

Subliminal Contributions of Service Quality Dimensions to Customer Satisfaction in Food Delivery Businesses

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Abstract

Food delivery businesses have been influenced by technology, challenging time schedules and changing lifestyles in society. As a result, a sizeable portion of the population, sometimes orders meals for consumption at locations other than in restaurants where the meals have been prepared. Food delivery businesses act as agents to make this possible and by so doing, the quality of the service provided by food delivery businesses can affect the customer's satisfaction with the food and possibly, the restaurants. This dilates the ramifications of poor service quality by food delivery businesses, for the broad hospitality sector. Yet, the extent to which service quality dimensions correlate with customer satisfaction in food delivery businesses in South Africa remains largely unexplored. Consequently, this study seeks to fill this gap by adopting a quantitative research methodology that employed a regression analysis technique to examine the study's data. Findings indicate that the service quality dimensions of tangibles, assurance and empathy demonstrate statistically significant relationships with customer satisfaction. On this premise, food delivery businesses are therefore encouraged to prioritise performance improvements along these dimensions to aid the pursuit of higher levels of customer satisfaction.

Keywords: Stakeholders service, quality, customer, satisfaction, food delivery

Introduction

Technology is at the epicentre of the fourth industrial revolution and it is especially prominent in the business world as consumers demand higher quality and improved services. To this end, businesses have had to adapt to technological changes in order to operate successfully (Hirschberg, Rajko, Schumacher & Wrulich, 2016) and food delivery businesses are not exempted. Owing to the fact that businesses in the hospitality sector experience pressure from





customers to adapt to changes in technology (Yeo, Goh & Rezaei, 2017), there has been an increase in the utilisation of electronic devices and software applications which has catalysed growth in food delivery businesses. Collateral with this growth, is an increase in competitiveness in the hospitality sector. A plausible implication of this may be that issues of service quality then become critical considerations in the equation of business patronage and success, due to their possible relationship with customer satisfaction.

The prospect of interrogating associations of service quality dimensions and customer satisfaction in food delivery businesses is apposite because according to Annaraud and Berezina (2020), only a limited number of studies have taken a detailed look at food delivery services. In harmony with this position, Suhartanto, Helmi Ali, Tan, Sjahroeddin and Kusdibyo (2019) observe specifically that literature examining the roles of quality-related issues and customer satisfaction/loyalty especially among food delivery services is sparse. It is therefore unsurprising that there is scarce empirical evidence that attests to the form and extent of possible relationships between service quality dimensions and customer satisfaction in food delivery businesses; more so in a developing economy context, like in South Africa. This is despite the fact that food delivery businesses are critical in the supply chain of the hospitality sector, given that they afford customers, the convenience of accessing and consuming food ordered from restaurants, at any location.

The purpose of this study is to determine to what extent, perceptions of the performance of food-delivery businesses along the dimensions of service quality, are related to customer satisfaction. The importance of this for theoretical purposes, cannot be over-emphasised as previous studies have not explored the issue of service quality and customer satisfaction related to food delivery businesses especially in the context of developing economies in Africa. Additionally, it is anticipated that the study would bode practical implications as it could reveal particular service quality dimensions that lend themselves more to customer satisfaction relative to others, thereby concurrently highlighting areas that are deserving of more attention by managers of food delivery businesses.

Literature review

Businesses providing food-related services operate in a largely saturated market. Due to this, such businesses have been compelled to enhance their services in order to remain competitive (Yeo et al., 2017) and one way in which this has been done is by delivering food to customers at their preferred locations. The prospect of food delivery businesses has also been enhanced by the reality that often, the younger generation of customers, desire the flexibility to consume ordered-food at their homes (Cho, Bonn & Li, 2019) and effectively addressing this expectation would lend itself to customer satisfaction. Expectedly, with a plethora of electronic platforms to utilise, the prospect of penetrating new markets that were previously unserved by restaurants is enhanced (Hirschberg et al., 2016). According to Pigatto, Machado, Negreti and Machado (2017), the recourse to various electronic platforms and devices to fulfil orders for food, catalysed by the changing behaviour and lifestyles of customers, has positively affected growth in the broader hospitality sector, globally.

For instance, restaurants have leveraged technological advances that address customers' needs for digital on-demand services to keep up with changes in tastes while easing access to their meals (Lee, Lee & Jeon, 2017; Suhartanto et al., 2019). Clearly, with the prevalence of electronic platforms, customers are now able to order a wide variety of foods, whenever they desire, from a kaleidoscope of restaurants that are present in the e-commerce domain (Thamaraiselvan, Jayadevan, & Chandrasekar, 2019). This reality means that food-



delivery businesses are fulfilling an important role in the market by servicing customers' needs for on-demand delivery of meals (Ramseook-Munhurrun, 2012) from restaurants.

The act of food delivery forms part of a new differentiation and innovation approach for enhancing profitability and product offerings (Pigatto et al., 2017) and this service can be provided by two types of retailers: the restaurants themselves or intermediaries that serve multiple restaurants. Notably, due to the rise of digital technology, two online platforms - aggregators and new delivery players - have also emerged to facilitate the ordering of food and subsequent delivery to customers (Hirschberg et al., 2016). While both ordering platforms allow customers to view, compare and order from various restaurants, the aggregators place the burden of delivering the food on individual restaurants while the new delivery players provide for intermediary businesses to handle the pick-up and delivery of food (Yeo et al., 2017). Regardless of these specific forms, food delivery businesses have enabled restaurants to defer more to customer expectations (Suhartanto et al., 2019) at least as it concerns desires to order remotely and consume the food at alternate locations.

Customer satisfaction

Customer satisfaction remains one of the important factors for management to consider in its quest to retain customers (Gagic, Tesanovic & Jovicic, 2013) and grow the business. Wu, Huang and Chou (2014) contend that customer satisfaction equates to a positive affective reaction stemming from a customer's favourable judgement of the performance of a product or service rendered by a business. In the opinion of Annamdevula (2017), customer satisfaction is an emotional reaction to a service experience that adequately addresses an individual's pre-existing needs and expectations. In essence, customer satisfaction is typically achieved whenever the performance of a product or service meets or exceeds the expectations of the customer (Lee et al., 2017). It would seem therefore, that while customer expectations are formed pre-delivery of the service, customer satisfaction occurs post-delivery of service; as a performance outcome.

Businesses strive to ensure that their customers are satisfied, principally because of the benefits to the company that accrue therefrom. Akilimalissiga, Sukdeo and Vermeulen (2017) highlight that the benefits of customer satisfaction to a company include but are not limited to increased competitiveness, effectiveness, profitability and market share. For companies to ride the wave of customer satisfaction benefits, they need to realise that customer satisfaction is not a once-off affair but instead, a dynamic construct that changes as wants, needs, behaviour and requirements evolve over time (Gagic et al., 2013). To a large extent, this makes it inevitable for businesses to consistently work to achieve customer satisfaction by according due consideration to issues of service quality (Malik, 2012).

Customer satisfaction typically results from a perceptual measurement of the performance of the product or service and this is why in the case of service companies, like food delivery businesses, Wu et al. (2014) insist that perceptions of service quality are critical determinants of customer satisfaction. On this basis, rational thinking would therefore suggest that positive perceptions of service quality may lead to customer satisfaction, while negative perceptions of service quality could lead to customer dissatisfaction thereby making the issue of service quality pivotal to the pursuit of customer satisfaction. Notably, though, the extent to which a particular dimension of the poly-construct of service quality lends itself to customer satisfaction may be subject to contextual nuances and this provides some impetus for the current study.



Service quality dimensions and customer satisfaction

It has been established that customers' perceptions of service quality can vary greatly due to differences in personality, culture and past experiences (Dabestani, Shahin, Saljoughian & Shirouyehzad, 2016). This is an indication that quality is a subjective notion and the opinion is corroborated by Teeroovengadam (2020) who asserts that perceptions of service quality will differ across contexts, as these perceptions are contingent upon a cocktail of factors. Regardless of the fluidity of the service quality notion, Eresia-Eke, Stephanou and Swanepoel (2018) declare that the levels of service quality that accompany the offerings of a business could be a prime factor for distinguishing between performing and non-performing business establishments.

According to Parasuraman, Zeithaml, and Berry (1988) service quality is a poly-construct and as captured in the Servqual instrument, comprises the dimensions of tangibles, reliability, responsiveness, assurance and empathy. In recognition of this, the measurement of customer perceptions in any specific case would according to Duggal and Verma (2013), reveal what is valued and indeed what the most important aspects of a service could be. This is what makes it appealing to investigate how each of the service quality dimensions relates to customer satisfaction in the context of food delivery businesses in South Africa.

Tangibles generally describe the physical facilities, equipment, materials and personnel of the organisation (Ramseook-Munhurrin, 2012). In the context of food-delivery services, tangibles may refer to the appearance of personnel, equipment utilised to render the service and artefacts of communication (Parasuraman, 2013). Specifically, these tangibles may include the scooters, bikes or vans used as delivery vehicles, point-of-sale payment devices, bags or containers in which the foods are stored and even the way the delivery person is dressed.

In a study conducted by Tucci and Talaga (2000), results showed that in the context of restaurants, tangibles are positively related to customers' perceptions of service quality. On a similar note, Dabestani et al. (2016) found that in hotel businesses, tangibles are important for the creation of a positive perception of service quality among customers. This could be due to higher interaction with tangibles by customers in the context of hotels. Interestingly, contrary to these findings, Gagic et al.'s (2013) study which was undertaken in a similar context, concluded that tangibles are unrelated to the service quality perceptions of customers, especially for the elderly. These findings reflect disagreements on the relationship between tangibles and customer satisfaction, possibly due to disparities in study contexts and so, it can be argued that each context has its own unique set of circumstances that shape research findings. Duly cognisant of previous findings, this study however defers to the argument of Ju, Back, Choi and Lee (2019) that customers are typically very considerate of tangibles when evaluating service quality and so the study elects to hypothesise that:

H₁: There is a positive relationship between tangibles and customer satisfaction in food delivery businesses.

The reliability of a service relates to the ability to perform the promised service consistently with accuracy (Fida, Ahmed, Al-Balushi & Singh, 2020) such that the customer trusts the company to deliver the service (Hafiz & Alam, 2016), always. Yousapronpaiboon (2014) suggests that reliability is simply about businesses providing services to customers, as promised. For the specific case of food delivery businesses, this dimension may be critical as customers typically expect to receive the correct meals for which orders have been placed within a particular period of time.



In a pool of Chinese restaurants, Gagic et al. (2013), found that reliability has a significant effect on customer satisfaction. This finding is corroborated by the results of a study by Du Plooy, Van Zyl and De Jager (2012) that showed that in the context of the South African informal grocery retail sector, reliability was the most important factor influencing customer repurchases which indicate customer satisfaction. In addition, a study by See Ying, Ahmad and Zainab (2016) in the Malaysian tourism sector also concluded that reliability is a critical determinant of customer satisfaction. In deference to the seemingly predominant position in extant literature that reliability correlates with customer satisfaction, this study hypothesises that:

H₂: There is a positive relationship between reliability and customer satisfaction in food delivery businesses.

According to Yarimoglu (2014), responsiveness describes a business' willingness and preparedness to be of assistance to customers in the course of providing a service. Parasuraman (2013) aligns with this opinion by arguing that responsiveness describes the willingness of a business to cede to specific requests made by customers. In the context of food delivery businesses, the perceptions of customers with respect to this service quality dimension may be critical to their attainment of the emotional state of customer satisfaction.

Indeed, Wu et al. (2014) argue that responsiveness is the most important service quality dimension to consider in people-based industries, and this may be the case with food delivery businesses. To lend credence to this position, Saad, AbuKhalifeh, Slamati, and TengkuYacob's (2020) study of premium casual restaurants, revealed that among the service quality dimensions, a business' performance with respect to responsiveness had the highest impact on customer satisfaction. In recognition of these findings in food-related contexts, it is hypothesised that:

H₃: There is a positive relationship between responsiveness and customer satisfaction in food delivery businesses.

Negricea, Edu and Avram (2014) opine that assurance relates to the depth of knowledge that employees have and how they deploy it to stimulate confidence amongst customers. According to Parasuraman (2013), companies are generally able to provide assurance to their customers when their employees are trustworthy and knowledgeable about the product/service that they provide.

In a study of Malaysian Islamic banks, Kashif, Wan Shukran, Rehman and Sarifuddin (2015) found that assurance significantly impacts customer satisfaction. To reinforce this finding, Moghavvemi, Lee and Lee (2018) in a similar context, found that customers considered the assurance dimension of service quality to be the one that contributes the most to customer satisfaction. In their study, Al-Haddad, Taleb and Badran (2018) also revealed that assurance has a statistically significant association with satisfaction. In contrast, Tucci and Talaga's (2000) study of consumer perception of service quality in restaurants found that assurance does not play any significant contributory role towards customer satisfaction as customers did not perceive the knowledge, or lack thereof, of employees as a critical factor in their assessment of service quality. These results highlight disagreements in findings of previous studies which imply that such findings cannot provide sufficient basis to infer, with reassuring accuracy, what the exact situation as it pertains to the nexus of assurance and



customer satisfaction in food delivery businesses in South Africa could be. Consequently, the study in its quest to address this gap in literature, opts to hypothesise that:

H₄: There is a positive relationship between assurance and customer satisfaction in food delivery businesses.

Empathy refers to the provision of care and individual attention to customers (Hafiz & Alam, 2016). On a similar note, Mansori, Vaz and Ismail (2014) contend that empathy relates to the actions of a business that signal a caring and understanding inclination towards customers' feelings and situations. With respect to food delivery businesses, the issue of empathy may be vital as customers who order food may expect for instance, that requisite care will be exercised in the handling of the food during the process of its delivery.

In a study of high profile golf club businesses, Lee, Kim, Ko and Sagas (2011) found that relative to other service quality dimensions, empathy was deemed to be the most important determinant of customer satisfaction. Similarly, Bougoure and Neu's (2010) study revealed that in Malaysian fast food restaurants, customer satisfaction was positively associated with empathy. In harmony with these findings, results of See Ying et al.'s (2016) study also showed that empathy substantially contributed to customer satisfaction. While these studies may suggest that empathy is positively linked to customer satisfaction, the precise nature of the relationship, if any, between empathy and customer satisfaction remains empirically unproven in the specific context of food delivery businesses in South Africa. Nonetheless, swayed by study findings that assert that there is an association between the constructs of empathy and customer satisfaction, this study hypothesises that:

H₅: There is a positive relationship between empathy and customer satisfaction in food delivery businesses.

Methodology

This empirical study adopts a quantitative research approach and is based on data collected through a survey strategy from its target population. The target population consisted of university students in South Africa that had patronised food delivery businesses. This study made use of non-probability sampling, specifically convenience sampling to select respondents. Using a central location intercept technique, the study realised 251 completed questionnaires.

The study's questionnaire was created using Google Forms and was designed in such a way as to ensure that all questions were answered before permission to submit the completed questionnaire was granted. The questionnaire consisted of two items measuring age and gender and two scales measuring perceptions of the service quality performance of food delivery businesses as well as customer satisfaction.

Parasuraman et al.'s (1988) 22-item Servqual scale which had been utilised in various studies (see Eresia-Eke et al., 2018; Teeroovengadum, 2020; Tegambwage, 2017) and still remains relevant as it also used by many companies (Robustin & Hariyan, 2019) was adapted for the measurement of the service quality dimensions. Items on this scale were accompanied by 7-point Likert response options ranging from "strongly disagree" to "strongly agree" with associated scores of 1 to 7. The American Customer Satisfaction Index (ACSI) 3-item scale which had also been previously used in studies (see Deng, Yeh & Sung, 2013; Gustafsson, Johnson & Roos, 2005), was used to measure customer satisfaction. A 7-point scale was also utilised with qualitative descriptive labels at the extremes of each scale such as 'very



dissatisfied’ to ‘very satisfied’, from ‘fell short of expectations’ to ‘exceeded expectations’ and ‘not very close’ to ‘very close’ for the 3 items in the scale, respectively.

Since the study was interested in aggregated measures of the respondent population, the scores associated with service quality and customer satisfaction were determined by means of an averaging method which meant totalling the response options and dividing the total by the number of participants. Since there were no reverse-coded items in any of the scales, high scores (above 3.5 on the 7-point scale) were indicative of favourable perceptions while low scores (below 3.5 on the 7-point scale) represented unfavourable perceptions.

Results

The demographic profiles of the respondents that took part in the study are presented in Table 1. The table shows that the biggest group of respondents (152 or 60.6%) comprised those who were aged between 21 and 23 years while the smallest group was represented by only one respondent (0.4%). Beyond these two groups, respondents in the 18-20, 24-26, 27-29 and above-30 age brackets made up 12%, 12.4%, 5.6% and 9.2% of the respondent population, respectively. With respect to gender, more than half of the respondents were females (130 or 51.8%) while the males constituted 47% (118) of the respondent population. Three individuals, representing 1.2% of the respondent population opted not to indicate their genders.

Table 1: Profile of respondents

Demographic categories	Frequency	Valid percent
Age		
Under 18	1	0.4
18-20	30	12
21-23	152	60.6
24-26	31	12.4
27-29	14	5.6
Over 30	23	9.2
Total	251	100
Gender		
Female	130	51.8
Male	118	47
Prefer not to say	3	1.2
Total	251	100

Since the service quality scale is multi-dimensional and had been used extensively in prior research, it was deemed necessary to only undertake a confirmatory factor analysis (CFA) for the scale. The CFA which was performed for the sub-components of the scale, confirmed one factor for each service quality dimension. All the factor loadings were statistically significant ($p < 0.05$). The inter-item loadings for items measuring tangibles (0.826, 0.675, 0.693 and 0.824), reliability (0.692, 0.818, 0.786, 0.833 and 0.817), responsiveness (0.885, 0.829, 0.808, and 0.656), 826, 0.675, 0.693 and 0.824), assurance (0.824, 0.780, 0.812, 0.856, 0.571) and empathy (0.592, 0.714, 0.778 and 0.773) were above the 0.5 threshold (see Awang, 2014; Hair, Hult, Ringle & Sarstedt, 2017) and so, all the items for measuring each dimension of service quality were retained.

Further, it was considered apposite to statistically examine the scales in the research instrument for reliability. Test results for internal consistency revealed that the Cronbach’s Alpha values associated with the scales used in the study were all above the 0.7 threshold (see Heale & Twycross, 2015; Kline, 2010) and so the scales were adjudged to be satisfactory. Table 2 shows the Cronbach alpha coefficients for each dimension in the service quality scale, the



overall service quality scale and the Customer satisfaction scale. In addition, the table also presents the mean values and standard deviation values associated with the study's constructs

Table 2: Scale measurements

Construct	No of items	Cronbach alpha	Mean	Standard Deviation
Tangibles	4	0.735	5.597	1.222
Reliability	5	0.788	5.590	1.327
Responsiveness	4	0.766	5.415	1.283
Assurance	4	0.829	5.270	1.377
Empathy	5	0.680	5.134	1.337
Overall Service quality	22	0.929	5.401	1.309
Customer satisfaction	3	0.885	5.480	1.125

The results as contained in Table 2, show that the overall service quality perception of the respondents with respect to food delivery businesses, is positive given the mean value of 5.401. With respect to the component dimensions of service quality, while all the scores are in the 5 to 6-point range ('slightly agree' to 'agree'), the highest and lowest mean values of 5.597 and 5.134 were associated with the dimensions of tangibles and empathy, respectively. The mean values indicate that from the perspective of the respondents, the food delivery businesses are performing satisfactorily with respect to the dimensions of tangibles, reliability, responsiveness, assurance and empathy (arranged in a descending order). As it pertains to customer satisfaction, the mean value of 5.480 also signals that the respondents are generally gratified with the performance of food delivery businesses.

Five directional relationships, linking the service quality dimensions to customer satisfaction were hypothesised in the study. A linear regression analysis was used to test the hypotheses and the results are presented in Table 3.

Table 3: Results of regression analysis

Dependent variable: Customer satisfaction				
Independent variables	Standardised Coefficients	Standard Error	t stat	p-value
Intercept	-3.965 E-16	0.040	0.000	1.000
Tangibles	0.343	0.062	5.531	0.000*
Reliability	0.087	0.074	1.176	0.241
Responsiveness	0.095	0.066	1.433	0.153
Assurance	0.219	0.065	3.383	0.001*
Empathy	0.172	0.057	3.050	0.003*
Adjusted R ²	0.595			
F statistic	74.399*			
Number of observations	251			

* Significant at $p < 0.05$.

The results of the regression analysis show that the regression model is statistically significant and has an adjusted R-squared of 0.595 which implies that the five dimensions of service quality can explain 59.5% of the variations in customer satisfaction. The results also show p-values of 0.241 and 0.153, respectively for the hypothesised relationships between reliability and customer satisfaction (H₂) and between responsiveness and customer satisfaction (H₃). On this note, it is evident that at a 95% confidence level, there is no statistical support for either of these two hypothesised relationships. However, since $p < 0.05$ for the test of hypotheses H₁, H₄ and H₅ linking tangibles ($p = 0.000$), assurance ($p = 0.001$) and empathy ($p = 0.003$) to the dependent variable of customer satisfaction, these hypothesised relationships



are statistically significant. The associated coefficients for the relationships expressed in H₁, H₄ and H₅ are 0.343, 0.219 and 0.172 respectively, and suggest that the relationships are positive in nature.

Instructively, different studies have investigated gender-induced influences on service quality perceptions (see Josiam, Foster, Malave & Baldwin, 2014; Kanta & Srivalli, 2014; Lu & Wang, 2015) and have generated discordant results. Consequently, this study sought to contribute to the scholarly discourse in this regard by investigating possible gender-induced differences in the relationship between service quality dimensions and customer satisfaction among food delivery businesses in South Africa. The respondent population was therefore disaggregated along gender lines and the data, re-examined. Instructively, linear regression analysis results were not markedly different for the two groups of customers. For the cohort of female respondents, an adjusted R-squared of 0.618 was realised as opposed to an adjusted R-squared of 0.598 when only males were considered. The results also revealed that for the category of female respondents, the independent variables that demonstrated statistically significant relationships with customer satisfaction were tangibles (p=0.001) and reliability (p=0.021). When only male respondents were considered, the dimensions of tangibles (p=0.000), assurance (p=0.000) and empathy (p=0.019) demonstrated statistically significant relationships with customer satisfaction.

Since the study's hypotheses were formulated for the entire group of respondents, regardless of gender, the study concludes that the hypothesised relationships as expressed in H₁, H₄ and H₅ are supported while those reflected in H₂ and H₃ are not. In essence, cognisant of the proven statistical significance and positive nature of expressed relationships, high ratings of the performance of food delivery businesses along the dimensions of tangibles, assurance and empathy actually correspond with high levels of customer satisfaction of respondents.

Discussion

The study set out to determine the relationship, if any, that exists between customer perceptions of the performance of food delivery businesses with respect to the dimensions of service quality and customer satisfaction. The results of the study show that for the entire group of respondents, the service quality dimensions of tangibles, assurance and empathy demonstrated statistically significant relationships with customer satisfaction. These findings contradict those of earlier studies (see Banerjee, Jain, SoB & Nayyar, 2019; Shafiq, Mostafiz & Taniguchi, 2019; Li & Krit, 2012; Saghier, 2013; Al-Ali, Ameen, Isaac, Khalifa & Hamoud, 2019; Alkhateri, Khalifa, Abuelhassan, Isaac & Alrajawi, 2019), which were conducted in different contexts and yet returned similar results that show that all the service dimensions are related to customer satisfaction. While many studies agree that service quality influences customer satisfaction (Tech, 2020), Supanun and Sornsarut (2019) emphasise that both constructs demonstrate a positive and strong relationship. While this may be the case, the need to rather focus attention on individual dimensions as shown in this study cannot be over-emphasised. This assertion is supported by Teeroovengadum (2020) who argues that treating service quality as a uni-dimensional construct, makes it impossible to unveil specific dimensional nuances in the relationship between service quality and customer satisfaction.

While the relationships between the independent variables of tangibles, assurance and empathy and the dependent variable of customer satisfaction were positive, the standardised coefficients of 0.343, 0.219 and 0.172 associated with them are, understandably, indicative of their varying levels of contribution to customer satisfaction. With specific reference to the tangibles dimension, the study's results contradict the findings of Gagic et al. (2013) who suggest that perceptions of tangibles do not contribute towards customer satisfaction. Notably,



however, the present study's results harmonise with the findings of previous studies conducted by Tucci and Talaga (2000) and Malik (2012). Indeed, within a South African context, Nethengwe, Nengovhela and Shambare (2018), found that the tangibles dimension of service quality was also associated with customer satisfaction. It is arguably in recognition of this that within the hospitality sector, Gebremichael and Singh (2019) declare that businesses should focus primarily on the tangibles dimension, if they are to improve their service quality.

As it concerns the dimension of assurance, the study's results are in agreement with the findings of Kashif et al. (2015) and Moghavvemi et al. (2018), conducted among banks, which showed that the performance of businesses along the assurance dimension of service quality correlates with customer satisfaction. Similarly, the study's findings align with those of Al-Haddad (2018) which revealed that assurance is associated with customer satisfaction. Ironically, there is a disagreement in findings when the results of the present study are juxtaposed against those from a study by Tucci and Talaga (2000) in the hospitality sector; specifically, in restaurants. While the contradictory results amplify the importance of contexts in studies, which is a point made by Ladhari (2009), the role of the assurance dimension may be particularly pertinent in the food delivery business because of the agency role that the food delivery business plays. This is because the role clearly places the burden of increasing the customer's overall confidence in the delivered food on the food delivery business.

With respect to the dimension of empathy, the findings of the current study are in harmony with the findings of previous studies (see Lee et al., 2011; Bougoure & Neu, 2010; See Ying et al., 2016) that show that perceptions of the extent to which a business is empathetic to customers, directly correlates with customer satisfaction. This is rational as food delivery businesses are positioned to make it more convenient for customers to enjoy their meals in locations other than the premises in which the foods have been prepared. In a sense, patronage of a food delivery business, somewhat reflects the desire of the customer for individualised service. Effectively therefore, the ability to deliver the food with the complementary individualised attention and care, is likely to be paramount for food delivery businesses.

Conclusion

The study's findings provide encouragement, based on empirical considerations, for food delivery businesses to invest efforts in improving their service quality performance especially given that the linear regression model provided by this study can explain approximately 60% of the variations in customer satisfaction by relying on the perceptions of the performance of food delivery businesses along the service quality dimensions. More specifically, it may be necessary for food delivery businesses to accord higher priority to actions that would improve customer perceptions of the food delivery businesses' performance in the service quality aspects of tangibles, assurance and empathy, given that these demonstrated statistically significant relationships with customer satisfaction.

In practical terms, food delivery businesses may need to improve the aesthetic appeal of their tangibles, such as their scooters, bikes, food containers and appearance of delivery personnel among others. Appealing to the sense of sight of customers may make food delivery businesses more attractive to customers and help them create a valuable first impression that could contribute towards overall customer satisfaction with the service. While delivery personnel, in some cases, are not directly employed by the food restaurants that they serve, the need for them to be knowledgeable about menus, communication channels and food preparation processes among others, cannot be over-emphasised. This is because knowledge aids the assurance dimension of service quality as it equips food delivery personnel to constructively engage in enriching conversations with customers, when necessary, which could



help build trust and confidence. Improvements along the empathy dimension may be practically realised if delivery personnel are trained specifically to develop the emotional ability to continuously consider the perspectives of customers and become more sensitive to them.

This study utilised a non-probability sampling to create its pool of respondents which is therefore not representative of everyone in the universe of customers of food delivery businesses. Consequently, the results of the study, cannot be generalised and applied to the entire population, even with respect to students only. It is therefore recommended that future studies investigate the relationship between service quality dimensions and customer satisfaction in food delivery businesses by using a randomly-created sample of respondents.

Further, considerations of other demographic variables in the analysis of data, such as race, ethnicity and culture may provide useful insights about the inclinations of seemingly homogenous cohorts of respondents in a broader heterogeneous population. Additionally, in recognition of the sequential nature of the relationship between service quality perceptions and customer satisfaction, a longitudinal approach, rather than the cross-sectional approach that this study has utilised for data collection, may generate data whose analysis may provide a better indication of the contributory roles that the dimensions of service quality may play in the customer satisfaction equation.

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