azar, Yosef and Bar-Eli 2015; Chandar, Gneezy, List and Muir 2019; Conlin, Lynn and O’Donoghue 2003; Kerr, et. al. 2009) with little attention given to the effects of third parties. A few studies have examined the effects of other customers on tippers’ decisions (c.f., Boyes, Mounts and Sowell 2006; Freeman, Walker, Borden, and Latane 1975), but to our knowledge none has examined the potential effects on tipping of service providers other than the tip recipient. This oversight is unfortunate, because people often encounter numerous service providers in close temporal and spatial proximity to one another. For example, in hotels, a doorman removes guests’ luggage from their cars and opens the door for

them, a bellhop brings guests to their rooms, a maid cleans those rooms, and a room-service waiter delivers food to the room. Similarly, in restaurants, a valet parks the guest's car, a bartender mixes the guest a drink (which a cocktail waitress delivers) while he or she waits in the lounge for a table in the dining room, a musician provides entertainment, a hostess seats the guest, a sommelier recommends a wine, opens the bottle ordered and pours the wine, a waiter or waitress takes the guest's food order and delivers the meal (which is prepared by a cook), and a busboy refills water glasses and clears empty plates from the table. Many of these different service providers expect tips and the potential dependence of those tips on the performance of, and tips received by, their coworkers is of both theoretical and practical importance. Accordingly, those potential dependencies and their implications are explored in this paper.

## **2 Literature Review**

### **2.1 Effects on Tipping of Coworker Performance**

The potential effect on a service worker's tips of the behavior of his or her coworkers is theoretically interesting because it would support the idea that tippers' affective states or moods influence tipping even when those affective states or moods are not directly attributable to the tip recipient. Such an effect would also be of interest to managers and policy makers, because it would speak to the fairness of tip sharing (or pooling) requirements. These issues are described in more detail below.

Scholars have found that a positive mood or affective state increases people's willingness to help others (Carlson, Charlin and Miller 1988) and have argued that it may also increase tipping (Cunningham, 1979). In fact, tipping researchers have argued that an increased positive mood may underlie the tip enhancing effects of (i) servers telling a joke (Gueaguen 2002), (ii) servers communicating good news about the weather (Rind, 1996; Rind and Strohmetz 2001), (iii) servers

giving excess change following customer payment of a restaurant bill (Azar, Yosef and Bar-Eli 2015), (iv) customers experiencing more sunshine (Devaraj and Patel, 2017), and (v) customers having his/her basketball team score an unexpected and close win (Ge, 2018). However, these findings are inconclusive about mood effects on tipping for various reasons. The first three of these findings involved the tip recipient as the source of the affect-inducing stimulus, so the observed effects on tipping could be due to reciprocity rather than a more generic positive affective state. The fourth and fifth of these findings involved mood enhancing variables (sunshine and unexpected team wins respectively) that could have affected tipping through their impact on the service providers' moods and behavior rather than through their impact on customer mood. Together these findings are clearly suggestive of mood effects on tipping, but there is a need for more research examining the effects on tipping of positive-affect-inducing stimuli that are not attributable to the tip recipient and that are unlikely to affect the tip recipients' mood and behavior. Research on the effects of coworkers' behavior on tipping could help fill this need.

Policy makers, restaurant managers, and others have shown a recent interest in tip pooling. In fact, federal law in the United States recently broadened the number and types of people allowed to legally participate in tip pools when restaurant servers are paid the regular rather than the tipped minimum wage (Tipmetric 2018). Furthermore, scholars and practitioners have argued that tip pooling is perhaps the best way to solve problems with pay disparities between front and back of house restaurant staff (Estricher and Nash 2018). Relevant to this reconsideration of tip pools is their fairness. If consumers' tipping decisions are based only on the efforts of the tip recipient, it would be unfair to distribute those tips among other workers. However, if other workers influence the tips received by a service provider, then principles of equity (Adams 1965) and reciprocity (Gouldner 1960) suggest that they deserve a share of those

tips. Thus, the effects of coworkers' performance on the tips of a service provider speak to the fairness of different tip-distribution schemes.

Despite its potential theoretical and practical value, there has been little research examining the effects on tipping of coworkers' performances. Researchers have found that restaurant tips are related to evaluations of the food (Lynn and McCall 2000), which suggests that the cook's behavior and performance may affect tipping. However, this research is correlational and may simply reflect the effect of customer generosity or some other variable on both tipping and food evaluations rather than a causal effect of the cook's performance. Ultimately, research that randomly assigns people to different treatments of a coworker's behavior is needed to identify any causal effects on tipping of such coworker behavior. While it would be unethical to assign people to get good or bad food and service, assigning them to receive extra entertainment or not is less objectionable. Therefore, the studies reported below examine the effects of randomly assigned performance (vs. no performance) at a dining table by a restaurant magician on the tips given to the servers of those dining parties.

## **2.2 Effects on Tipping of Coworker's Tips**

The potential effects of the tip amounts given to one service worker on those given to other service workers subsequently encountered by the customer is also of both theoretical and practical importance. Such effects are theoretically interesting because they speak to the relevance of self-perception, licensing, and resource budgeting processes to tipping. They are also managerially interesting because they speak to the advisability of broadening vs. narrowing the pool of workers allowed to accept tips. These issues are described in more detail below.

First, people's behavior often affects their subsequent behavior through self-perception and/or licensing processes. Sometimes people come to see their behavior as defining their

attitudes and identities and they feel a need to continue behaving in a manner consistent with those self-attributed attitudes and identities (Scott 1978). This suggests that tipping (or not) one service provider may affect customers' self-labels as good (or bad) tippers, which then causes them to tip subsequent service providers well (or poorly). Other times people believe that prior "good" choices license them to make more self-indulgent choices in the future (Khan & Dhar 2006). This suggests that tipping one service provider well may make customers feel that they are good people and give them license to tip other servers less. Testing the effects of tips given to one service worker on the tips given to other service workers would shed light on which, if any, of these processes operate in tipping settings, which might ultimately help identify their boundary conditions.

Second, expenditures deplete finite budgetary resources and, therefore, tend to reduce future spending – especially spending within the same budgetary category or mental account (Heath and Sol 1996). This suggests that tipping one service provider might deplete consumers' "tipping" budgets and reduce the tips given to subsequent service providers. Testing the effects of tips given to one service worker on the tips given to other service workers would shed light on the existence (or not) of such mental "tipping" accounts and/or to the responsiveness of tipping to variations in budgetary resources.

Finally, services managers do not have to passively accept the dictates of tipping norms and customs. They can encourage or discourage consumer tipping of their employees and allow or prohibit those employees from accepting tips regardless of the prevailing tipping norms (Lynn and Withiam 2008). Recent examples of such managerial actions include Danny Myers' replacement of tipping with "Hospitality Included" menu pricing at his restaurants (Feldman 2018), Uber's addition of tipping functionality to its rideshare app (Lucky 2017), and Frontier

Airline's addition of a tipping option to its onboard payment tablets (Helizberger 2019). In an effort to inform such tipping policy decisions, researchers have begun to study the effects of those policies on various outcomes such as consumer satisfaction, perceptions of service expensiveness, and employee retention (e.g., Alexander, Boone and Lynn 2019; Lynn 2017, 2018; Lynn and Wang 2013). Also relevant to such policy decisions are their effects on the tips received by other employees not covered by the policy. For example, if tipping restaurant musicians reduces the tips consumers leave their servers, then managers seeking to reduce server turnover may want to prohibit tipping the musician in order to maximize the servers' tips. Thus, testing the effects of tips given to one service worker on the tips given to other service workers would inform managers' decisions about which employees it should allow to accept tips.

Despite its potential theoretical and practical value, there is no publicly available research examining the effects on consumer tipping of the amounts tipped to previously encountered coworkers. This oversight may be due in part to the difficulty of studying this relationship. Simply correlating the tip amount consumers give one worker with the tip amount those same consumers give another worker is not very informative, because consumer characteristics could be driving or suppressing the relationship between these tip amounts. This problem is addressed in the studies reported below by having a restaurant magician randomly assign customers to conditions known to affect the size of tips given to the magician, but unlikely to directly affect the tips given to servers, and then to see what impact it had on servers' tips. Specifically, customers in the magic performance condition were randomly assigned to receive or not a souvenir playing card used in the magic routine. This small gift from the magician has been shown to substantially increase the magician's tips (Frank 2019) but is unlikely to directly affect



the tips given to servers. Thus, any effect it has on servers' tips is likely to be caused by the customer having given a small vs. a large tip to the magician.

### **3 Methods**

#### **3.1 Overview**

A magician employed as a restaurant entertainer randomly sampled dining tables and assigned them to either receive a tableside magic performance or not. Those who received a performance were also assigned to receive or not receive a souvenir playing card used in the performance. The magician then recorded the conditions tables were assigned to, the number of people at the table, and the amounts (if any) they tipped him. He also obtained the tables' group sizes, bill sizes and tips to their server from the restaurant manager.

#### **3.2 Study One**

##### **3.2.1 Study context**

The first of two experiments was conducted at a family-style Italian restaurant in Long Island, NY between 6:00 p.m. - 9:00 p.m. over 10 months and involved 270 dining parties. The restaurant seats up to 38 tables in the dining room, employs six servers, and provides a full dinner menu and bar service. The data collection took place on Saturday nights (one of the most popular times of the week).

### 3.2.2 Study procedures and conditions

A table magician (also a co-author of this paper) arrived at the restaurant with each pre-established table number written on individual index cards. The magician organized the cards for all occupied tables into a pile, adding cards as parties arrived and subtracting cards as parties departed or were assigned to conditions.<sup>1</sup> Prior to approaching a table, the magician shuffled the pile and randomly selected a table to include in the study. He then randomly assigned that table to the performance or no performance condition by flipping a coin; if the coin landed on “heads,” he performed for the dining party, and if it landed on “tails,” he did not. At each “magic performance” table, the magician performed sleight of hand tricks, including a trick in which he asked one member from each party to sign a playing card and to enclose it between his or her hands. The magician then removed a random playing card from the deck and, without touching the spectator, made it magically switch places with the signed card that was in the spectator’s hands.

At the completion of the magic routine, the magician then randomly assigned each party for whom he performed to receive a souvenir of the signed playing card or not. He did this by selecting a card from a shuffled deck following the magic routine’s completion, and just prior to the customer taking out money for a tip. If the card was an ace, two, three, four, five, or six, the magician gave the signed playing card that was used in the routine to the signing customers for

---

<sup>1</sup> Table turnovers and seating changes were handled as follows. The magician sat at a table next to the entrance door as a “home base” between magic performances. The venue was small enough for the magician to keep track of patrons and table turnover as he sat at that location. It is important to note that nobody could enter or leave the dining room without walking by the restaurant manager, who was stationed between the magician’s home base and the dining room. While the magician was performing (and not sitting at home base), the restaurant manager kept track of all newly seated and departed tables and reported the changes to the magician upon his return to home base. The magician then updated his index cards, shuffled, and selected the next table.

them to keep as a souvenir. If the card was a seven, eight, nine, ten, jack, or queen, the magician did not leave the spectators with a souvenir playing card. If a king was selected, the magician would return it to the deck and repeat the aforementioned procedure. Following the performance at each table, the magician accepted any proffered tips and recorded the relevant information about that table. Seventy-two parties received a souvenir playing card, 73 parties did not, and 125 parties did not see any magic.

### **3.2.3 Study variables recorded**

The magician recorded each dining party's experimental condition and tip to him. In addition, he obtained the dining party size, server's tip, and overall bill size from the manager. Sales and charge tips were reported directly to the magician by the manager, who obtained the information from the Point of Sale (POS) system. Cash tips were reported by the servers to the manager, who then reported them to the magician.

## **3.3 Study Two**

### **3.3.1 Reason for a second study**

Analyses of Study 1 (reported in Table 2) found a treatment effect on dining party size such that dining parties in the performance with souvenir card condition were reliably larger than those in the other two conditions, which did not differ from one another. This effect is puzzling because the treatments could not have possibly affected the number of people at a table. The procedure assigning subjects to the souvenir vs. the no souvenir condition was similar to that used by Frank (2019) and believed to be random. Perhaps the assignment was random, and its apparent effect on dining party size was merely a Type 2 error. However, it is possible that the post-performance order of the cards was affected by group size in some unknown way so that the assignment procedure using those cards was not genuinely random. If so, it should be noted that

group size was not strongly related to either the magician's tips or the servers' tips, so this possible effect of group size on treatment is not likely to impact the treatment effects on these variables. Nevertheless, Study 1 was replicated using a different souvenir vs. no souvenir assignment procedure to ensure internal validity.

### **3.3.2. Similarities and differences across studies**

Study 2 took place at the same restaurant as Study 1 from 5:30 p.m. to 9:00 p.m. and involved 225 dining parties. Most of the data collection took place on Thursday, Friday, Saturday, and Sunday nights. In addition to involving different dates, times of day, and days of week, Study 2 differed from Study 1 in the way customers were randomly assigned to "souvenir" or "no souvenir" conditions. In Study 2, this was done by flipping a coin (instead of selecting a playing card) following the magic routine's completion, and just prior to the customer taking out money for a tip. If the coin landed on heads, the magician gave the signed playing card that was used in the routine to the signing customers for them to keep as a souvenir. If the coin landed on tails, the magician did not leave the spectators with a souvenir playing card. All other experimental procedures were the same across studies. These procedures resulted in fifty-four parties receiving a magic performance and a souvenir playing card, 56 parties receiving a magic performance but not a souvenir playing card, and 115 parties receiving no magic performance.

## **4 Results**

The descriptive statistics for and correlations among study variables are presented in Table 1, and analyses of treatment effects are presented in Table 2. All effects of performing magic on the means of per-person bill size and servers' percent tip are the same across Study 1 and Study 2. Similarly, the effects of leaving a souvenir playing card on the means of magician's tip, servers' percent tip, and per-person bill size are the same across studies.

Therefore, for ease of reporting, the following descriptions of those effects will focus on Study 2's results.

Table 1. Descriptive statistics for, and correlations among, study variables.

	Mean	Standard Deviation	n	Magician Tip Amount	Bill Size Per-Person	Percent Tip to Server
Study 1						
Party Size	4.30	3.00	270	.13	.07	.09
Magician Tip Amount	\$4.93	\$6.31	145		.21*	.15
Bill Size Per-Person	\$44.25	\$13.28	270			.02
Percent Tip to Server	19.90	3.57	270			
Study 2						
Party Size	3.89	2.70	225	.15	.05	-.03
Magician Tip Amount	\$4.81	\$8.50	110		.01	.01
Bill Size Per-Person	\$40.32	\$16.02	225			-.26**
Percent Tip to Server	19.84	4.00	225			

\*  $p < .05$ , \*\* $p < .01$

Table 2. Means and standard deviations by experimental condition and statistical tests of differences between conditions.

	No Magic	Magic without Souvenir Card	Magic with Souvenir Card	Omnibus F-Test	<u>Magic vs. No Magic</u> <sup>D</sup>	<u>Card vs. No Card</u> <sup>D</sup>
Study 1	N = 125	N = 73	N = 72	F (2, 267)	F (1, 268) / t (268)	F (1, 143) / (143)
Party Size	3.66 <sup>a</sup> (2.28)	4.21 <sup>a</sup> (2.51)	5.51 <sup>b</sup> (4.07)	9.33***	6.64* / -3.31**	7.60** / -2.34*
Magician Tip Amount	n/a	\$2.71 (\$3.78)	\$7.18 (\$7.49)	n/a	n/a	16.20*** / -4.55***
Bill Size Per-Person	\$42.86 (\$12.02)	\$45.12 (\$14.59)	\$45.80 (\$13.90)	1.34	4.70* / -1.61	.22 / -.29
Percent Tip to Server	18.84 <sup>a</sup> (3.50)	20.75 <sup>b</sup> (3.29)	20.88 <sup>b</sup> (3.48)	11.11***	.03 / -4.72***	.70 / -.22
Study 2	N = 115	N = 56	N = 54	F (2, 222)	F (1, 223) / t (223)	F (1, 108) / t(108)
Party Size	3.79 (2.75)	4.14 (2.52)	3.83 (2.81)	.33	.02 / -.55	.07 / .61
Magician Tip Amount	n/a	\$2.20 (\$4.45)	\$7.52 (\$10.65)	n/a	n/a	13.90*** / -3.44**
Bill Size Per-Person	\$40.71 (\$17.20)	\$38.25 (\$13.74)	\$41.66 (\$15.69)	.69	2.21 / .37	.52 / -1.22
Percent Tip to Server	18.96 <sup>a</sup> (3.99)	20.85 <sup>b</sup> (3.85)	20.65 <sup>b</sup> (3.83)	5.91**	1.07 / -3.43	.04 / .28

Note: Means in each row with different superscripts differ significantly at the .05 level in post-hoc comparisons using least significant differences. T-tests assuming equal and unequal variances produced very similar results, but only tests with equal variances are reported for ease of communication.]

<sup>D</sup> Column reports a Levene's F-test of variances and a t-test of means, \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

#### 4.1 Effects of Magic Performance

The effects of performing magic on the servers' percent tip and per-person bill size were assessed with t-tests. The analyses show that magic performances did not affect servers' sales but did increase their tips. In Study 2, servers tips increased from 18.96% to 20.75% ( $p < .01$ ), which is roughly comparable to the effects on tips of increasing restaurant service from average

to excellent (Lynn 2001, 2013) and represents a substantial increase in income when aggregated across dining parties and work shifts. The results clearly indicate that receiving a tableside magic performance (vs. not) causally increased the tips consumers gave to restaurant servers, even though the servers had nothing to do with that performance.

#### 4.2 Effects of Giving a Souvenir

Providing customers with a souvenir playing card increased the magician's tips, which replicates the findings of Frank (2019). In Study 2, the mean tip increased by 240% -- from \$2.20 to \$7.52! This effect reflected an increase in the proportion of customers leaving a tip from 25% to 61% ( $\chi^2(1) = 14.65, p < .001$ ) and an increase in the size of those tips left from \$8.79 to \$12.30, though the latter effect was not reliable ( $t(45) = -1.12, n.s.$ ).<sup>2</sup> Customers were, therefore, effectively randomly assigned to "high tip" and "low tip" conditions. The effects of this manipulation on servers' bills and tips were non-significant, which implies that tipping the magician had no causal impact on servers' sales or tips. If this conclusion is a Type 2 error and a causal effect truly does exist, then it must be small. More than doubling the proportion of people tipping the magician, and the total tip amounts he was given, decreased servers' average tip percentages only by a non-significant 0.2 points. The 95% confidence interval around this effect was 1.41, meaning that there is only a 5% chance that doubling the magician's tips has a true effect of reducing servers' tips by more than 1.6 percentage points or of increasing servers' tips by more than 1.2 percentage points.

---

<sup>2</sup> In Study 1, the effects of the no souvenir vs. souvenir manipulation had reliable effects on both the likelihood of tipping the magician (47% vs. 74%,  $\chi^2(1) = 11.04, p < .005$ ) and the size of non-zero tips given to him (\$5.52 vs. \$9.75,  $t(85) = -2.98, p < .005$ ).

## **5 Discussion**

The key findings of these studies are: (1) servers received larger tips when a restaurant magician performed at their tables than when he did not, and (2) giving dining parties a souvenir from the magic performance substantially increased the tips given to the magician, but did not affect the tips given to servers. The former effect suggests that the tippers' affective state or mood influences tipping even when it is not directly attributable to the tip recipient. It also provides some credence to the idea that co-workers contribute to the tips servers receive and, therefore, may deserve a share of those tips. The latter effect implies that tipping service workers does not engage the self-perception, licensing, and resource budgeting processes observed in other contexts. In addition, it suggests that managers can allow employees providing early (and perhaps peripheral) services, such as entertainers, to accept tips without adversely affecting the tip income of employees providing later (and perhaps more central) services, such as waiters. These theoretical and practical implications of the findings, along with directions for future research, are further discussed below.

### **5.1 Implications of the Magic Performance Effect on Servers' Tips**

The most plausible explanation for the tip enhancing effects of the magic performance in the current studies is that the performance elevated customers' overall enjoyment of the evening and that this led them to tip their servers more. Such an enhancement of overall-satisfaction would be consistent with the presumed reasons that management had for hiring a restaurant magician. Since the servers who got the larger tips had nothing to do with the magician's performance, this effect provides some evidence suggesting that tippers' affective state or mood influences tipping even when it is not directly attributable to the tip recipient. As such, it supports the plausibility of customer affect-based explanations for previously observed effects on



tipping of joke telling (Gueaguen 2002), sharing good news (Rind, 1996; Rind and Strohmetz 2001), giving excess change (Azar, Yosef and Bar-Eli 2015), experiencing more sunshine (Devaraj and Patel, 2017), and having your sports team score an unexpected and close win (Ge, 2018). Nevertheless, this explanation goes beyond the current data, which did not include measures of mood or affect, and deserves further investigation.

Another possibility is that tables in the “no magic” condition tipped less because they experienced negative affect as a result of being overlooked by the performer. This possibility was tested post-hoc using a control condition in which nobody received magic performances. Charge data were collected for 63 tables from 5:30 p.m. to 9:00 p.m. throughout one week following Study 2 in which the magician did not perform. The average server tip that week was 19.28% (SD = 3.89%), which did not significantly differ from that in the no magic performance condition of Study 2 (mean = 18.96%, S.D. = 3.99,  $t(176) = -.52$ , n.s.) and was significantly less than that in the magic performance condition of the study (mean = 20.75%, S.D. = 3.82,  $t(171) = -2.42$ ,  $p < .02$ ). This provides some evidence that being overlooked by the magician in Study 2 did not decrease the servers’ tips. More generally, it suggests that getting a magic performance increased servers’ tips rather than that not getting one decreased servers’ tips. Nevertheless, future investigations should try to replicate this result in a study that randomly assigns days to “magic” vs. “no magic” conditions.

In addition to supporting the idea that positive affect enhances tipping, the magic performance effect on servers’ tips provides some support for the fairness of tip sharing or pooling -- at least in this case, and perhaps more generally. In particular, the commonly endorsed and followed rules that you should treat others equitably (Adams 1965) and return favors (Gouldner 1960) suggests that servers who benefit from the magician’s performance should

share at least a portion of their tip windfall with the magician who generated it. More generally, by indicating that tips can be affected by the performance of service workers other than the tip recipient, our findings add credence to the idea that other restaurant workers contribute to the tips servers receive and, therefore, deserve a share of those tips. Thus, they support recent calls for broadening tip pooling practices (see Estricher and Nash 2018).

## **5.2 Implications of the Null Souvenir Effect on Servers' Tips**

Souvenir effects on the magician's tips but not on servers' tips indicate that the tips received by the magician did not affect those received by the servers. In turn, this conclusion suggests that the self-perception, licensing, and resource budgeting processes that create interdependencies in consumer spending in other contexts (see Heath and Sol 1996; Khan and Dhar 2006; Scott 1978) were not activated in the current tipping study context. The failure to find self-perception or licensing effects of tipping on subsequent tipping is similar to Alexander, Boone and Lynn's (2019) failure to find tipping effects on consumer satisfaction and re-patronage. These null results may be attributable to the fact that tipping is driven by many different motives – e.g., the desires to help servers, reward server effort, improve future service, get and keep social esteem, and fulfill social obligations (see Lynn 2015) – because multiple motivations are likely to interfere with the self-attributions underlying self-perception and licensing effects.

The failure to find resource budgeting effects of tipping suggests either that people do not have a separate mental budget account for tipping or that the limit for that account is very high. This conclusion is consistent with several other previous research findings that suggest consumers are not very budget conscious (or price sensitive) when it comes to tipping. First, Lynn and Sturman (2003) found that dollar and cent tip amounts increase linearly with bill size and

without the negative quadratic trend that would be expected if cost-considerations reduced the percentages people tip. Second, Lynn and Wang (2013; also Wang and Lynn 2007) found that changes in expected tips affected perceptions of restaurant expensiveness less than did comparable changes in menu prices. Finally, Alexander, et. al. (2019) found that larger tip recommendations increased tip amounts but did not decrease customer satisfaction, re-patronage or future spending as would be expected of budget conscious consumers. Thus, the current null-effect of the magician's tip on servers' tips joins these earlier findings in challenging many economists' assumptions, and Lynn's (2015) explicit theorizing, that cost considerations affect tipping the same as they do other expenditures.

From a purely practical perspective, the null-effect of the magician's tip on servers' tips suggests that different service providers do not compete with one another for limited tip resources. This means that managers can allow entertainers and other early encountered service providers to accept tips without concern about harming the tip incomes of servers or other later encountered service workers.

### **5.3 Future Research**

In addition to enhancing our understanding about the dependence of tips on the performance and tips of co-workers, this study raises several issues for future research. First, despite making it clear that co-workers can affect a servers' tips, it is not clear how generalizable this effect is. Must co-workers deliver "magical" or "delightful" performances to increase a server's tip, or will more moderately positive performances do so as well?

Second, despite adding to existing evidence that tipping does not engage the self-perception, licensing, and resource budgeting processes that create interdependencies in consumer spending in other contexts, it is not clear why this is so. Alexander, Boone and Lynn

(2019) suggest that the large number of motivations underlying tipping may undermine self-attribution and self-perception processes. They also argue that consumers may be less sensitive to the costs of tipping than to the costs of other payments because (i) voluntary costs like tipping can be avoided by price sensitive customers and so tend to be paid by price insensitive ones, (ii) the reputational benefits of voluntary payments may lessen the pain of paying, and (iii) voluntary pricing empowers consumers and that empowerment may decrease price sensitivity by fostering an acquisitive rather than a loss-avoidant mindset. However, these potential explanations are speculative and need to be tested.

Finally, while the current studies clearly demonstrate one benefit of hiring entertainers in service settings (they increase tips to employees) and strongly discredit another (they do not increase bill sizes), numerous other potential effects of service entertainers remain untested. In particular, the potential effects of entertainers on customer satisfaction, delight, and re-patronage seem worth investigation in future research. Hopefully, this paper encourages further exploration of this relatively neglected type of service worker as well as further exploration of the dependence of servers' tips on the performance of, and tips received by, their coworkers.

## References

- Adams, J. S. (1965). Inequity in social exchange. In *Advances in experimental social psychology*, Academic Press, v. 2, 267-299.
- Alexander, D., Boone, C., & Lynn, M. (2019). The Effects of Tip Recommendations on Customer Tipping, Satisfaction, Re-patronage, and Spending. *Management Science*, forthcoming.
- Azar, O. H. (2007). Why pay extra? Tipping and the importance of social norms and feelings in economic theory. *The Journal of Socio-Economics*, 36(2), 250-265.
- Azar, O. H. (2010). Do people tip because of psychological or strategic motivations? An empirical analysis of restaurant tipping. *Applied Economics*, 42(23), 3039-3044.
- Azar, O. H. (2011). Business strategy and the social norm of tipping. *Journal of Economic psychology*, 32(3), 515-525.
- Azar, O. H., Yosef, S., & Bar-Eli, M. (2015). Restaurant tipping in a field experiment: How do customers tip when they receive too much change? *Journal of Economic Psychology*, 50, 13-21.
- Bodvarsson, Ö. B., & Gibson, W. A. (1994). Gratuities and customer appraisal of service: Evidence from Minnesota restaurants. *The Journal of Socio-Economics*, 23(3), 287-302.
- Boyes, W. J., Stewart Mounts Jr, W., & Sowell, C. (2004). Restaurant tipping: Free-riding, social acceptance, and gender differences. *Journal of Applied Social Psychology*, 34(12), 2616-2625.
- Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of personality and social psychology*, 55(2), 211.
- Chandar, B., Gneezy, U., List, J. A., & Muir, I. (2019). The Drivers of Social Preferences: Evidence from a Nationwide Tipping Field Experiment. *National Bureau of Economic Research* No. w26380.

- Conlin, M., Lynn, M., & O'Donoghue, T. (2003). The norm of restaurant tipping. *Journal of Economic Behavior & Organization*, 52(3), 297-321.
- Connolly, M. (2013). Some like it mild and not too wet: The influence of weather on subjective well-being. *Journal of Happiness Studies*, 14(2), 457-473.
- Cunningham, M. R. (1979). Weather, mood, and helping behavior: Quasi experiments with the sunshine samaritan. *Journal of Personality and Social Psychology*, 37(11), 1947.
- Denissen, J. J., Butalid, L., Penke, L., & Van Aken, M. A. (2008). The effects of weather on daily mood: a multilevel approach. *Emotion*, 8(5), 662.
- Estreicher, S., & Nash, J. R. (2016). The Case for Tipping and Unrestricted Tip-Pooling: Promoting Intrafirm Cooperation. *NYU School of Law, Public Law Research Paper*, (16-05), 16-07.
- Feldman, L. (2018). Danny Meyer on eliminating tipping: 'It takes a year to get the math right', <https://www.forbes.com/sites/lorenfeldman/2018/01/14/danny-meyer-on-eliminating-tipping-it-takes-a-year-to-get-the-math-right/#6bff24ef431f>, accessed 11/21/19.
- Flynn, S. M., & Greenberg, A. E. (2012). Does Weather Actually Affect Tipping? An Empirical Analysis of Time-Series Data 1. *Journal of Applied Social Psychology*, 42(3), 702-716.
- Frank, D. G. (2019). To gift or not to gift: How providing a memento affects a restaurant magician's tips. *International Journal of Hospitality Management*, 102368.
- Freeman, S., Walker, M. R., Borden, R., & Latane, B. (1975). Diffusion of responsibility and restaurant tipping: Cheaper by the bunch. *Personality and Social Psychology Bulletin*, 1(4), 584-587.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 161-178.

Gueaguen, N. (2002). The effects of a joke on tipping when it is delivered at the same time as the bill. *Journal of Applied Social Psychology*, 32(9), 1955-1963.

Heath, Chip and Jack Soll (1996). Mental budgeting and consumer decisions. *Journal of Consumer Research*, 23 (1), 40-52.

Helizberger, S. (2019). This airline is asking passengers to tip their flight attendants, <https://www.cnbc.com/2019/01/11/budget-airline-frontier-asks-passengers-to-tip-their-flight-attendant.html>, accessed 11/21/19.

Jacob, Nancy and Alfred Page (1980). Production, Information Costs, and Economic Organization: The Buyer Monitoring Case. *American Economic Review*, 70 (June), 476-478.

Kerr, P. M., Domazlicky, B. R., Kerr, A. P., & Knittel, J. R. (2006). An objective measure of service and its effect on tipping. *Journal of Economic Insight (formerly the Journal of Economics (MVEA))*, 32(2), 61-69.

Khan, U., & Dhar, R. (2006). Licensing effect in consumer choice. *Journal of Marketing Research*, 43(2), 259-266.

Lucky, B. (2017). Uber has now rolled out in-app tipping in 120+ cities, <https://onemileatatime.com/uber-in-app-tipping/>, accessed 11/21/19.

Lynn, M. (2013). A comparison of Asians', Hispanics', and Whites' restaurant tipping. *Journal of Applied Social Psychology*, 43(4), 834-839.

Lynn, M. (2015). Service gratuities and tipping: A motivational framework. *Journal of Economic Psychology*, 46, 74-88.

Lynn, M. (2016). Why are we more likely to tip some service occupations than others? Theory, evidence, and implications. *Journal of Economic Psychology*, 54, 134-150.

- Lynn, M. (2017). Should US restaurants abandon tipping? A review of the issues and evidence. *Psychosociological Issues in Human Resource Management*, 5(1), 120-159.
- Lynn, M., & Grassman, A. (1990). Restaurant tipping: an examination of three 'rational' explanations. *Journal of Economic Psychology*, 11(2), 169-181.
- Lynn, M., & Lynn, A. (2004). National values and tipping customs: A replication and extension. *Journal of Hospitality & Tourism Research*, 28(3), 356-364.
- Lynn, M., & McCall, M. (2000). Gratitude and gratuity: a meta-analysis of research on the service-tipping relationship. *The Journal of Socio-Economics*, 29(2), 203-214.
- Lynn, M., & Sturman, M. C. (2003). It's simpler than it seems: an alternative explanation for the magnitude effect in tipping. *International Journal of Hospitality Management*, 22(1), 103-110.
- Lynn, M., & Wang, S. (2013). The indirect effects of tipping policies on patronage intentions through perceived expensiveness, fairness, and quality. *Journal of Economic Psychology*, 39, 62-71.
- Lynn, M., & Withiam, G. (2008). Tipping and its alternatives: Business considerations and directions for research. *Journal of Services Marketing*, 22(4), 328-336.
- Rind, B. (1996). Effect of beliefs about weather conditions on tipping. *Journal of Applied Social Psychology*, 26(2), 137-147.
- Rind, B., & Strohmets, D. (2001). Effect of beliefs about future weather conditions on restaurant tipping. *Journal of Applied Social Psychology*, 31(10), 2160-2164.
- Scott, C. A. (1978). Self-Perception processes in consumer behavior: Interpreting one's own experiences. *ACR North American Advances*.



Tipmetric (2018). The new tip pooling laws for restaurants,

[https://medium.com/@hello\\_5766/the-new-tip-pooling-laws-for-restaurants-what-you-need-to-know-in-2018-fec8e898b522](https://medium.com/@hello_5766/the-new-tip-pooling-laws-for-restaurants-what-you-need-to-know-in-2018-fec8e898b522)

Uehara, E. S. (1995). Reciprocity reconsidered: Gouldner's moral norm of reciprocity' and social support. *Journal of Social and Personal Relationships*, 12(4), 483-502.

Wang, S., & Lynn, M. (2007). *The effects on perceived restaurant expensiveness of tipping and its alternatives*. Cornell University, School of Hotel Administration, The Center for Hospitality Research.