

Running Head: Leftovers

The Principle of Reciprocity in Hospitality Contexts: The Relationship  
Between Tipping Behavior and Food Servers' Approaches to Handling Leftovers

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### Abstract

Based on the norm of reciprocity, this study hypothesized that food servers would earn higher tips when they boxed customers' leftovers compared to having customers box leftovers themselves. In addition, the effect of writing messages (i.e., the date and/or customer's name) on boxes of leftovers was explored. Two female food servers waited on 608 diners and boxed or did not box leftovers, and wrote or did not write messages on boxes. The hypothesis was supported. However, writing messages was not associated with tipping behavior.

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According to Cialdini and Goldstein (2002), the ability to understand and apply principles of persuasion is essential to success in hospitality settings. One persuasion principle, known as the norm of reciprocity, suggests that people are obligated to repay what others have provided them. In other words, receiving help, gifts, favors, or concessions motivates people to reciprocate in some way (Cialdini, 2001). This may be particularly true in restaurants, where customers have the option of leaving tips for employees. As Cialdini and Goldstein (2002) noted, "...tipping in the U.S. service industry is supposed to be based on a reciprocity-related *quid pro quo* system, in which it is tacitly acknowledged that the consumer will make a more generous payment in exchange for better-than-average service" (p. 43).

Previous research has identified a number of techniques that lead to larger tips (for a review, see Lynn, 2011). For example, food servers earn higher tips when they use cosmetics (Jacob, Guéguen, Boulbry, & Ardiccioni, 2010), leave personalized messages on checks (Seiter & Gass, 2005), wear certain colors (Guéguen & Jacob, 2014), touch (Hubbard, Tsuji, Williams, & Seatriz, 2002) or compliment diners (Seiter, 2007; Seiter & Weger, 2010), stand at closer distances (Jacob & Guéguen, 2010), or squat at eye level with customers (Lynn & Mynier, 1993). Few of the identified techniques, however, rely on reciprocity as a theoretical explanation for their effectiveness. Instead, most involve verbal or nonverbal behaviors that foster perceptions of food servers' warmth, attractiveness, or likeability.

Additionally, tipping research examining techniques that activate the norm of reciprocity seem only indirectly related to the act of providing service. One study, for instance, found that food servers increased tips by giving free candy to customers (Strohmetz, Rind, Fisher, & Lynn, 2002).

The article presents an exploratory study that extends past research in two ways. First, it tests the effectiveness of a previously unexamined technique related directly to providing service. Second, in doing so, this study explores an interaction point in service encounters, which, to our knowledge, has not yet been examined. Specifically, this study explores the ways in which servers attend to leftover food that their guests would like to take home.

#### HYPOTHESIS AND RESEARCH QUESTION

Previous research suggests that the norm of reciprocity is activated when people are especially helpful. In selling contexts, for example, customers purchased more merchandise from salespeople who were rated as being more helpful than from those who were rated as less so (see Cody, Seiter, & Montagne-Miller, 1995). In restaurant settings, we suspect that attending to guests' leftovers presents food servers with opportunities to be especially helpful.

That said, existing literature presents a contradictory picture about what constitutes best practices. For instance, one guidebook for servers offers this advice: "Always offer to wrap unfinished food for the guests to take with them. Don't bring takeout boxes to the table and expect guest to pack up their own food..." (Rothschild, 2001, pp. 106-107).

On the other hand, an examination of comments accompanying three Internet web logs on this topic indicated that at least half of the bloggers preferred boxing their own food, mostly for sanitary reasons (Bender, 2010; Interrobang!?, 2007; Wolf, 2009). As one poster wrote, "...keep your grubby paws off my food and bring me the box please" (fastmetal, 2010).

Despite these opposing perspectives, previous research on the norm of reciprocity led to the following hypothesis:

H: Food servers who box customers' leftovers will receive higher tips than food servers who do not.

The simple act of boxing or not boxing food is not the only option servers have when helping customers with leftovers. In one case study, for example, Seiter (2014) reported that in addition to boxing leftovers, a server provided potentially helpful information. Specifically, on each box, the food server wrote the date and the name of the customer whose food was in the box. Given this, we examined the following research question:

RQ: Is writing guests' names and/or the day's date on boxes of leftovers associated with higher tips for food servers compared to not writing such information?

## METHOD

### Participants

Participants originally included 199 parties (with a total of 608 diners) eating dinner at two restaurants. Both restaurants belong to franchises that can be described as casual dining establishments.

## Procedure

Two communication students, who worked as food servers, collected the data. Each was instructed to treat her customers no differently than she would during her regular server duties, except when assisting them with leftovers. In order to assign participants to conditions randomly, as dining parties were nearing the end of their meals, each server rolled a six-sided die. If a one was rolled, the server brought boxes and left the customers to package their own food. In all other conditions, the server asked customers what food they would like to take home and packaged the food for them in the kitchen. If a two was rolled, this was all the server did. If a three was rolled, upon delivering the boxed leftovers, the server also wrote the date on the box. To increase the chance that this was noticed, the server told customers, "I've put the date on the box so you can keep track of how fresh your food is." If a four was rolled, upon delivering the leftovers, the server asked for the customer's name and wrote it on the box while saying, "I'll put your name on the box so you can easily see who it belongs to." If a five was rolled, the server combined the behaviors from conditions three and four (i.e., date then name). If a six was rolled, the server disregarded it and rolled again.

After each party left, the servers recorded the number of people in the party, how many in each party had leftovers, the paying customer's sex (males = 62.8%; females = 37.2%), the total amount of the check, and the total amount tipped. The dependent variable was tip size as a percentage of the total bill (before taxes) ( $M = 18.2$ ,  $SD = 5.32$ , range = 4.0 to 50.0). The servers did not differ from each other in overall tip size,  $t(185) = 1.32$ ,  $p = .19$ ,  $r = -.03$  (Server 1  $M = 18.21$ ,  $SD = 5.00$ ; Server 2  $M = 17.18$ ,  $SD = 5.65$ ).

## RESULTS

The hypothesis and research question were addressed by computing a univariate ANCOVA with tip percentage as the dependent variable and size of dining party as a covariate. The latter was included as a covariate because of the consistent negative relationship between tip amount and party size (e.g., Snyder, 1976). Results (see Table 1 and Figure 1) indicated a significant effect for condition,  $F(4, 197) = 4.63, p = .001, \eta^2 = .09$ . We did not find the expected negative relationship between party size and tip percentage  $F(1, 189) = .23, p = .630, b = -.001$ . With regard to the hypothesis, post hoc analyses of differences among the means indicated that, when compared to letting customers box their own leftovers, boxing leftovers for customers (without writing on the box) was associated with significantly larger tips. With regard to the research question, boxing leftovers and boxing leftovers while adding the customer's name resulted in larger tips than letting customers box leftovers or boxing leftovers while adding the date. Interestingly, adding the customer's name and date resulted in lower relative tips than simply adding the customer's name.

## DISCUSSION

Support for the hypothesis is consistent with research on the principle of reciprocity and with anecdotal advice on best practices for food servers (see above). From a consumer psychology perspective, it may be that customers perceive the act of boxing leftovers as going above and beyond typical service, and reciprocate by leaving bigger tips. If so, our results can be seen as contributing to the literature on the service-tipping relationship. Specifically, Lynn (2003) observed that tips are weakly related to perceptions of service quality but strongly affected by behaviors that, for the most part, are unrelated to service quality (e.g., standing closer to customers). The present study is

somewhat unique in that boxing leftovers seems directly related to providing better service. As such, despite the apparent disconnect between subjective ratings of service quality and tip size, this study suggests that the two variables may be related after all.

Although our findings indicate that boxing leftovers is associated with larger tips, analysis of our research question suggests that other approaches to dealing with leftovers were not effective. In fact, as Figure 1 illustrates, writing the date on boxes may be counterproductive. Indeed, when servers wrote the date, their tips were significantly lower than when they did not write the date and no different from simply having customers box food themselves. What's more, writing the customer's name *and* the date was associated with lower tips than writing the customer's name without adding the date.

There are several possible explanations for these findings. First, perhaps writing the date on boxed leftovers is perceived as a condescending act that questions the intelligence of consumers, particularly since it is coming from a person who may be perceived as having unequal status (i.e., consumers may believe that food "servants" have less status than do medical professionals). More specifically, if the date is perceived as instructional (*'Better use it before this date.'*), customers may feel insulted (*'Don't I know how to treat leftover food?'*) and leave smaller tips as a result. Similarly, perhaps customers, particularly those who dine out infrequently, felt put off by the suggestion that they might not be able to remember when they had last dined out.

Second, previous research suggests that people devalue products that are close to their expiration dates (Harcar & Karakaya, 2005). Perhaps writing the date on leftovers activates this process. If so, because perceptions of food quality are associated with

diners' satisfaction (Harrington, Ottenbacher, Staggs, & Powell, 2012; Ryu & Han, 2010), writing dates may decrease satisfaction, resulting in lower tips for the server.

Third, although the script in this study was designed to make customers aware of the date being added to their box of leftovers, perhaps the wording (i.e., "I've put the date on the box so you can keep track of how fresh your food is.") was perceived as manipulative spin. Indeed, adding a date to keep track of how *old* food is may sound unappealing, but it's probably perceived as a more truthful description of an expiration date's real purpose.

Finally, adding customers' names to boxes did not decrease (or increase) tips in this study, but that could be due to additional variables. For example, several studies indicate that when food servers demonstrate immediacy by learning and using customers' names, they earn higher tips than when not using names (Rodrigue, 1999; Seiter & Weger, 2013). Perhaps the effects of learning and using names in this study counterbalanced any of the potentially negative effects mentioned above.

Future research should explore the viability of these explanations, perhaps by using focus groups to examine consumers' reactions to the various conditions in this study. Moreover, future work should consider the possibility of alternative explanations. Some research, for instance, suggests that higher tips occur when customers' expectations are violated in a positive way (Tse, 2003). Thus, if boxing leftovers is a positive violation of expectations, it should lead to higher tips. That said, we do not see this explanation as inconsistent with the norm of reciprocity.

In addition future research should correct for the limitations of this study. First, additional data collected in a variety of restaurants and geographical locations by both

male and female servers would improve the generalizability of our results. Second, some local health departments do not allow leftover food to be taken back into the kitchen, so alternative approaches to the one used by servers in this study should be examined. Third, we did not include conditions in which customers boxed their own leftovers after food servers had written dates and names on the boxes. As such, some questions (e.g., would adding a date to an empty box decrease tips relative to providing just the box?) were left unanswered.

Despite these limitations, and in addition to its academic contributions, this study should be of interest from an applied perspective. First, for the approximately two million food servers in the US (Lynn, 2011) who depend on gratuities to make their living, a three percent increase in tips (i.e., the difference between boxing and not boxing customers' leftovers) over hundreds of shifts, could translate into meaningful wages over time. Moreover, assuming that higher tips are indicative of greater customer satisfaction, restaurant owners and managers would be well advised to consider the merits of training servers to implement the simple approach to helping customers that was addressed in this study.

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Table 1.

*Descriptive statistics for, and post hoc comparisons among, tip percentages across experimental conditions.*

Condition	<i>M</i>	<i>SD</i>	Dining Parties
Handed Customer Box	16.4 <sub>a</sub>	4.85	51
Boxed leftovers	19.4 <sub>bc</sub>	6.37	31
Boxed and dated	17.4 <sub>a</sub>	5.07	36
Boxed and added name	20.8 <sub>b</sub>	6.33	41
Boxed, dated, added name	18.1 <sub>ac</sub>	4.13	38
Total	18.3	5.56	197

Means with matching subscripts do not differ at <.05 level of significance.

Figure 1. Tip percentage across conditions.

