



THE PERCEIVED INFLUENCE OF WAITING TIME ON CUSTOMER SATISFACTION AND SERVICE QUALITY AT MCDONALD'S INTRAMUROS AMONG COLLEGE STUDENTS OF LETRAN MANILA

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ABSTRACT

This study investigated the perceived impact of waiting time on customer satisfaction and service quality at McDonald's Intramuros, focusing on Letran's college students as the participants. The results show that waiting time has a significant negative perceived effect on customer satisfaction. Respondents consistently showed in the results that the longer the waiting times, the lower the satisfaction level, with delays in service as one of the biggest disadvantages to their dining experience. Satisfaction falls sharply as waiting time increases. Results further indicate that existing waiting times often exceed students' tolerance, leading to a strong sense of poor service quality. Speed of service is a basic determinant of quality in fast-food service; failure to provide timely service will directly undermine customer satisfaction and brand reliability. However, these findings have to be viewed with caution, considering their limitations.

Keywords: smart cane, audio navigation, ultrasonic sensor, visually impaired, banana fiber

INTRODUCTION

Background of the Study

Long waiting times in restaurants significantly undermine customer satisfaction, often leading to negative experiences that drive away repeat business and harm revenue. This issue is particularly acute in the competitive food service industry, where poor service timing contributes to lost loyalty and reputational damage, making it essential for operators to address waiting times to sustain profitability. Fast food restaurants are known to be quick and convenient—commonly called Quick Service Restaurants (QSR). This implies that when a QSR delays, it may influence a customer's perception and may lead to lower satisfaction.

Several studies have explored strategies to mitigate waiting time's negative effects on restaurant customer satisfaction. Baek et al. (2025) employed big data analytics on online reviews, using topic modeling and regression, revealing waiting as the strongest negative predictor of ratings and highlighting its disproportionate impact. Jo (2025) investigated psychological mechanisms via surveys in physical and virtual queues, finding waiting equity perceptions drive intentions to wait and consume, advancing equity-based management. Studies like Baek et al. (2025) and Jo (2025) focused on big data from unspecified or advanced markets, overlooking Southeast Asian urban dynamics that amplify wait sensitivities in high-density areas.

According to Khan et al. (2021), customer satisfaction remains one of the most important outcomes of organizations in various service sectors such as retail, banking, hospitality, and health. One of the most important determinants of satisfaction is service quality, often conceptualized through the SERVQUAL model comprising tangibles, reliability, responsiveness, assurance, and empathy. Aside from service quality, waiting time is the most important factor shaping consumers' perceptions of service and their general satisfaction. The

longer customers wait, the more likely they are to experience negative emotions, like frustration or impatience, which decrease satisfaction even in cases where service quality is objectively high. On the other hand, brief waiting times or better-organized waiting times increase satisfaction and positively affect ratings of service quality accordingly (Khan et al., 2021).

Quality of service is one of the most important factors that define the success of the hospitality industry, which boasts a very high degree of interaction between service providers and guests (Ali et al., 2021). The assessment of service quality has undergone changes over time to tailor itself to the needs of various demographic segments and industry types (Pratik Ghosh et al., 2023). It was through their study that it was established that QSR service quality has a direct effect on the satisfaction and thus the behavioral intentions of Gen Z consumers. To be more specific, it has been suggested that satisfaction mediates the relationship between service quality and consumer behavior.

Previous studies focused on fast-food restaurants globally and have investigated the impact of waiting time on customer satisfaction and service quality. However, there are limited studies about how perceived waiting time affects overall customer satisfaction and service quality locally—specifically, McDonald's Intramuros. Gaining deeper insights about the relationship of the given variables may improve customer experience in local quick-service restaurants. Therefore, there is a need to examine how perceived waiting time affects customer satisfaction and service quality.

Objectives of the Study

The purpose of this study is to determine the perceived influence of waiting time on customer satisfaction at McDonald's in Intramuros,

Manila. To specify, the study aims to: (1). Examine the perceived effect of customers' waiting time on their overall satisfaction. (2). Identify how perceived waiting time for the customer influences customer perceptions of service quality.

Research Framework

Conceptual framework

The conceptual framework in this research centers on making sense of waiting time and its impact on satisfaction and service quality perceptions. Waiting time can be defined as the time elapsed prior to the commencement of services.

The impact of waiting time would, therefore, influence the perceptions of service quality, apart from affecting satisfaction levels. Customer satisfaction implies the degree to which an individual's expectation was fulfilled, while service quality perceptions refer to an individual's assessment of the service delivery with respect to dependability, responsiveness, and general service excellence.

This conceptual framework precisely captures the aims of this research, addressing both aims in one: first, to explore the relationship between waiting time and satisfaction, while the secondary aim seeks to explore the relationship between waiting time and perceptions of service quality.

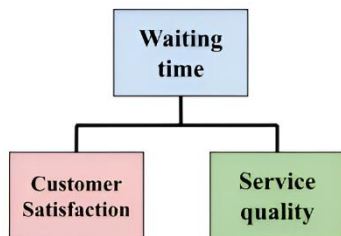


Figure 1. Conceptual framework of the study

Scope and Limitations

This study mainly aims to explore the relationship between perceived waiting time, customer satisfaction, and service quality among college students of Colegio de San Juan de Letran, Manila, from the Academic Year 2025–2026.

College students were questioned through a 5-point Likert scale survey to determine their satisfaction and perception of service quality depending on the perceived waiting time of their orders in a fast food restaurant.

This study focused exclusively on dine-in experiences of Letran Manila college students, excluding delivery and online orders due to differences in waiting procedures. The selected fast food restaurant for this research is the McDonald's branch located in Intramuros, Manila, as it is the closest to Letran, Manila. The purpose of this study is to investigate how waiting time influences customer satisfaction and perceptions of service quality. However, the findings of this study may not be entirely reliable, as they are based solely on the perceptions of the respondents.

METHODOLOGY

Research Design

This study employs a descriptive quantitative study to investigate the perceived relationship between waiting time and consumer satisfaction, along with the perceptions of service quality among the college students of Colegio de San Juan de Letran, Manila. The researchers collected the data using a survey based on the SERVQUAL model (tangibles, reliability, responsiveness, assurance,

and empathy), and the participants of this study are college students from Colegio de San Juan de Letran who have experience dining or ordering at the McDonald's branch in Intramuros during the Academic Year 2025–2026.

Procedures

In this part of the study, the researchers first had their instruments validated by the research department to ensure that each question is appropriate for this study, ensuring each question is relevant in order to answer the goals of this study. They also added the aspect of SERVQUAL dimensions of customer satisfaction, waiting time, and service quality. In order to get data from the survey, a 5-point Likert scale was used from strongly disagree= 1 to strongly agree = 5.

The participants were chosen through purposive sampling—the students must be from Colegio de San Juan de Letran, Manila, who are enrolled during the Academic Year 2025–2026 and have experienced ordering at McDonald's in Intramuros. Creswell & Poth (2018) stated that purposive sampling is appropriate in cases where a study requires direct experience or knowledge of participants. They were provided with a consent form to ensure that participants give their full permission before proceeding to the survey—they are required to answer based on their latest visit to McDonald's in Intramuros and must give an honest answer regarding their experience based on what they recall. Their responses will be based on their perceptions as this study uses a descriptive method.

Lastly, the collected data was encoded, analyzed, and represented in tables via suitable software such as Google Sheets and statistical analysis tools to provide results regarding waiting time, customer satisfaction, and service quality perceived.

Research Instrument

This study utilized a researcher-made structured survey questionnaire as the primary instrument to gather data from college students of Letran, Manila. The questionnaire is designed to measure participants' perceptions of waiting time, customer satisfaction, and service quality in McDonald's Intramuros.

The instrument aims to assess how perceived waiting time influences overall customer satisfaction and shapes customers' perceptions of service quality in a quick-service restaurant setting. Cronbach's Alpha was used to determine the reliability and accuracy of the instrument. Items for waiting time and service quality were separated to ensure a clean and clear questionnaire. Waiting time focused on the speed of service; on the other hand, service quality focuses on service performance and efficiency.

Table 1. Customer satisfaction

Cronbach's alpha (α)	Interpretation
α ≥ 0.90	Excellent
α ≥ 0.80	Good
α ≥ 0.70	Acceptable
α ≥ 0.60	Questionable
α ≥ 0.50	Poor
α < 0.50	Unacceptable

According to Taber, K. (2018), Cronbach's alpha is used to measure the consistency and reliability of a questionnaire. It shows how correlated each set is. An alpha value of 0.70 is commonly accepted, while a higher value is considered significant and accepted.

Table 2. Reliability Statistics for Customer Satisfaction and service Quality Scale

Scale	Cronbach's alpha (α)	Interpretation
Customer Satisfaction	0.71	Acceptable
Service Quality	0.78	Acceptable

Table 2 presents the reliability statistics for the customer satisfaction and service quality scales. The customer satisfaction scale obtained a

Cronbach's alpha of 0.71, while the service quality scale obtained a Cronbach's alpha of 0.78. Both values meet the acceptable threshold of 0.70, indicating that the items for perceived waiting time and service quality are consistent and reliable.

The slightly higher value for service quality suggests greater internal consistency among items measuring service performance and efficiency. This reliability test was conducted during the pilot testing phase prior to the main study. With a sample size of 20 participants, the results confirm that the instrument is suitable for use in the full-scale data collection.

Participants

The participants in this study are college students aged 18 and above who are currently enrolled for the academic year 2025-2026 in Colegio de San Juan de Letran, Manila. The researchers ensured that each participant had given their full consent before distributing the survey. According to Kuncel and Huber in 2016, college students are more capable of mature, reflective, and critical thinking than pre-college students, making college students appropriate participants for this study.

A total of 50 participants were selected to complete the survey for this study. Due to time constraints, the sample size was limited to 50 participants, but this number is still adequate to yield meaningful results. According to Mursa et al. (2025), 50 participants is considered acceptable for a descriptive quantitative study since there are no fixed rules in settling for a sample size. Creswell, J. W., & Creswell, J. D. (2018) also stated that a descriptive study may employ small sample sizes if the objective is to describe rather than the general population. The researchers employed a purposive sampling technique, which facilitated the recruitment of participants who had recent dining experiences at McDonald's in Intramuros. This approach ensured that the data collected was relevant to the study's objectives.

Statistical Treatment

Validated results from the survey questionnaires were collated, coded, and interpreted with the aid of Google Sheets. All the forms were validated for correctness before the results could be processed further. Perception regarding waiting time, customer satisfaction, and service quality based on the five dimensions of the SERVQUAL model (tangibles, reliability, responsiveness, assurance, and empathy) was also measured with the use of the five-point rating scale (1 = Strongly Disagree, 5 = Strongly Agree).

To determine the influence of the variables, the mean and standard deviation analyses were used to establish the influence of waiting time, customer satisfaction, and service quality perceptions.

RESULTS AND DISCUSSION

Table 3. Influence of waiting time in customer satisfaction

Statement	Mean	SD	Interpretation
1.The waiting time at McDonald's Intramuros affects my overall satisfaction as a customer.	4.22	0.91	Strongly Agree
2.Short waiting times at McDonald's Intramuros increase my satisfaction.	4.40	1.14	Strongly Agree
3. I feel frustrated when I experience long waiting times for my order at McDonald's Intramuros.	4.28	0.83	Strongly Agree
4.The waiting time for my order influences my overall dining experience at McDonald's Intramuros	4.00	1.05	Agree
Overall	4.23	0.98	Strongly Agree

Note: Legend: 1.00 - 1.79 Strongly Disagree; 1.80 - 2.59 Disagree; 2.60 - 3.39 Neutral; 3.40 - 4.19 Agree; 4.20 - 5.00 Strongly Agree

Table 3 presents the participants' level of agreement regarding the

perceived influence of waiting time on customer satisfaction at McDonald's Intramuros. The overall mean score is 4.23 with a standard deviation of 0.98, which is interpreted as Strongly Agree based on the given scale. This indicates that, generally, participants perceive that waiting time influences their overall satisfaction.

Among the individual statements, the highest mean was recorded for statement 2, with a mean value of 4.40 and a standard deviation of 1.14—it was interpreted as strongly agree. This suggests that minimal waiting time may positively contribute to their satisfaction. This is followed by statement 4 with a mean of 4.28 and a standard deviation of 0.83, interpreted as strongly agree, which highlights that long waits can affect their mood.

Statement 1 also obtained a high mean value of 4.22 and a standard deviation of 0.91, also interpreted as strongly agree, showing that waiting time influences customers' satisfaction. Meanwhile, waiting time influenced the overall dining experience, with an average value of 4.00 and a standard deviation of 1.05, both interpreted as agree, suggesting that although participants recognize the impact of waiting time, the effect may vary depending on individual experiences.

Statements 2 showed the highest value of standard deviation, followed by statement 4 suggesting that, regardless of the fact that both statements have a high mean value, the answers of the participants are scattered. Meaning, there are still some that vary in individual perceptions if short waiting times decrease their satisfaction, as well as if waiting time influences their overall satisfaction.

Additionally, the mean scores across all statements range from 4.00 to 4.40, indicating agreement among respondents on the listed statements related to waiting time. However, the standard deviation of 0.98 indicates that the responses from participants are somewhat spread out from the average, reflecting some differences in personal views, yet the overall answers remain quite uniform.

Table 4. Influence of waiting time in service quality

Statement	Mean	SD	Interpretation
1.Employees at McDonald's Intramuros provide prompt service with minimal waiting time.	3.50	0.79	Agree
2.Orders at McDonald's Intramuros provide prompt service with minimal waiting time.	3.38	1.01	Neutral
3. During busy hours, employees at McDonald's Intramuros handle orders efficiently.	3.30	0.95	Neutral
4.The speed of service at McDonald's Intramuros meets my expectations.	3.20	1.03	Neutral
5.McDonald's Intramuros consistently delivers orders without unnecessary delays.	3.18	1.12	Neutral
Overall	3.31	0.98	Neutral

Note: Legend: 1.00 - 1.79 Strongly Disagree; 1.80 - 2.59 Disagree; 2.60 - 3.39 Neutral; 3.40 - 4.19 Agree; 4.20 - 5.00 Strongly Agree

The table shows The overall mean value of table 4 is 3.31 with a standard deviation of 0.98, which interprets as neutral based on the scale and shows that McDonald's Intramuros service quality depends on customer waiting time and the aggregate score indicates a neutral assessment in which the customers neither agree nor agree that perceived waiting time influences their insights of service quality reflecting a mixed experience between participants.

Based on the results, the perceived service quality indicates that there are inconsistencies in service speed, especially during busy hours. Some may have received service with a reasonable waiting time, while others have experienced longer queues, affecting their perceptions of service quality in McDonald's Intramuros.

Statement 1 acquired the highest mean of 3.50 with a standard deviation of 0.79, suggesting that certain participants acknowledge that employees provide fast service. Meanwhile, Statements 2, 3, 4, and 5 received neutral assessments, with standard deviations ranging from 0.95 to 1.12, indicating that respondents observed various service speeds during their experience at McDonald's Intramuros.

Results show that statement 5 had the highest standard deviation, showing a value of 1.12. It suggests how inconsistent the service from McDonald's Intramuros is—there's a difference in the quality of service in each participant, which makes the value very scattered.

The neutral analysis shows that while employees at McDonald's Intramuros provide prompt service, there is room for improvement when it comes to consistency.

Based on the results for customer satisfaction and service quality, it shows that perceived waiting time influences customer satisfaction more than service quality. While both results show that opinions may vary, customer satisfaction is interpreted as strongly agree with a mean value of 4.23 and standard deviation of 0.98, while service quality is neutral with an average of 3.31 and standard deviation of 0.98—showing that longer waiting time influences their satisfaction.

CONCLUSION

The primary objective of this study was to examine the perceived influence of waiting time on customer satisfaction and service quality at McDonald's Intramuros. The data reveal that waiting time exerts a significant negative perceived influence on customer satisfaction. The results indicate that Letran students perceive delays as a major detriment to their dining experience; as waiting time increases, satisfaction levels decline sharply. The study found that current waiting times frequently exceed the students' patience limit, leading to a distinct perception of poor service quality. These findings highlight a critical gap in service efficiency at McDonald's Intramuros. The reported low satisfaction implies that the branch is currently failing to meet the speed expectations of its core market. This is significant because, in the fast-food industry, a failure to deliver on the promise of "speed" directly equates to a failure in service quality. If left unaddressed, this dissatisfaction could lead to a decrease in student patronage or a shift toward competitors with faster service turnover. Readers should exercise caution when interpreting these results, as the study relies entirely on self-reported opinions rather than objective metrics. As a consequence of this methodological limitation, the findings are not sufficiently reliable to serve as a baseline for factual conclusions.

Recommendations

It is recommended that the management of McDonald's Intramuros invest in additional self-ordering kiosks to significantly reduce customer waiting times. Intramuros should adapt a facility layout that would facilitate a more efficient and orderly customer flow to reduce congestion, minimize customer confusion, and speed up customer service to ensure a higher level of service quality during busy periods of service. The management of McDonald's Intramuros should improve the queuing experience to minimize the perceived burden of waiting. Future researchers are encouraged to investigate strategies to reduce waiting time in Intramuros, Manila. Conduct an inferential analysis to examine the relationship between waiting time, customer satisfaction, and service quality.

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