



Senior Project in Economics, School of Natural and
Social Sciences

Exploring the Determinants of Tipping: A Case Study of a Chain Restaurant in New York

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Abstract

Tipping in restaurants has for a long time been considered a norm and a way of appreciation for the service offered. However, tipping itself is considered arbitrary and even unfair as the basis for tipping is often not clearly defined. In this paper, I conduct a study at Chili's restaurant in New York with 20 full-time wait staff over a period of 16 weeks from May 2019 to the end of July 2019 by using data collected from surveys prompted by payment kiosks. The study uses an OLS regression to examine whether the following variables were associated with greater tip amounts per hour and per guest: the gender of the server, the attentiveness score the server received, the servers' years of experience, and the number of problems customers indicated with their dining experience. The preliminary results in this study indicate that the greater server experience (as measured by the length of time employed as a server at Chili's) is positively and significantly correlated with greater tip amounts. Attentiveness, customer problems, and the gender of the server were found to be not significant.

Section 1: Introduction

Servers work with different motivations, but what unites them are the monetary compensations that they receive as a reward for their services and commitments. Employees earn differently based on multiple reasons such as performance, age, seniority, creativity, experience, and academic qualifications, among other issues that employers evaluate in this relationship. While salaries are a common denominator in the employer-employee relationship, other issues serve as motivation not only for the continuation of the relationship, but also for enhancement of productivity that further influences stability. With the variations in the inherent attributes and factors that determine the amount of pay that people get, there is expectation that people would work differently or perhaps in commensuration of the pay.

While pay as indicated induces worker commitment at varying degrees, tips are other monetary elements that crucially define an employer and their relationship with the employees. Arsiya (2016), defines tips, otherwise called gratuity, as a token of appreciation that customers advance to the servers besides the bill for the services rendered (Arsiya, 2016). Impliedly, out of goodwill, a customer would feel obliged to part with extra cash to the server in question in acknowledgement of the quality of the services received separately from the bill relating to the products or services served. Marsh (2016) further illustrates that tips, while important in connecting the customer, the employer, and the employee in question, is not necessarily a legal entitlement to the former. It is rather a customary etiquette in some cultures which can also mean its advancement is not necessarily tied to the value or quality of the services in question.

The motivation for work has long been understood to be centered on monetary compensations among other things. As part of monetary compensations that provide impetus for

working, tipping has been studied by scholars and enthusiasts. Specifically, there have been investigations regarding the tipping patterns as influenced by the underlying factors. Among the many influencers, this study investigated the critical role that gender, work problems, attractiveness, and job experience have on both the frequency and amount in tipping.

The study was conducted at Chili's restaurant in New York with 20 full-time wait staff over a period of 13 weeks May 2019 to the end of July 2019 by using data collected from surveys prompted by payment kiosks. The study uses an OLS regression to examine whether the following variables were associated with greater tip amounts per hour and per guest: the gender of the server, the attentiveness score the server received, the servers' years of experience, and the number of problems customers indicated with their dining experience. The preliminary results in this study indicate that the greater server experience (as measured by the length of time employed as a server at Chili's) is positively and significantly correlated with greater tip amounts. Attentiveness, customer problems, and the gender of the server were found to be not significant.

Section 2: Literature Review

Tipping represents a significant amount of money with regards to a server's income. However there exists a wide range of predictor's with respect to a server's average earnings. Several surveys have indicated that female servers earn large average tips due to their attractiveness. Even though tips are not obligatory, consumers may decide the amount of tips they are to give. The knowledge about the predictors of such tips informs how employers make decisions with regard to employment or hiring of servers. Many tipping and social psychology literatures argue that the differences in server's average sales adjusted tips are largely due to

differences in physical attractiveness, sex, self-monitoring, and service ability. Physical attractiveness stands out as a major factor in tipping because it is norm driven. Consumers usually tip servants because they feel that it is expected and failure to do that brings risks such as social disapproval. Research indicates that people value the approval of attractive people and so consumers tip more attractive servants more than unattractive ones (Jacobs, 2015). There has been a direct correlation between service evaluations and the size of tips. However, it only accounts for an estimated 2% of the variability of tips (Lynn and Simons 2000, 250). A survey conducted by Lynn and Simons (2000), with respect to the average waiter earnings on the basis of attractiveness, sex, and self-rated service indicated that physical attractiveness had a great influence on a waitresses' average tip than of a waiter's (Lynn and Simons 2000, 250). On the other hand, self-rated service greatly determined a waiter's average tip. It also found out that self-rated service had a huge influence on a waiter's average tip than that of a waitresses' average tip (Lynn and Simons, 2000, 250). However, no significant differences were observed in relation to sex or self-monitoring in predicting the server's average tips (Lynn and Simons, 2000, 250). The study, therefore, found out that physically attractive servers were highly tipped as compared to less attractive ones. On the other hand, attractiveness did not play any significant role on the tips that waiters earned.

Tipping in restaurants is a common phenomenon and even customary in some cultures or hospitalities. Tipping, in this case, refers to the token in the form of money given to the waiters apart from the bill (Bujisic 253). However, the factors that affect tipping are varied and even dependent on cultural expectations. Beauty is considered one of the major factors that influence tipping in restaurants. A study by Parrett Matt (2006) sought to determine the effect of beauty on tipping and by application of restaurant tipping and they confirmed that tipping was hugely

influenced by the beauty of the server or the water. According to Bujisic (2013, 253), attractive servers in the restaurants earned about \$1261 in a year more than those considered to be unattractive. The data drawn from five restaurants in California confirm that tipping is hugely influenced by the beauty of the servers (Parret 2006). The study confirms the hypothesis that the beautiful servers are more likely to be tipped than those of lesser beauty. Women servers are more likely to get more tips than men in the same restaurants. In most restaurants, it is more likely that the servers will be women than men. The employment of female servers is economic psychology which is meant to influence the moneyed clients most of whom are men to spend in the restaurants. Women are considered fairer and gentler than men hence the notion that women will get tipped more. In the situation that women and men work in the same restaurant, the women will get tipped more. In the same vein, the study presents that 80% of the women and 40% of the men use beauty enhancing products in the morning before going to the job (Bujisic 2013, 275). In this case, it is easy to relate the preoccupation with beauty which is more in women than in men. The findings confirm the commonly held concepts of beauty and tipping.

Tipping has been part of different cultures for different reasons and whose value has been instrumental in trending up the welfare of servers. A study conducted by Parett found that in 2003, sales at full-service restaurants totaled approximately \$151 billion (Parett 2006, 1). The study further illustrates that if the tipping norm was pegged at 15% of the total sales, the n waiters and waitresses would have pocketed around \$ 22 billion in that year alone. Considering that tipping as illustrated is separate from the salaries they earn, their welfare would have risen by the same percentage if all else operated fixedly. However, tipping is not necessarily a legal requirement (Marsh) which in essence implies that having a fixed rate is not possible much less a whopping 15% thought of in the study.

While the legality and the customary issues tussle, recent studies show that the social paradigm wants tipping not only to be a frequent exercise but also that which happens at fairly high levels. As Petter illustrates, there has been a recent advocacy trending in social media in which participants vehemently propose that diners should leave 100% on the tables in form of tips to the waiters and waitresses for services received (Petter,2006). In their views, there is good reason to tip the employees as some of them have been servers themselves and candidly understand the hardships that one goes through. If the trend continues and gets adopted by all diners, the USA would lead other countries in ensuring that the welfare of these employees is well-maintained. It is a practical norm, as Lee writes, for diners to tip between 15% and 20% (Lee-Zogbesson, 2018, 3) of the bill in Canada while 12.5% is the rate in the UK although it is not enforced in which case diners can ask for a removal if the services rendered are not to the standard to warrant such generosity.

The insistence on increment and perhaps the legal enforcement of tipping in some jurisdictions paints a picture of an instrumentally important element that has the attention of the society. In the literature provided above, tipping is understandably an appreciation of services rendered and a demonstration of generosity for the services rendered. Impliedly, there must be a service rendered for a tip to be advanced but what is of interest is the determination of this gesture besides the service which is a constant. For instance, in a jurisdiction that does not enforce tipping as is the case with the UK, one may be interested to know what may prompt a person to tip a certain waiter and deny another in the same context of service delivery (Parett 2006, 2). In Parett's illustration, the behavior around and the determinants of tipping draw significant influence on multiple factors that include but not limited to table size, sex, and

method of bill settlement which relates to the ease and convenience of payment in relation to cash and other methods.

A study conducted by Gueguen and Jacob (2010) examined one hundred and seventy four restaurants customers that included sixty two females and one hundred and twelve males assigned to two groups. The study wanted to find the effects of cosmetics on tipping and the link between the tipping behavior judgment on the physical attractiveness of the server wearing or not wearing cosmetics. Results showed that waitresses with makeup stimulated the tipping behavior of male customers. It also found out that makeup had a significant effect on the perception of attractiveness of the server especially with male customers. The findings, therefore, confirm that cosmetics used by servers has a great influence on the tipping behavior of male customers. Additionally, male customers gave out more tips to female servers with cosmetics than those without cosmetics. The female servers with cosmetics are considered more attractive than those without (Gueguen and Jacobs 2010, 285). However, this is not true with female customers. The study revealed that the use of makeup or no makeup by waitresses had no significant effect on female patrons. However, the study had a methodological limitation in that only one restaurant was used as a test example where only one waitress participated. This means that it was not representative enough to come up with a strong hypothesis. Also the experimental conditions may have differed even though care was taken to ensure that the two groups with and without makeup differed.

In illustration of Guenguen and Jacob (2010) and Paret (2015), there is a spectacular role that one's attractiveness plays. In their findings, without regard to gender, an attractive employee would receive more attention than one whom customers consider as less attractive and are more likely, in response, to tip the former than the latter (Jacobs and Lynn, and Simons, pp. 245-247).

As was the case with job experience and tenure, gender was studied as a difference between men and women and their varied outcomes in tipping influence and an inter-gender comparison based on the degree of one's attractiveness.

A study conducted by Parrett (2015) surveyed customers in five Virginia Restaurants about their experiences and the servers including their tipping behaviors with regard to the servers' productivity and beauty. The study ascertained that servers who are regarded as beautiful earner approximately \$1260 more annually in tips as compared to those who are regarded as unattractive. In this study, the results also revealed that female patrons tipped attractive female servers more than unattractive ones. The explanation behind this finding is that most customers from both sexes were motivated to tip more due to a certain type of discrimination based on taste. The study confirms that servers who are considered as plain looking earn less than average looking people, who also earn less than good looking people. Beautiful looking servers are considered to be more confident with better negotiating skills. The study confirms that both male and female customers find attractive women and men more acceptable than unattractive ones. The study found out that attractive servers earn approximately 1.37 percentage points more on tips than unattractive ones. This finding can be explained as a consequence of four factors which include increased confidence, stereotypes, better negotiation skills and taste-based discrimination (Parrett 2006, 43). However, as with most studies and surveys, the results of this researched are limited in terms of inadequate amount of data collected from a limited number of establishments and in a limited geographical location. It, therefore, means that the information provided by his survey can or cannot generalize the whole situation on tipping with respect to attractiveness. A more comprehensive survey needs to be undertaken

which covers a great number of restaurants in different geographical regions. However, it is a difficult task to undertake because of the cost factor.

A study conducted by Jahan (2018) attempted to analyze customers' tipping behavior to assess factors that determine why people tip servers and the size of tip they are likely to part with in US restaurants. The study considered about 2,334 home and away eating events. It considered factors such as demand for personal interest and demand for social interest in determining tipping decisions and sizes. The findings of this study indicated that the average tip size was largely a factor of the tip scenario and the specific restaurant in question. The hypothesis was tested and confirmed that cultural and demographic factors had a great role to play in the tipping behavior of customers and more so on the tipping size. According to this study, it is to be deducted that tipping decisions and sizes largely depend on social interest. A more attentive server is most likely to be tipped more than a less attentive one. It is because consumers perceive tipping as a function of compliance to social norms rather than that that relates to self-interested rational behavior. Customers who view servers in a cultural and social dimension of attentiveness to their needs rather than to the self-interest of the server's personal interest tend to give more tips to those servers than they will actually do to less attentive ones (Jahan, 2018). If they perceive a server as being concerned with their specific needs as opposed to the server's personal interest they will reward the server in question. Issues such as empathy, closeness, attention to detail, and care, among others come into play. However, this study had its own limitations which include the issue of shared interests such as cultural similarities. The study is not, therefore, representative in terms of the general outlook of things. It does not address issues such as different cultural orientations on the part of the customer and the server. Customers with a different cultural background to that of the server do not share the same cultural norms. The

question then arises if such a customer will tip a “culturally correct” server more than that who is “culturally incorrect” given that they do not share the same social norms.

The topic of inequality in wage distribution in close reference to tipping at restaurants servers has been contentious. According to McAdams and Massow (2016), in their study that they conducted on restaurant operators, they observed that cooks earned more than the average staff when it came to tips. Research shows that the average tips paid to servers per hour was in the range of \$18. However, cooks in this survey registered an average earning more than \$11 per hour in comparison to their hourly incoming earning of \$8.60 per hour. This was more than \$3 dollars of their average earnings per hour (McAdams and Massow, 2016). The main reason for this is that most customers viewed cooks as the key participant in improving their consuming experience. They are viewed as performing better than the average waiter or waitress in the front office. In the minds of the consumers, they view cooks as deserving more than waiters. This is a case of worse and good performance. However, it does not mean that other staff are worse performers but the perceptions of consumers tend towards who brings the best value to their consuming experience.

In real life, one would intimate that there are often more responsibilities at the front-of-house than there are in the kitchen. However, most customers would gladly reward the kitchen staff to appreciate the good experience they have had. This means that kitchens are adding more value than the front of the house in that they are the producers of a satisfying experience in any establishment. It is a social norm which is well ingrained in most social practices. To show an appreciation of services well-delivered. Service quality can, therefore be considered as a factor that contributes to higher tips from consumers. On the other hand, worse restaurant servers usually get a cold reception and are rewarded dimly. Since tipping is a form of social norm,

tips to bad restaurants servers are less than those who serve with dedication. However, the study identified certain limitations associated with the tipping culture in relation to performance by servers. There is a lack of a clear objective in the study on the importance of the various issues of performance. For instance, the perception of performance and productivity is subjective and cannot be generalized. Different people view good performance of service in different ways and this is a fact that requires psychological analysis.

However, a study confirms that cultural factors can affect the tipping trend which in this case depends on the client and also in part by the servers. The author shows that Americans tip more from the need to show appreciation for the services offered (Artuğer and Burçin 2013, 77). The service offered in this case can relate to beauty when further indulged. The author explains that the beautiful servers are more confident because of their appearance are more confident than those who are not attractive. In this way, they can strike a rapport with the clients faster, therefore, portraying themselves as favorable (Artuğer and Burçin 2013, 35). The author adds that beautiful server has better oral and interpersonal skills which could translate to their getting tipped more. However, the author adds that beauty is varied and most of the attributes are client dependent. However despite his assertion, there is the general agreement on who is beautiful and who is not from the data on the earnings. Beauty, therefore, accentuates other factors influencing tipping.

Despite the inclination to beauty, standard procedure in services such as the quality of the food and the conduct of the server influence the tipping. In the study by Artuğer and Burçin (77), tipping was encouraged by quality service from the server in elements such as courtesy in their conduct, clean plates, quick service, and food at the right temperature just as it was requested by the customers. The conduct of the server such as apologizing when they had made a mistake also

adds to their desirability leading to tipping. While there are individual propensities that can influence tipping, the general expectation in the service and the conduct of the server will determine the tipping. The studies show that tipping is tied to the expectation of the client and while some of the clients will tip out of personal obligation or appreciation, the beauty, service, and conduct of the server greatly influence the tipping

The subject of tipping is one that is greatly influenced by problems faced in particular establishments. Sometimes such establishments experience different types of problems ranging from worker apathy, poor services and low productivity, among others. In such scenarios, customers tend to reward workers in a dismal manner given the type of services they receive. Problems invite more problems that is the reason why waiters who are high performing tend to be rewarded lower than other waiters in high performing establishments.

In this study, it is envisaged that establishments that have employed such staff have a duty to ensure that the services they provide meet the expectations of the clients. In so doing, they are able to lift the stature of such employees so that customers can view them in a positive manner. It then concludes that workers who are engaged in low performing establishments tend to be tipped lower than workers in high performing ones due to the problems that they have to grapple with. Problematic work situations are observed by customers who then determine the size of tips they give to servers.

Workers who work in less problematic situations tend to receive higher tips than those who work in establishments that are rife with problems. However, compared to the worldwide tipping average, Norway, which is the country in question, has no statistical evidence to confirm this assertion. Nonetheless, the US tip average size for restaurants without problems stands at 18.8% in the food and beverage industry (Wisneski, 2004). This means that restaurants which

exhibit less problems enhance the chances of their waiters and waitresses being paid more than those that are steeped in problems. This is a social norm issue that dictates that customers tend to tip more professionals who exhibit less problems because they are considered to be more efficient.

Tipping is the act of issuing a certain amount of money to a waiter who is serving you a meal and is commonly 15% of the total costs of the meal. As this subject has been in controversy for many years, Gershon (2020) conducted research to answer the question of why people tip. The report also reveals the reaction of the customer towards tipping; whether they are in support of in contrast with it. Gershon also found out that tipping started in England where it was initially issued as a bribe to the waiter before it spread to other parts.

In the article, it was also revealed that the reason behind the spread of the idea of tipping was motivated by the fact that business owners felt that their burden of paying the waiters was relieved to their advantage. Also, as tipping spread, it became part of the culture in what was termed as a “social institution” where if one failed to issue a tip, they would feel guilty as it had become a responsibility (Gershon, 2020, 3). Sooner, it was embraced to be a “rule of thumb.”

The report also reveals that the customer, in their decision to give a tip considers factors like whether the waiters are offering a professional service and whether they are responding by subtle things like friendly smiles (Gershon, 2020, 2). Also, it was found out that the more the servers made rounds to and from the table, the higher the diners appreciated the effort and gave out the tips wholeheartedly. Also, customers were found to have that virtual belief that by giving the tips, they were creating a better environment that will be of benefit to them even later on. However, the report revealed that tipping could also be affected by the number of singles dinners

that happen to have in their pockets. Lastly, a rough calculation of determining the reasonable amount of a tip by the customer also determines the frequency of tipping.

Again on the issue of attractiveness and job performance it should be noted that female waitresses are tipped more than less attractive ones (Parret 2006). However, the issues of performance also come into play because there are instances where more attractive waitresses provide mediocre service. The question then arises if they should be paid more than what they have delivered just because they are attractive. On the other hand we might have a situation where less attractive waiters or waitresses perform well. Research has proven that beauty at the workplace has a significant role to play when it comes to tipping (Lynn and Simons 2000, 250). Male patrons are more likely to tip attractive female waitresses more than plain looking ones. On the other hand, female patrons are more likely to tip highly productive female waitresses regardless of their physical attributes. This revelation shows that there is a gender discrimination attribute on the part of male patrons on female waitresses. On the other hand, male waitresses also receive more tips from female patrons regardless their performance.

However, they get a raw deal from tier male customers who prefer better services. Again, the limitation experienced in this research is the issue of representation. The sampled restaurants and participants cannot conclusively confirm that it is an issue that applies across the board. However, given the psychological perspective it is only logical to assume that normal male customers are not impressed by the attractiveness of fellow men but on how they go about their activities. On the other hand, most male patrons will tip an attractive female server more than an unattractive one because of psychological reasons. Males are more attracted to beauty and will express this feeling by rewarding a beautiful servant even though the service was not satisfactory. This then confirms the fact that attractive lady servants have more advantage than

less attractive ones when it comes to tipping from male customers irrespective of the quality of their services.

There is also the issue of average tips. Average tips mean that customers will always give tips to servers not based on their attractiveness or their performance. This is true because on average most servants are given, more or less, the same amount of tips by customers irrespective of their performance or attractiveness. This case scenario applies in many instances but there are many issues that do not conform to this fact. A study by Ati Mayouf (2013) reveals that most customers give an average tip to a server without regarding their attractiveness or performance. A tip is purely based on the standard percentage that a customer feels is right for the server irrespective of gender, attractiveness or otherwise. However, the study also found out that customers tip more to servers when specific situations and attitudes in a certain service operation take place. Servers will actually receive more tips when they practice specific actions. Nevertheless, tips will always be average for normal services offered. However, the limitation of this study is that most customers share similar beliefs about tipping and, therefore, there is a need to identify what customers view as negative or positive action in any workplace environment. It is hard to notice a customer's attitude to determine whether it is positive or negative.

Section 3: Hypotheses

The study intended to find answers concerning tipping and the critical factors that determine its rate and frequency. As detailed in the literature review, the model in this cases was through a quartet model that sought to clarify the varying effects of gender, work-related problems, attentiveness, and work experience. In doing so, the following hypotheses were generated from the literature review and tested in this paper.

H1. There is a positive relationship between one's attentiveness and tipping

In this case, the hypothesis formed was positive and inductively sought to connect job attentiveness and attention to details with outcomes as manifested in the trend and pattern of tipping. The theorized approach in this case was that when an employee is attentive at work, they would attend to the needs of the clients in the best approach to and beyond the standards expected. The higher one's attentiveness, the higher would be their productivity. With this in mind therefore, the diners or customers on experiencing the attention of the servers would feel the need to tip. By doing so, and as hypothesized, there would be a positive relationship between the two variables

Attentiveness in simple definition refers to the ability to give attention to what matters as and when there is need. The lack of attention according to Kazryn, Kulpezynski, and Piotrowska, (4) decreases worker productivity It entails a host of issues that relate to observation, patience, and active listening with a proactive approach of taking action in ensuring that everything operates as seamlessly as possible.

H2. There is a positive relationship between job experience and tipping

In this hypothesis, the study introduced the second variable which relates to one's longevity of tenure as an independent variable that determines tipping patterns. In this case, the idea was to draw differences in the levels of experiences and their varied outcomes. The study proceeded with the idea that experience increases or otherwise indicates one's ability to perform their roles better than in cases where they have no experience. With greater ability to perform, the expectation is that customers would be motivated the employee in question for the quality of services rendered.

The work experience of an employee explains how well they know their work based on previous interactions with the same issues in different and same context. Experience is highly linked to the number of years or unit time that someone spends at their work in a particular position. By inference, it is expected that, with all else working fixedly, an employee who has been clean lavatories for over two or more years would have a higher level of experience than one who is barely six months into the job. The outcomes would be manifested in elements such as the results of cleaning on assessment, the speed and thoroughness of cleaning, and their creativity in handling issues related to their work. It is this concept that was used here for servers by virtue of the unit time, measured in months, they had been at work.

H3. Work related issues and problems are negatively associated with tipping

It is unquestionable that the relationship and interaction between the servers and their customers takes place at the workplace. As an operating environment, the status of the workplace anchors on multiple issues that determine its rating and how servers discharge their duties and how customers respond in return. The issues are diverse and entail the details to which customers are sensitive including but limited to the size and arrangement of the tables, the cleanliness of the place and plates, the mode of payment and its convenience, and the general quality of the workplace in terms of response to customers and employee treatment. The combination of all these elements formed the variable and studied in consolidation to establish their effects on tipping practices. It in essence implies that the more there are work-related problems, the less would be the tips.

. In our case, and as indicated in the hypothesis, work place issues related to the general status of the store that is the management's arrangement of all things that matter in the basics of

sense to customer comfort. They included but not limited to the sizes and arrangement of tables, the cleanliness and fanciness of the place and plates, and the mode and manner of bill settlement. According to their nature, problems and work-related issues were not under the ascendancy of the servers, but rather the management's. Impliedly, the management invisibly influenced tipping in multiple ways through these elements.

H4. Gender difference has a significant influence on tipping frequency and amount

As is widely studied and understood as detailed in the literature, gender has been concluded to be one of the most critical factors that shape and determine the trends of tipping. In this analysis, the common knowledge is that women attract higher tips and receive them more often than is the case with their male counterparts. Without an observation to gender balance and diversity at the workplace, most restaurants and similar business, as hypothesized, employ more women than men. Whereas male servers also get tipped in the context of their work, the amount and the frequency with which they get tipped is significantly lower than that of women.

Section 4: Data and Variables Description

The study was conducted at Chili's store in New York with 20 full-time wait staff over a period of 16 weeks beginning on May 2019 to the end of July 2019 by using data collected from surveys prompted by payment kiosks. The study examined whether the following variables were associated with greater tip amounts per hour and per guest: the gender of the server, the attentiveness score the server received, the servers' years of experience, and the number of problems customers indicated with their dining experience.

Independent Variables:

Attentiveness: This variable was measured by customer responses about the server's attentiveness toward the customer. The customer response was intended to capture how well the server met customer comfort, responded to their requests promptly, and made available everything that a customer needed or otherwise wanted to make their stay worthwhile. For each server, the restaurant kiosk software generates an average server percentage score based on attentiveness scores from the 13-week period. Attentiveness ranges from 33% to 86% for the least and most attentive servers, respectively.

Problems: Customers could indicate whether they had problems during their time at the restaurant. However, one issue is that any given customer problem could be associated with a number of issues unrelated to the server. For example, problems could include the sizes and arrangement of tables, the cleanliness and fanciness of the place and plates, and the mode and manner of bill settlement. Thus, some aspect of problems and work-related issues were not under the ascendancy of the servers, but rather the management's. However, these problems associated with management decisions do not vary across servers, and thus there is not a bias in the measurement of this variable. The variable is measured as a percentage of 'problems' that customers, as associated with each server. For each server, the restaurant kiosk software generates a server average percentage score based on problem scores from the 13-week period.

Work Experience: Work experience is measured in two ways. First, work experience is a binary variable measured by how long they have worked at Chili's. I group servers into 'below one year of experience' and 'above one year of experience'. Servers who have greater than one year of experience at Chili's = 1 and servers who have less than one year of experience at Chili's = 0.

Second, I use experience as continuous variable that measures the number of months each server has worked at Chili’s. The continuous variable that ranges from 3 to 47 months.

Gender is collected with each server’s information. This is a binary variable where 1 = female, and 0 = male. There were an equal number of men and women.

The dependent variable was tips per guest per hour. This activity was measured depending on the number of guests served hourly by a waiter and the amount of tips they received.

Section 5: Results

The results for the first regression with experience as binary variable are reported in Table 1 below. As shown, experience is significant at the 10% level with a coefficient of .41 – indicating that when servers move from the ‘below’ average to ‘above’ average tenure group, tip amounts increase by 41 cents. Attentiveness, Problems, and Gender are not significant.

Table 1

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.51182661							
R Square	0.26196648							
Adjusted R Square	0.0774581							
Standard Error	0.49499156							
Observations	21							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	4	1.391506363	0.347876591	1.419808017	0.272503471			
Residual	16	3.920266253	0.245016641					
Total	20	5.311772616						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.18919266	1.219387584	0.975237634	0.343957588	-1.395793539	3.774178865	-1.395793539	3.774178865
Problem	7.34318269	4.986994979	1.472466428	0.160292891	-3.228774399	17.91513977	-3.228774399	17.91513977
Gender	-0.03799154	0.265254205	-0.143226892	0.887899276	-0.60030533	0.524322259	-0.60030533	0.524322259
Attentiveness	2.18482056	1.459347424	1.497121608	0.153828053	-0.908857776	5.278498901	-0.908857776	5.278498901
Experience	0.41528786	0.229388036	1.810416404	0.089050627	-0.07099305	0.901568774	-0.07099305	0.901568774

The results for the second regression with experience as a continuous variable are reported in Table 2 below. Experience is marginally significant at 11% with a coefficient indicating of .015 indicating that for every additional month the server is employed at Chili's, the tip amount increases by about 2 cents. Attentiveness is also close to significant (12%), and problem and gender are not significant.

Table 2

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.49561894							
R Square	0.24563814							
Adjusted R Square	0.05704767							
Standard Error	0.50043723							
Observations	21							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	4	1.304773926	0.32619348	1.30249499	0.310940927			
Residual	16	4.00699869	0.25043742					
Total	20	5.311772616						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.03841038	1.251892646	0.82947239	0.41904093	-1.615483473	3.69230423	-1.6154835	3.69230423
Attentiveness	2.47546106	1.481181084	1.6712751	0.11410782	-0.664502568	5.61542469	-0.6645026	5.61542469
Problem	7.35880149	5.049513542	1.4573288	0.1643725	-3.345689027	18.063292	-3.345689	18.063292
Gender	-0.1047138	0.262422516	-0.3990274	0.69514824	-0.661024666	0.4515971	-0.6610247	0.4515971
Experience	0.01522937	0.009004782	1.69125373	0.11017064	-0.003859914	0.03431866	-0.0038599	0.03431866

Thus, the regression analysis shows there is some moderate support that experience is associated with greater tip amounts, while attentiveness, problems, and gender are not significant. Between the two regressions and among all the variables, gender was the least significant variable.

Interestingly, women were more attentive at work with an average of 76% than their male counterparts who averagely scored only 65% in the same context. The outcomes attributable to

these differences manifested in the likelihood of guests returning as a sign of satisfaction were mixed. For instance, an employee with an attentive rate of 56% had 94% of guests hinting at returning as compared to only 83% for an employee with an attentiveness rate of 86%.

Discussion and Limitations

In the findings, worker experience is a chief factor that centrally explains and determines tipping patterns and trends. Contrastingly, the literature conducted indicates that gender is a crucially influential factor in the determination of tipping frequencies and amounts. Women are more likely than men to be tipped as previous researches established (Polit and Beck, pp. 1452-1455). It is surprising given the statistical weakness that gender exhibited in this study in comparison to other factors. It could however be attributable to the limitations portrayed in the number of observations, the sample size, and the period of study. As Polit and Beck illustrate, sample size is a major element in the determination of the credibility of results and their subsequent generalization (Polit and Beck, pp. 1452-1457).

My study used had 20 observations, which is a small number given the variables and the relevance of tipping as outlined. This has an influence on the degree of error part of which may explain the weakness observed in gender. Also, with generalization, it would have been more credible not only to use a bigger sample size, but also to draw it from multiple stores and not one as the case was.

Conclusion

Tipping is a gratuity that servers receive from customers as a percentage of the bill for the quality of services rendered. Its legality is varied as some jurisdictions enforce it while others

exercise it as form of gratitude and etiquette. Nevertheless, it is an important element that connects waiters and waitresses to their customers and helps improve their welfare. Tipping anchors on multiple factors as studies have previously established. Gender and similar issues such as beauty and attractiveness have been found to influence the patterns and trends. However, this study established that there is very weak link between gender and tipping as compared to other factors under consideration. Experience, especially as measured that of more than one year working, indicated a significant and positive relationship with tipping amounts.

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