

Self-ordering Effects on Restaurant Tipping Percentages

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Abstract : The restaurant industry saw significant increases in take-out and delivery orders because of the in-person dining ban during the pandemic. While restaurants had telephone and online orders for take-out and delivery, they were unprepared for the unexpected surge in volume and for the fact that take-out orders accounted for such a large portion of their business. The purpose of this study is to look at how self-ordering affects server tips and wages.

Data was collected from 2100 participants on the percentage they tipped when dining at a moderately priced restaurant (\$15-\$30). They were asked what percentage you generally tip at a full-service restaurant when a server took your order and when you self-ordered food? Questions were also asked on attitudes toward tipping. The findings showed a significant difference in tipping behavior between server ordering and self-ordering. The findings showed negative attitudes toward self-ordering in restaurants in which participants were likely to leave a 0% tip. Customer self-ordering has increased considerably, which has impacted tipping percentages. The decrease in tipping percentages can have a direct effect on server income. Future research on attitudes toward tipping could show that no matter how good the service is the consumer will not tip.

Keywords: gratuity, self-ordering, server ordering, tipping

Introduction

It is hard to determine when the act of tipping started as it could have been in existence as far back as the Mesopotamian Civilization. What we do know are claims that tipping began in the late Middle Ages “when a master or lord of the manor could give a little extra money to a servant or laborer, whether from the appreciation of a good deed or from compassion” (Segrave, 1998). Others have attributed the tipping origins to sixteenth-century England, coffee houses, and later local pubs in London providing a brass box or urn at the door where customers dropped a coin in the box if they wanted “To Insure Promptitude”

which two centuries later evolved to notes stating “To Insure Promptitude” with coins attached (Schein, Jablonski, & Wohlfahrt, 1984) (Brenner, 2001) (Segrave, 1998). It seems logical to understand how this practice grew and why people tipped in advance by putting money in the urns to get quicker service.

The common belief is that tipping in the United States started from the experiences of wealthier Americans traveling to Europe in the 19th century who upon their return home, wanted to show that they had been abroad and were familiar with the European customs (Schein, Jablonski, & Wohlfahrt, 1984). By 1895 the common restaurant tip in the United States was 10 percent of the total bill while European restaurants maintained a 5 percent restaurant tip (Azar, 2020).

By 1910 there were an estimated five million workers in the United States with tip-taking occupations which was more than 10 percent of the labor force (Segrave, 1998). The substantial extent of tipping gave some tipped employees relatively high income, and employers both in Europe and the United States sometimes tried to take these economic rents from the workers either by taking the tips or by charging employees for the right to work and earn tips (Segrave, 1998) (Azar, 2004) (Aydin & Acun, 2019). Many of the service industry workers depend on tips as their main source of income especially those who make substandard minimum wages (Seiter, 2007). There were complaints documented in the 1800’s by The New York Times that “Tips were designed by restaurants and hotels to avoid paying proper wages” (Topics of the times, 1899).

Tipping

Gratuities and tips are synonymous as they provide a gift or a sum of money given voluntarily without obligation for a service performed or anticipated (Merriam-Webster, 2023). Tipping has been a custom in the United States since the late 1800s, long before the United States implemented a minimum wage in 1938 (Sachdev, 2003).

In America up until the 1850s lodging rates included meals with all customers eating together with the owner of the private residence which was called the American Plan. Tipping was not appropriate for a houseguest in a private residence. As cities grew so did the hotels where the owner no longer ate with the guests. Meals were still included with lodging and food was now served by employees. Tipping was looked upon as a bribe to get more food and was discouraged by management. Late in the 1800s hotels started moving away from the American Plan of including meals in the room rate. The American Plan was being replaced by the European Plan which charged separately for meals. By the 1920s most hotels no longer included meals except for some of the resorts. Dining managers no longer saw the tips as bribes and welcomed the tips as a complement to wages. Tipping was still very controversial and was illegal in some states (Mentzer, 2013).

Tip Income

Tipping income can be controversial, for example, restaurants do not provide true pricing on their menus. The prices provided are generally 30% less than the actual cost. Menu prices have a legal expectation in some jurisdictions with approximately 10% in taxes which must be paid but are not shown. The other expectation is a 20% tip for the server as part of their wages for taking your order and bringing your food.

In 2015 Danny Meyer from the Union Square Hospitality Group announced their restaurants would not take tips and would pay their workers a fair wage. Five years later that policy changed and subsequently, they reverted to accepting tips (Lipton, 2020) (Moskin, 2020). Meyer reversed policy during the pandemic in support of allowing his employees to make extra money “that tips could offer” (Morales, 2022). His original restaurant Daily Provisions operated in a 450-square-foot space that featured bar seats and standing-only tables which mostly operated as a takeout business (Editors, 2017), when it was easier to operate tip-free. However, Daily Provisions now provides outdoor seating and service that encourages tipping behaviors. The need to stay competitive with the culture also makes it easier to be a tipping establishment without having to explain what is different. Currently, tips are the most competitive way to get the best servers. (Lipton, 2020)

Full-service dining can provide an exceptional experience with outstanding cuisine and a unique atmosphere. Tipping can be beneficial for employers who can keep those wages out of food costs, for customers who enjoy empowerment, and for employees who have an opportunity to make good wages. An argument for tipping is the best get the most tips and those not as skilled should look elsewhere for work (Gill, 2018)

Social Norm

Tipping is considered a social norm within many service industries. Some people tip because this is a social norm and when they do not follow the norm, they feel guilty, social disapproval, and embarrassment (Azar, 2003). Tipping is unique in that the customer, not the employer, provides a major portion of the employee’s wage. The amount being tipped is not insignificant (Becker, Bradley, & Zantow, 2112) as past research studies have shown the positive impact of having the desirable server characteristics. Historical evidence shows that service quality is important but the primary reason for tipping is to conform to the expectations and pressures of social norms to avoid embarrassment (Azar, 2004).

Restaurant workers rely on tips for a sizable percentage of their wages. Across the US servers in many states receive only \$2.13 per hour which is the Federal minimum wage rate. Tipping becomes a significant portion of their income. Customers will also factor in the minimum wage, the lower the server minimum wage the higher the tipping percentage rate (Tang, 2022). If customers stopped tipping would wages then be adjusted to match the lost tips? If so, then

not tipping could be a benefit for both the customers and the servers (Holland, 2009).

Tipping is a complex voluntary economic behavior that spans many service professions but is most associated with restaurants (Lynn & Brewster, 2020). Tipping is considered important and widespread but interestingly an expense that consumers are free to avoid. Encouraged as a social norm, tips are not legally required and are not given until after services have been rendered. In fact, customers leave tips even when they are infrequent customers of the establishment and are unlikely to encounter the same service worker again (Lynn M., 2006). Tipping after the service may not correlate directly to the level of service received. Then why tip?

There are five distinct motivations for tipping such as (1) strategic motivation to obtain better future service, (2) as a reward for service, (3) compassion towards servers, (4) a desire to conform with social norms, and (5) impression concerns over avoiding embarrassment. (Kakker & Li, 2022) (Azar, 2020) (Lynn M. , 2018).

Earlier studies revealed the quantity of the tip tends to vary based on service factors such as service quality, size of the bill, method of payment, characteristics of the server, frequency of visits, interactions with the server, server attractiveness, customer demographics, customer mood, weather conditions, and background music, etc. is recorded in detail (Aydin & Acun, 2019). Other characteristics such as how the server handled the bill, repeat server, server visibility, amount of contact time, personally close, and customized service have also been studied (Lynn M. , 2019). The experiential side of marketing and tipping shows that consumers will tip more when their goal is to impress others (Netter & Raghurir, 2021). One negative aspect of tipping is the subjective nature of tipping that relies on the customer's discretionary generosity and personality and in some instances, servers deal with sexual harassment when they are just trying to earn a living (Mensah, 2019)

Recently, limited-service restaurants have been contrasted with full-service restaurants in that they have traditionally not been establishments where customers were expected to tip employees (Karabas, Orłowski, & Lefebvre, 2020). Nonetheless, a growing number of limited-service restaurants have implemented tip requests while customers are completing transactions. For example, the electronic screen can be programmed to prompt the customer to tip. The motivations for tipping behavior have received significant attention across service industries (Azar, 2004) (Lynn M. , 2018).

Pandemic

The public health and economic crisis in March of 2020 from the COVID-19 pandemic immediately impacted hospitality service workers. Stay-at-home orders and banned in-person dining changed the restaurant industry (AJMC Staff, 2021). Full-service restaurants experienced a jolt to their business models that were wholly predicated on in-person dining. Businesses closed permanently

because of the loss of revenues from in-person dining during the lockdown period. What was lost from closed dining rooms was partially recovered as restaurants experienced significant increases in take-out and delivery orders. It was no surprise that customer self-ordering for take-out and delivery also increased significantly. What was not clear however was the impact on tipping as customers now did the work of ordering and in many instances prepaid for meals with optional adding on of gratuities.

Some workers appeared to reap the benefits of generous patrons in empathy for the plight of the situation, but this may have been short-lived once restaurants returned to in-person dining (Johnson, 2021). In April 2020, patrons tipped 23.5% at the start of the pandemic but had since declined to 19.8% in March 2022 (Morales, 2022). Interestingly, in one poll of 2600 adults in June 2022, those results showed that Americans were slightly worse tippers in sit-down restaurants than prior to the pandemic with 73% tipping in 2022 versus 77% in 2019 (McClanahan, 2022). Central to the argument is that servers and take-out workers need to be paid an affordable wage that is dependable, professional, and not heavily reliant on tips (Ren, 2021). Additionally, the extra costs for take-out and delivery will need to be factored into the overall cost of food and operations. However, adding a service charge has not been positively accepted as it turns into a service tax (Newman & Estes, 2018).

Restaurant Takeout Increases

Restaurants have had phone orders for take-out and delivery, but few had websites to order from. When the Pandemic closed restaurants in March of 2020 to indoor dining, revenues fell by as much as 90% while takeout and delivery increased by 76% which was not enough to offset the revenue loss from indoor dining (Lucas, 2020).

Many restaurants that have closed their indoor dining have not reopened and those that did had to partially modify operations in response to the new demands from increased takeout and delivery. Other restaurants reacted quickly to meet this demand via new electronic screens, websites, apps, automated payment, and phone orders. Workers quickly adjusted to new job duties in the preparation and processing of take-out and delivery orders where some became order takers and food givers rather than servers providing an experience. The restaurants had to coordinate takeout and delivery stations, integrate new processes and automation, and schedule dedicated phone order takers (Nuckolls, 2022).

Prior to the pandemic, take-out orders were not a significant percentage of sales. Restaurants and other food markets started focusing on grab-and-go items. The additional cost for takeout containers, silverware, napkins, plates, and bags was absorbed by the restaurant (Stuckey, 2020). During the pandemic for a restaurant to survive, they had to quickly adjust. Websites were quickly revamped with new menus, online ordering, and delivery apps. Online orders were prepaid which provided contactless payment interactions (EHL Insights, 2022). Restaurant lobbies were adjusted or remodeled to handle takeout orders.

Customers switched to credit/debit cards which provided all sales with a service and additional expense for the restaurants. The larger restaurant chains were quicker to adapt to the changing technologies as many already have self-order technology and they just needed to expand and update. Many smaller chains were forced to update their technologies to handle the new self-ordering demands and accept online credit card payments. (Nuckolls, 2022).

The pandemic brought about the utilization of new point-of-sale technologies for self-ordering beyond a telephone plus a higher demand for disposable utensils, crockery, and takeout containers. Restaurant meals can now be self-ordered from the business website, a third-party delivery site, an app, phone call, electronic kiosks, or counter ordering. This technology-driven approach allows customers to place their own orders without interacting with the servers. The lack of server rapport and interaction during self-ordering would have an effect on the server's tip.

Tips Decrease

Indoor dining pertains to being served food and beverages while seated at the place of consumption. Part of the dining experience includes alcoholic beverages. Alcoholic beverages on a national level average are approximately 20 to 25 percent of restaurant sales. Alcohol is a large part of restaurant profits (Thacker, 2023). Laws were adjusted and some restaurants were able to sell alcohol to go with food orders during the pandemic, but it was very minimal. Servers were now losing the alcohol sales lowering the guest check and tips.

Alcohol purchases did increase during the pandemic. In Great Britain household alcohol purchases had increased by 40% (Anderson, Llopis, O'Donnell, & Kaner, 2021). In the United States during the first quarter of the pandemic restaurant sales fell 27% while alcohol purchases increased by 20% (Castaldelli-Maia, Segura, & Martins, 2021). Following the first quarter of the pandemic alcohol sales had a 51% increase in national sales and a 262% increase in online sales (Mandal, 2020).

The pandemic changed how consumers paid for their purchases with many businesses going cashless. Some eliminated cash payments and only accepted credit/debit cards. The loss of cash had a negative effect on restaurant server tips in that consumers will tip more frequently with cash versus paying by credit card because tipping behavior is publicly more observable which provides a positive social image. Tipping is significantly higher when paying by cash, but customers dining alone are significantly less likely to tip or will tip significantly lower amounts especially when paying by cash, and men are significantly more likely to tip larger amounts relative to women (Kakker & Li, 2022). Therefore, it seemed logical that the loss of indoor dining and cash payments would affect the overall tip percentages for restaurant servers.

As a motive for this study, the authors sought to better understand the tipping phenomenon and changes that occurred during the pandemic and post-lockdown

period where another study reported that self-ordering at restaurants increased at a whopping rate of 76% for take-out and delivery orders (Lucas, 2020).

The authors here were looking at the tipping percentages and the attitudes of the participants toward server ordering and direct ordering of food within mid-priced restaurants. The study did not look at why people tip the amount chosen. For example, the survey did not ask about rapport dynamics or customer-server interactions whether positive or negative, which could have a significant effect on tip size (Medler-Liraz, 2020). With the increase in takeout and delivery business, the front-line employee or point of contact worker becomes a facilitator in a transactional sense without the ability to build a rapport and cater to the diner's experience in a transformational sense or in the way a server can in a full-service restaurant. Subsequently, this study sought to focus on how self-ordering versus server ordering affected the overall tipping percentages.

Attitude Toward Tipping

To assess attitude towards tipping, we employed Muehling's Attitude toward Advertising Scales. Attitude toward advertising showed that a consumer's attitude toward advertising in general will affect their overall attitude toward all advertisements (Muehling, et al., 1991). If a consumer already has a negative attitude to all advertisements, then no advertisements will be effective to change their behavior. Following the attitude toward advertising theory we determined a customer's overall attitude towards tipping would have an overall effect on the percentage they tipped. Participants were asked "My feelings towards tipping in full-service restaurants is and My attitude towards tipping in self-ordering restaurants is". The attitudes toward tipping Likert 5-point scales were utilizing with the statements Bad – Good, Unfavorable– Favorable, Negative – Positive, and Not Important – Important."

Methodology

The primary method for data collection in this study involved snowball sampling with an online survey. Upper-level market research students from a Southwestern University distributed the survey link via their social media networks. The participants responded to questions from Qualtrics survey about their tipping behavior and attitude toward tipping in both full-service and self-service restaurants. The surveys were collected at three different times and are shown as Study 1, Study 2, and Study 3. No incentives were offered to participate in the surveys. The restaurant service dining style for the study was limited to the casual dining segment. The survey instrument asked questions on the food ordering preferences and tipping amounts for self- ordering and server ordering of food.

Study 1 A total of 529 participants took part in a survey conducted in the summer of 2021 (Mean Age = 29.55; 58.0% female). To measure tipping percentages for full-service versus self-service restaurants, participants were tasked with responding to two questions: "What percentage do you generally tip

at a full-service restaurant when a server took your order?” and “What percentage do you generally tip at a self-ordering restaurant when you ordered your food?” (1 = 0%, 2 = 5%, 3 = 10%, 4 = 15%, 5 = 20%, 6 = 25%, 7 = 30%).

To assess their attitude towards tipping, we employed Muehling’s Attitude toward Advertising Scales (Muehling, et al., 1991). In particular, participants rated their feelings using a 5-point scale for statements like “My attitude towards tipping in full-service restaurants (versus self- service restaurants) is Bad – Good, Unfavorable – Favorable, Negative – Positive, and Not Important – Important.”

Results

Tipping Percentage:

The Wilcoxon Signed Rank Test revealed that in line with predictions, participants demonstrated reduced tip percentages for self-service restaurants compared to full-service ones ($Z = -17.61, p < .001$). The median for tipping percentages in self-service restaurants stood at 2, corresponding to 5%, while the median for tipping percentages in full-service restaurants was 4, which corresponds to 15%. Consequently, the null hypothesis of the Wilcoxon Signed Rank Test, which posted that the median difference between tipping percentages for self-service and full- service restaurants is zero, has been rejected.

Moreover, an additional McNemar Test demonstrated a statistically significant difference in the ratio of 0% tipping ($\chi^2 = 125.19, p < .001$). The findings illustrated that merely 3.9% of respondents gave a 0% tip to full-service restaurants, whereas 28.73% of participants offered a 0% tip to self-service restaurants.

Attitude:

Similarly, the paired samples t-test, which compared participants' feeling regarding tipping at full-service versus self-service restaurants, revealed a significant difference ($t(528) = 27.77, p < .001$). The dependent variable encompassed the combined score of Muehling’s Attitude toward Advertising Scales, calculated by averaging the ratings of four items: Bad – Good, Unfavorable – Favorable, Negative – Positive, and Not Important – Important, all rated on a 5-point scale. The outcomes indicated that participants exhibited a more favorable attitude toward full-service restaurants ($M = 4.27, SD = .91$) compared to self-service restaurants ($M = 2.58, SD = 1.23$).

Discussion

As anticipated, the findings indicated that participants exhibited a higher likelihood of giving 0% tips to self-service restaurants in comparison to full-service restaurants. Furthermore, participants demonstrated a negative attitude toward self-service restaurants, while displaying a positive attitude toward full-

service restaurants. Additionally, participants showed a greater willingness to offer larger tips to full-service restaurants as opposed to self-service restaurants.

Study 2

Study 2 was designed to build upon the conclusions drawn from Study 1. In this study, we anticipate observing a decreased favorability among participants towards self-service restaurants in contrast to full-service ones. Furthermore, we expect to observe an increased tendency among participants to provide 0% tips and allocate lower tips to self-service restaurants as opposed to their approach towards full-service restaurants. Lastly, we delve into participants' perceptions of the benefits associated with both self-service and full-service restaurants.

Methods

The methods were like Study 1. A total of 1,037 participants were recruited during the Fall of 2021 (Mean Age = 28.50; 53.9% female). Tipping percentages were assessed using the identical question: "What percentage do you generally tip at a full-service restaurant when a server took your order?" (1 = 0%, 2 = 5%, 3 = 10%, 4 = 15%, 5 = 20%, 6 = 25%, 7 = 30%). This same question was also employed for self-service restaurants. Additionally, participants' attitudes towards both full-service and self-service restaurants were evaluated through Muehling's Attitude toward Advertising Scales.

Furthermore, participants' perceived benefit of self-ordering and full ordering were measured using four respective items. To be specific, participants were asked to respond to the statement "I see the benefits of self-ordering (compared to full ordering) to be: Getting food order started quickly, minimizing the tip, lower pressure in placing order, and better food item descriptions," rated on a scale from 1 (disagree) to 5 (agree).

Results

Tipping Percentage:

Wilcoxon Signed Rank Test showed that participants indicated lower tipping percentages for self-service restaurants compared to full-service restaurants ($Z = -24.53$, $p < .001$). Consistent with the findings of Study 1, the median for self-service restaurants was 2, equivalent to 5%, while the median for full-service restaurants was 4, which corresponds to 15%. Consequently, the null hypothesis of the Wilcoxon Signed Rank Test, assuming that the median difference between tipping percentages for self-service and full-service restaurants is zero, has been rejected.

Additionally, the McNemar Test highlighted a statistically significant difference in the proportion of participants who tipped 0% at self-service and full-service restaurants ($\chi^2 = 226.95$, $p < .001$). The results indicated that merely 3.9% of participants provided a 0% tip to full-service restaurants, whereas 27.9% of participants did so for self-service restaurants.

Attitude:

Participants' feelings toward tipping full-service versus self-service restaurants showed a similar pattern. The paired sample t-tests demonstrated a significant difference in the composite score of Muehling's Attitude toward Advertising Scales ($t(1036) = 43.32, p < .001$), illustrating that participants showed more favorable attitude toward full-service restaurants ($M = 4.38, SD = .84$) than self-service restaurants ($M = 2.62, SD = 1.20$).

Perceived Benefits:

Finally, participants' perceived benefit of self-ordering and full ordering was tested using one- sample t-test. In this test, the test value was set as 3 which is the middle point of the 5-point scale measuring perceived benefit. The results showed that participants see the benefits of self- ordering as getting food order started quickly ($M = 3.94, SD = 1.26; t(1036) = 24.03, p < .001$), minimizing the tip ($M = 3.48, SD = 1.40; t(1036) = 11.08, p < .001$), and lower pressure in placing order ($M = 3.64, SD = 1.36; t(1036) = 15.10, p < .001$). However, they did not see "better food item description" as the benefit of self-ordering ($M = 3.08, SD = 1.43; t(1036) = 1.69, p = .091$).

On the contrary, participants indicated that they see the benefit of full-service restaurants as better food description ($M = 3.58, SD = 1.30; t(1036) = 14.27, p < .001$) whereas they were not expecting full-service restaurants to be getting food order quickly ($M = 2.84, SD = 1.26; t(1036) = -3.95, p < .001$), minimizing the tip ($M = 1.96, SD = 1.15; t(1036) = -29.12, p < .001$), and lower pressure in placing order ($M = 2.67, SD = 1.26; t(1036) = -8.35, p < .001$).

Discussion

Study 2 successfully replicated the outcomes observed in Study 1, confirming that participants exhibited a greater willingness to provide higher tips to full-service restaurants compared to self- service restaurants. Additionally, participants demonstrated a higher tendency to offer 0% tips to self-service restaurants in comparison to full-service restaurants. Moreover, they exhibited negative feelings toward self-service restaurants while displaying positive feelings toward full- service restaurants.

The results also unveiled participants' expectations related to self-ordering, indicating that they anticipate benefits such as expedited food orders, reduced tipping, and less pressure during the ordering process. However, it was interesting to observe that participants did not anticipate better food description quality through self-ordering. Furthermore, the findings revealed that the perceived benefit of full-service restaurants lies in the superior food description recited by a server.

Study 3 The objective of Study 3 was to replicate the findings observed in both Study 1 and Study 2.

Methods

For Study 3, a total of 534 participants were surveyed online during the Summer of 2022 (Mean Age = 29.44; 44.0% female). The data collection approach and survey content closely paralleled that of Study 1 and Study 2. Specifically, we solicited responses related to tipping percentages, as well as participants' feelings and perceived benefits associated with both full-service and self-service restaurants.

Results

Tipping Percentage:

The Wilcoxon Signed Rank Test showed that participants exhibited a tendency to provide lower tipping percentages for self-service restaurants in comparison to full-service restaurants ($Z = -18.59, p < .001$). This pattern of results mirrors those observed in Study 1 and Study 2, where the median for self-service restaurants remained at 2, equivalent to 5%, while for full-service restaurants, it reached a median of 4, equivalent to 15%. Consequently, the null hypothesis of the Wilcoxon Signed Rank Test, which assumed that there is no median difference in tipping percentages between self-service and full-service restaurants, has been rejected.

Furthermore, the McNemar Test yielded a statistically significant difference in the proportions of participants who opted for a 0% tip at self-service and full-service restaurants ($\chi^2 = 124.57, p < .001$). Specifically, only 3.7% of participants indicated their intention to give a 0% tip to full-service restaurants, while a notable 28.83% of participants expressed a 0% tip for self-service restaurants.

Attitude:

Like previous findings, the analysis of paired sample t-tests once again highlighted a difference in the composite scores of Muehling's Attitude toward Advertising Scales. This difference was statistically significant ($t(533) = -30.48, p < .001$). Specifically, the results indicated that participants exhibited a notably more favorable attitude toward full-service restaurants ($M = 4.19, SD = 1.03$) in comparison to self-service restaurants ($M = 2.39, SD = 1.19$).

Perceived Benefits:

Like in Study 2, the perceived benefit of self-ordering and full ordering was tested using one-sample t-test. As expected, the results showed that participants see the benefits of self-ordering as getting food order started quickly ($M = 3.87, SD = 1.26; t(533) = 15.90, p < .001$), minimizing the tip ($M = 3.69, SD = 1.33; t(533) = 12.02, p < .001$), and lower pressure in placing order ($M = 3.69, SD = 1.36; t(533) = 11.72, p < .001$). However, they did not see "better food item description" as the benefit of self-ordering ($M = 3.02, SD = 1.48; t(533) = .38, p = .352$).

For the full-service restaurants, participants indicated that they expect better food descriptions ($M = 3.57$, $SD = 1.38$; $t(533) = 9.59$, $p < .001$). However, they were not expecting full-service restaurants to be getting food orders quickly ($M = 2.68$, $SD = 1.13$; $t(533) = -6.62$, $p < .001$), minimizing the tip ($M = 1.93$, $SD = 1.09$; $t(533) = -22.90$, $p < .001$), and lower pressure in placing the order ($M = 2.51$, $SD = 1.15$; $t(533) = -9.97$, $p < .001$).

Discussion

The outcomes of Study 3 validate the earlier findings. Participants consistently expressed a willingness to provide lower tips to self-service restaurants compared to full-service restaurants. Additionally, the results revealed a higher incidence of 0% tipping for self-service restaurants in contrast to full-service restaurants. Moreover, participants showed higher expectations of detailed food descriptions at full-service restaurants, while they perceived the benefits of self-service restaurants to include quicker food ordering, reduced tipping, and decreased ordering-related pressure.

Conclusion

As predicted, the results from the Studies showed that participants were more likely to give 0% tips to self-service restaurants compared to full-service restaurants and showed negative attitudes toward self-ordering restaurants and showed positive attitudes toward full-service restaurants.

Also, they were more willing to give higher tips to full-service restaurants than self-ordering restaurants.

Furthermore, participants were more likely to give 0% tips to self-ordering restaurants compared to full-service restaurants and showed negative (vs. positive) attitudes toward self-ordering (vs. full-service) restaurants. Interestingly, the results also showed that participants expect self-ordering to get food orders started quicker, minimizing the tip, and lower the pressure of placing orders, but they do not expect a better description of the food. The findings highlighted the major benefit of full-service restaurants is servers' ability to provide better descriptions of menu items with the potential to upsell.

Restaurants comprise a substantial portion of the greater services industry where more ordering both preordering and onsite ordering is being pushed through personal technology. Going forward, restaurants may need to expand or refocus their business models to survive. Before the pandemic, many restaurants depended on their employees to answer the phone, take phone orders, and service takeout orders. Now restaurants use self-ordering technology, have designated takeout areas, and have scheduled to-go workers. (Nuckolls, 2022)

Even before the pandemic, the tipping culture in America was seen by some as a controversial topic met with acceptance or reluctance across generational lines. Factoring in changes working from home, uncertainty in the economy, higher costs from inflation, and the increasing use of apps to do the work of ordering either remotely with a takeaway or in person, optional versus

customary, it is no wonder why tipping fatigue is pervasive. To add further pressure to an industry where profit margins are already low, some states are proposing legislation to change the tipping system (WSJ, 2023) where operators will need to contend with raising menu prices or in some cases reducing staff as offset strategies. Consumers may be getting tired of supplementing server wages as menus are priced approximately 30% below the expected final payment before the tips and taxes are added.

Manager Implications

Restaurant managers are having to adjust to the changes in tipping behavior as self-ordering has become more popular. Technological advances in online and app ordering will continue to change the landscape. Online self-ordering accounts for 42% of all food orders and 51% of Americans now use restaurant delivery services which is expected to continue to grow (Zippia., 2023). The decrease in tipping income will need to be offset with better wages to keep the best employees. As technology integration expands, servers and operators may be less dependent on tipping and more reliant on specialized efficiencies and equipment. However, wages will need to be competitive as the tips continue to decrease.

Future Research

The results showed that consumers felt they received better food descriptions from servers. With all the online menus and reviews available it is no wonder why the server and human touch is trusted more. Ninety percent of restaurant visitors are said to research a restaurant online before going (Zippia., 2023) Future research on the utilization of online reviews prior to ordering food and how that affects tipping and users leaving reviews is another area that could be explored.

The research study also showed that attitude toward tipping has an affect on the amount tipped. Future research could include determining how attitude toward tipping can be better understood to help the consumer without having a negative effect on the server.

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