

## **How Tip Credits Affect Consumer Tipping Behavior**

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### Abstract

In the United States, employers can count servers' tip earnings toward the satisfaction of minimum wage requirements, so that servers are often paid a sub-minimum wage. The difference between the regular and server minimum wage is known as the tip credit and it has come under attack on the grounds that it contributes to server poverty. However, if tip credits increase consumer tipping, then reducing or eliminating tip credits may not increase servers' incomes as much as expected and may even decrease those incomes. The current study finds that consumers from states with larger tip credits say they tip restaurant servers more and that this effect is serially mediated by perceived server need and altruistic motives. These findings contribute to theory by supporting the role of altruistic motives in tipping and to practice by raising a cautionary, yellow flag to those contemplating reductions in the tip credit.

## How Tip Credits Affect Consumer Tipping Behavior

### 1. Introduction

Restaurant servers in the United States receive part of their compensation in the form of paid wages from their employer and part in the form of voluntary gifts of money (called “tips”) from the customers they serve. Under federal and many state minimum wage laws, employers can count some of servers’ tip earnings toward the satisfaction of minimum wage requirements, so that servers are often paid a sub-minimum wage by their employers. This difference between the server subminimum wage and the regular minimum wage is known as the tip credit and it varies in size across the states of the United States (from \$0.00 to \$7.65 per hour in 2021). The tip credit has come under attack in recent years on the grounds that it contributes to server poverty and many progressive policy thinkers as well as Democrats in Congress are advocating its elimination (see Allegretto, 2016; Schweitzer, 2021; Sutton, 2021). However, if tip credits increase consumer tipping, then reducing or eliminating tip credits may not increase servers’ incomes as much as expected and may even decrease those incomes. Surprisingly, however, only a few research studies have examined this issue. The current paper adds to this small research literature and the larger policy debate on tip credits by reporting on another study examining their effects on consumers’ self-reported tipping propensities.

## 2. Literature Review

Tipping has been studied by numerous hospitality scholars (e.g., Becker, Bradley and Zantow, 2012; Lynn, 2015; Whaley, Douglas and O'Neill, 2014), who theorize (among other things) that it is motivated by desires to help servers financially (altruistic motives) and to equitably reward servers for their efforts (reciprocity motives). Both of these motivations for tipping seem likely to be impacted by tip credits. If consumers are aware of servers' wages, then larger tip credits (i.e., lower server wages) may enhance altruistic and/or reciprocity motivations for tipping and, thereby, increase tip amounts.

To date, only two published academic papers have examined the effects of tip credits on tipping behavior. In one Lynn (2020) found that states with lower tipped subminimum wages had larger average restaurant tip percentages but smaller average coffee-shop tip percentages. Since restaurant servers are generally paid a tipped subminimum wage while baristas are generally paid the regular minimum wage, these findings are consistent with the idea that consumers tip more the lower they perceive workers' wages to be. However, this explanation for the findings assumes that consumers are aware of minimum wage laws and tip credits, which is open to question. Furthermore, the study provided no evidence about underlying processes. Finally, the data are only correlational and the observed state-level relationships could be due to other confounding variables.

In a hypothetical scenario experiment, Tang, et. al. (2021) found that people said they would tip more if they knew servers were paid \$2.13 an hour versus \$16.00 an hour. Contrary to expectations, this effect was not moderated by service quality and was not mediated by the perceived fairness of the server minimum wage. The results of this study conceptually replicate those of Lynn (2020) and the manipulation with random assignment of server wage in this study

permits stronger causal inferences than does Lynn's study. However, the processes underlying the causal effect of server wage found by Tang, et. al. remain unknown. In addition, the disparity in pay across experimental conditions was more extreme than that typically observed in the real world and this raises concerns about demand artifacts and about generalizability to less extreme wage differentials or tip credits. Finally, the explicit manipulation of server wage in this study shows that knowledge about server wages affects tipping, but not that actual server wages, which consumer may not be aware of, affect tipping.

In summary, two existing studies – one with good external but weak internal validity and one with the reverse – both support the idea that consumers will tip more the lower the wages they believe servers are paid. However, questions remain about (i) whether consumers are aware of tip credits, (ii) whether the moderately sized differences in tip credits actually observed across states causally impact tipping, and, if so, (iii) what processes underlie those effects. The study reported below addresses these questions.

### **3. Method**

#### *3.1. Sample*

Eight-hundred seventy-six Amazon.com Mechanical Turk (MTurk) workers completed an online survey about tipping in exchange for a small monetary payment. However, many respondents failed to answer every question (including 62 who failed to indicate what state they reside in), so sample sizes vary across the analyses reported below.

#### *3.2. Experimental Stimuli*

The respondents were shown a picture of people in a casual dining restaurant along with the following words. "It is Thursday night and you are having dinner in the restaurant shown

above. Your bill comes out to be \$15.69 (or \$35.69 depending on randomly assigned condition).

How much would you tip the server (in dollars and cents) if the service was: Fantastic \_\_\_\_,

Good, but not great \_\_\_\_, Rotten \_\_\_\_.”

Respondents could write in any three tip amounts they chose in response to the question.

However, tip amounts that equaled or exceeded the bill amount were dropped as implausible outliers. The remaining observations were analyzed in a mixed, within- and between-subjects analysis using the general linear model. In addition, the three tip percentages were averaged together and used in a between-subjects serial mediation analysis.

### *3.3. Thoughts and feelings about tipping*

Respondents were also asked: “Listed below are several statements expressing possible thoughts, feelings and behaviors on the subject of tipping. For each statement, indicate how much you agree or disagree with that statement. “Response options were: 1 = strongly disagree, 2 = moderately disagree, 3 = neither agree nor disagree, 4= moderately agree, and 5= strongly agree. Among the statements were two relevant to the current paper:

(i) Perceived need - “Without tips, most restaurant waiters and waitresses would make less than the standard minimum wage.” and

(ii) Altruistic motivation - “I tip in order to help waiters and waitresses make a living.”

### *3.4. Tip credits*

Finally, respondents were asked to answer several geo-demographic questions – including state of residence. State information was combined with minimum wage information from the Department of Labor website to establish the tip credit in each respondent’s state.

#### 4. Results and Discussion

Descriptive statistics for and selected correlations among the key measured variables in this study are presented in Table 1. The results of a mixed, within- and between-subjects analysis of tip credit (divided into three categories), bill size, service quality, and their interactions on tip percentages is presented in Table 2. Reliable interactions from this analysis are depicted in Figures 1 and 2. The results of serial mediation analyses using PROCESS Model 6 (Hayes, 2018) with perceived need and altruistic motivation as mediators of tip credit effects on tipping are presented in Table 3. Key findings are described and discussed below.

In these data, larger tip credits (smaller tipped minimum wages compared to regular minimum wages) were positively associated with the perception that restaurant servers make subminimum wages (aka, perceived server need), the tendency to tip as a way to help servers make a living (aka, altruistic tipping motives), and tip percentages (see Tables 1 and 2 and Figures 1 and 2). Furthermore, the apparent effect of tip credits on tip percentages was reliably, serially mediated by perceived server need and altruistic tipping motives such that: tip credits → perceived server need → altruistic tipping motives → tip percentages (see Table 3). These findings provide provisional answers to the open research questions identified in the literature review – (i) at least some consumers are aware of tip credits, (ii) actual variation across states in tip credits appear to affect the tip percentages consumers leave, and (iii) this effect is serially mediated by perceived server need and altruistic motives for tipping. The current data are only correlational, so do not permit strong causal inferences. However, the current results certainly increase the credibility of a causal interpretation of Lynn’s (2020) correlations, argue in favor of the generalizability of the causal effect observed by Tang, et. al. (2021), and provide a plausible process explanation for that previously observed causal effect.

Interestingly, the serial mediation of tip credit effects on tip percentages via perceived server need and altruistic tipping motives was only partial. Tip credits also had a reliable, direct, positive effect on tip percentages in the mediation analyses, while the two indirect effects via perceived server need and altruistic tipping motives alone were not reliable. These findings suggest the existence of some other, unmeasured mediating process that is independent of perceived server need and altruistic tipping motives. What that additional process may be is unclear, but it can and should be examined in future research.

Finally, the effects of tip credits on tip size were reliably moderated by service quality and bill size (see Table 2). The moderating effect of service quality was both small and difficult to explain (see Figure 1), so it seems l

ikely to be a Type 1 error. The moderating effect of bill size was larger and easier to explain. Tip credits increased tip percentages more when bill size, and the cost of tipping a given percentage, was small (see Figure 2). This suggests that people are more willing to compensate for low server wages with larger tip percentages the less expensive it is to do so.

## **5. Conclusions**

The results of this study (i) indicate that the public has some awareness of the tip credits in their states, and (ii) provide some evidence that consumers are motivated to make up for low actual and perceived server wages with larger tips. From a theoretical perspective, these findings support the role of altruistic motives in consumer tipping decision making. From a practical perspective, they should serve as a cautionary, yellow flag to those contemplating reductions in, or the elimination of, the tip credit. Increasing server wages in this way is likely to reduce server tip income, which would reduce, and could even reverse, the intended effects of the wage



increase on total income. Unfortunately, the current data do not permit a direct weighing of the dollar-wage benefits of lowering or eliminating tip credits against the reductions in dollar-tips of such changes, so the effects on total income remain unclear pending further research. Given changes in some states' tip credits over the past several years, multi-state restaurant chains have the data necessary to make such an assessment and should make it available to economics, hospitality or other scholars interested in the topic. Until such research is forthcoming, policy makers may want to proceed cautiously – perhaps incrementally reducing tip credits over time rather than eliminating them entirely at one time.

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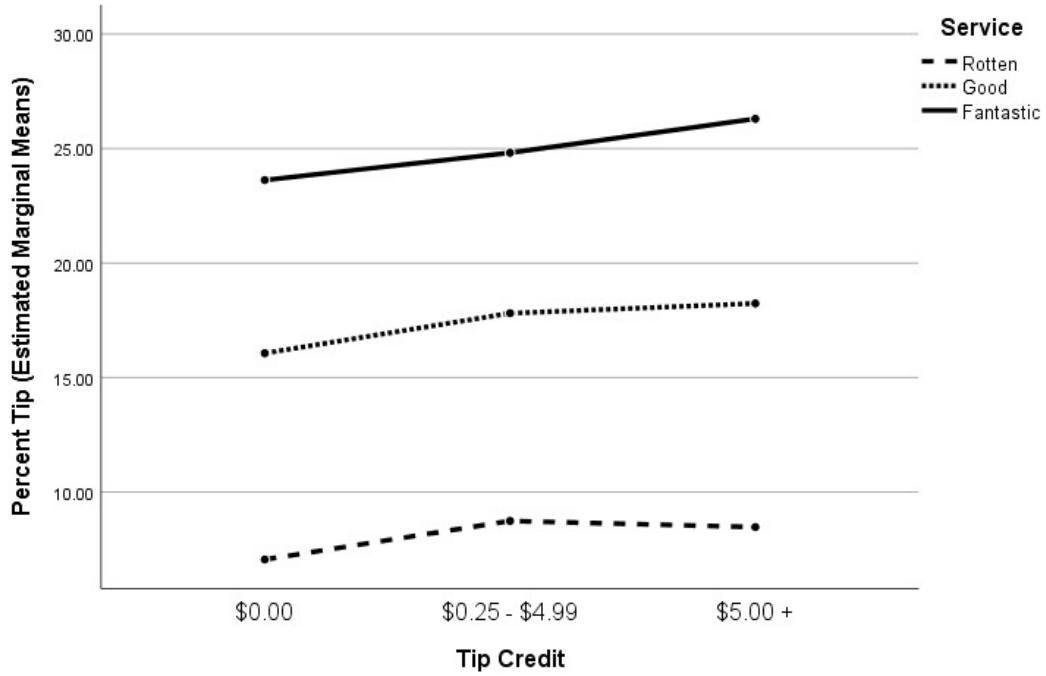


Figure 1. Tip percentages increase with the tip credit and the marginal rate of change increases with service quality.

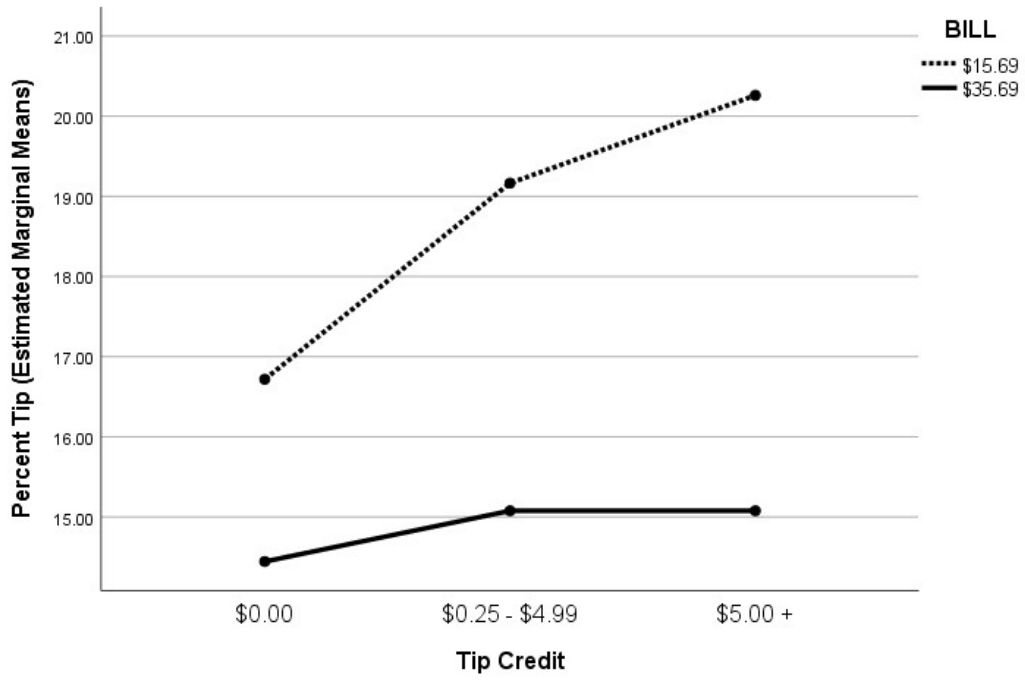


Figure 2. Tip percentages increase with the tip credit more when the bill size is low.

Table 1. Descriptive statistics for, and selected correlations among, key measured variables.

	N	Mean	Std. Deviation	Tip credit	Altruistic Motivation	Perceived Need
Tip credit (\$)	813	3.32	1.94		.09*	.22**
Altruistic motivation (1-5)	835	4.08	1.03	.09*		.31**
Perceived need (1-5)	834	4.26	1.06	.22**	.31**	
Tip % for rotten service	829	8.30	6.24	.08*	.21**	.13**
Tip % for good service	830	17.67	6.43	.11**	.24**	.11**
Tip % for fantastic service	834	25.16	9.46	.09**	.18**	.08*

Table 2. Results from a mixed, within- and between-subjects analysis using the general linear model.

	Type III Sum of Squares	df	Mean Square	F	p-value
<b>Within Subjects Effects</b>					
Service	97721.39	2	48860.69	1968.26	.000
Service x Bill	3032.00	2	1516.00	61.07	.000
Service x Tip Credit	258.75	4	64.69	2.61	.035
Service x Bill x Tip Credit	79.87	4	19.97	0.80	.522
<b>Between Subjects Effects</b>					
Intercept	581843.45	1	581843.45	5764.01	.000
Bill	7644.22	1	7644.22	75.73	.000
Tip Credit	1279.55	2	639.78	6.34	.002
Bill x Tip Credit	616.39	2	308.20	3.05	.048
Error	80048.78	793	100.94		

Table 3. Results of bootstrap tests of the direct and indirect effects of the tip credit on average tip percentage (using PROCESS Serial Mediation Model 6).

Effect	Effect Size	Bootstrap SE	Lower Limit of 95% Confidence Interval	Upper Limit of 95% Confidence Interval
Direct	.266	.114	.043	.489
Total Indirect	.091	.040	.015	.175
Indirect via Perceived Need	.032	.027	-.018	.087
Indirect via Altruistic Motivation	.007	.026	-.044	.057
Indirect via Perceived Need and Altruistic Motivation	.052	.015	.026	.084

Note: A continuous measure of tip credit was used in this analysis.  $n_{\text{observations}} = 794$ ;  $n_{\text{bootstrap samples}} = 5,000$