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Evaluation of customer satisfaction and service quality using SERVQUAL model: the case of fast-food restaurants in Iraq

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ABSTRACT

Due to the exponential growth in the number of fast-food outlets in the last two decades, the amount of people employed in the sector has significantly increased. Due to the country's growing consumption level, Iraqi consumers are becoming increasingly concerned about their food choices. The increased number of people spending money on fast food made it more available to them, leading to dramatic changes in their daily consumption habits. As the restaurant industry has risen, people's demands for the service industry have also increased. This paper adopted a quantitative method using a survey covering a sample consists of 200 regular customers in five Iraq fast-food restaurants. Performance and consumer loyalty is evaluated using the SERVQUAL model. The findings indicate that the sample restaurants' quality dimensions can be ordered in ascending order from (concrete), reliability (reliability), response (response), certainty (warranty), to empathy (empathy). The results also indicate that the quality of service for local fast-food restaurants is relatively reasonable but lower than that of international fast-food restaurants.

Keywords: Quality, SERVQUAL Model, Customer Satisfaction, Fast-Food Industry, Quality Gap

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1. Introduction

Fast food is well-known for its diverse menu, ease of use, delectability, and affordability. In the modern day, fast food is well-known for its convenience, consistency, and delectability. Additionally, fast food restaurant advertisements often present fast food as healthy, which leads to customers being readily swayed. According to Goyal and Singh [1, fast food is the fastest rising food segment in the world. Fast food restaurants will account for this by requiring accelerated subsequent subscriptions and low-cost facility subscriptions for dining and takeout services. Fast food is described as a meal that can be served and prepared in a short period of time. Customers, mostly dual-working families with children, are predominantly motivated by their busy lifestyles to prefer a quick meal over a home-cooked meal [2, 3]. It was corroborated by Habib et al. [4], who affirm that shoppers' insufficient time has compelled them to resort to fast food as a result of long work hours, a hectic lifestyle, a demanding career, and a demanding family. As a result, Malaysia's fast-food industry has become the preferred choice for the majority of consumers, owing to the quick preparation of meals that enables them to eat quickly. Malaysia's food industry has been able to grow its activities as a result of changing consumer lifestyles. Globally, food distribution is growing. Customers appreciate the robust flavor of the food and the low cost of purchase [3, 5]. Fast-food restaurants, for the most part, serve the public as counter-service establishments, where the customer must engage in buying and cooking food, as well as performing the food they ordered [6]. Additionally, big fast-food chains such as McDonald's and Burger King have failed to sustain their current customer bases. Second, as new waves of customers seek meaning and authenticity in their food, FFR has struggled to keep up. Large firms, such as McDonald's, have redirected their marketing campaigns to boost customer satisfaction and enhance service efficiency [7, 8]. Numerous researchers argue that FFR influences behavioral variables such as the level of

customer service, perceived worth, business appearance, and customer loyalty [9]. Several research examined various assessment scales to determine the restaurant's service level. Another critical factor to remember is customer trust in FFR. In light of the background, this term was historically referred to as consumer loyalty [10, 11]. This research has a dual purpose: it contributes to the body of knowledge and advances scientific understanding. PLSEM is particularly advantageous when learning multidimensional subjects. Along with regular track coefficients, IPMA analysis can be used to examine various facets of the multifaceted construction of fast-food consistency [12].

Price and Reichert [13] assert that consistency is intrinsically related to satisfying consumer criteria, desires, and needs. In such cases, a service's correct and outstanding execution may have a significant effect on its reuse. For services rendered to these restaurants, as well as for consumers who used the services for the first time. Offering consumers fast-food restaurant facilities generates an illusion, which could vary from the service's experience. The study attempts to ascertain service efficiency and customer loyalty using an improved approach. Two primary motives can be attributed to the motivation for doing this study. The first explanation is a lack of local research evaluating the level of service offered by fast-food restaurants in Iraq in light of global cultural differences. The second explanation is the likelihood of increasing the productivity of fast-food restaurants in Iraq, which is the focus of the study, through the creation of a realistic performance evaluation approach that is useful for strategic management and planning. This essay has a number of goals. The first is concerned with objectively measuring the level of services rendered and producing more objective outcomes. Additionally, the third goal of the paper is to define the quality difference between requirements and experiences of the dimensions of the updated quality of service model (quality of service), as well as the possibility of defining and enhancing the essential factors of service in fast-food restaurants in Iraq.

2. Literature review

Through 2027, the global fast-food industry is forecast to rise at a compound annual growth rate (CAGR) of 5.1 percent, establishing it as one of the world's most dominant business sectors [14]. Customers demand a wide range of products and services, something both international and domestic restaurant chains are trying to meet. People love fast food restaurants because they are easy and time-saving. Consumer preferences have boosted the appeal of dining out, and as a result, the fast-food restaurant market is booming. Customer expectations are a market problem for restaurants, just as they are for other industries [15]. In today's intensely dynamic marketplace, customer loyalty has become a vital component of corporate policy. Fast food restaurants aim to optimize a customer's favorable experience in order to improve the probability that the customer will return [16]. Entrepreneurs have recognized the vital importance of constructive consumer reviews in developing a long-term, sustainable enterprise. Restaurant managers benefit from a thorough understanding and knowledge of the factors that influence consumer satisfaction in order to plan and offer the best offerings to consumers. As a result, regardless of whether an organization provides a service or a product, customer loyalty is vital to its success. The direct benefit of satisfying consumers is that it enables the business to grow and capture a greater market share, which results in improved profitability. Consideration is given to the tangible implications of service efficiency. Nonetheless, it discovers "during affiliations between vendors and customers," which encompasses the mechanisms and manner in which the product is distributed to the client. Following that, the dimensions of service quality are calculated using instruments in accordance with a single norm. Meanwhile, several scholars have distinguished different categories of standard of service sub-components, with several writers confusing one another. Xiao et al. [17] cite references. Practical consists of three components: (1) the personnel or contact dimension; (2) the facility or environmental dimension; and (3) the content or outcome of an aspect of what was delivered, which takes into account "the manner in which the company and its customers were transmitted" and all personal correspondence. Similarly, corporate efficiency refers to the credibility and brand of a company. Women consumers are usually more happy than males, according to the American Customer Satisfaction Survey Index [18]. This is because women are more involved with communal matters and need greater bonds and harmonious relationships with others [19]. Males were more willing to take chances than females, and they are more prone to reckless actions in social settings. Males are less likely to maintain a provider's loyalty because they are less concerned about moving brands and experimenting [20]. On the other hand, women seem to be more likely than boys to return to a suitable restaurant. [21.] According to some scientific research, gender has little impact on people's perceptions of pleasure. Male happiness and life satisfaction, according to Chui and Wong [22], are associated with feelings, while female happiness and life satisfaction are associated with family and other social relationships (self-concept). They investigated the relationship between gender and happiness and life satisfaction in Hong Kong and found that gender has no impact on happiness. While joy has long been

studied in other areas of social science, no research has examined how gender affects consumer attitudes toward satisfaction in the field of service marketing. Operation reliability is a tough concept to understand. Given the disparate attributes and characteristics of the facilities offered, it is challenging for consumers to assess service prior to, after, and after usage [23]. Customer satisfaction is measured largely by the quality of service rendered [24]. Numerous studies have been conducted on the relationship between consumer loyalty and service efficiency [25]. After Anantharanthan developed a quantitative description of service quality, Parasuraman et al. [26] developed a measurement for service quality (SERVQUAL) (the PZB model). They generalized service efficiency into ten metrics based on observations of banks, long-distance telephone companies, credit card companies, stock dealers, and household repair/maintenance service providers, then narrowed them down to five and fine-tuned the SERVQUAL estimate [27]. The five elements to remember are tangibles, longevity, transparency, assurance, and empathy. STEVENS et al. [28] build the LOGDSERV measurement based on their retrospective studies on customers visiting fast-food restaurants, recreational restaurants, and luxury restaurants. Kim et al. [29] developed the institutional DINESERV equation by referencing the five dimensions in LOGDSERV and SERVQUAL and developing a total of 29 questions based on the DINESERV restaurant service efficiency measurement. Chen and Chen [30] evaluate the efficiency of operation in Taiwanese fast-food restaurants. The institutional DINESERV measurement was created by Kim et al. (2009). Restaurants' primary considerations include service quality, product quality, price and value, the atmosphere, and comfort. A factor analysis of the five institutional DINESERV parameters showed that all five were important predictors of consumer satisfaction and willingness to return. The questions in this paper have been revised to reflect fast-food restaurant specifics, literature review, and expert perspectives, while maintaining the practical DINESERV estimate as a baseline. The theoretical framework for this study is depicted in Figure 1.

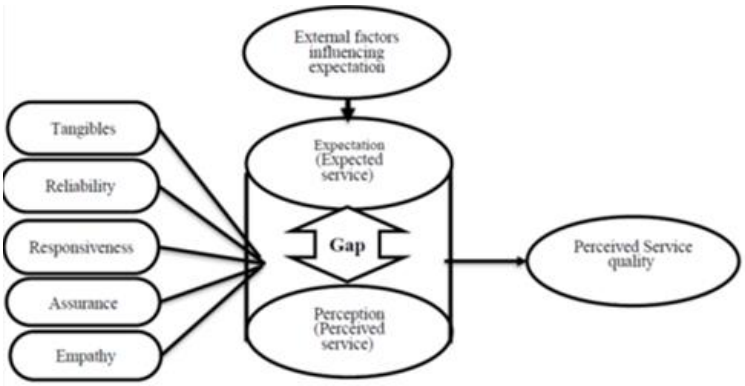

Figure 1. The Research Framework.

3. Methodology

Numerous tools and methods are available for assessing service efficiency. SERVQUAL (service quality) is the most well-known and widely used instrument [28]. SERVQUAL has been revised and is commonly used in restaurant settings to assess service quality [31]. The SERVQUAL has been used in a variety of restaurant environments, including fine dining, casual dining, fast food, food courts, and chain restaurants, and is widely recognized as a legitimate and relatively simple tool for determining how customers view a restaurant's quality [31]. For the last two decades, SERVQUAL models have been widely used to evaluate service quality in the fast-food industry [32]. The SERVQUAL method was used to assess customers' standards of service quality [33-39]. The SERVQUAL instrument provides researchers with broad performance dimensions for service industries, but does not have specific service characteristics. For this research, we developed and revised our SERVQUAL questionnaire using pilot studies and existing literature on fast food restaurants. The pilot analysis contained 29 different facility characteristics to test the questionnaire's comprehensibility. After it was said and done, we found that 29 of these features suited the SERVQUAL dimensions. There were five measurements (Table 1) and 29 characteristics in the final edition of the questionnaire (Table 2).

Table 1. Five SERVQUAL dimensions and descriptions

Dimensions	Descriptions	Example of Fast-food restaurants
Reliability	It is the capacity to deliver the promised service consistently and accurately..	Providing operation in accordance with the contract Dependability in the resolution of customer service issues.

Dimensions	Descriptions	Example of Fast-food restaurants
		Delivering programs accurately the first time. We provide programs on schedule. We ensure that our databases are error-free.
Assurance	Employees' knowledge and courtesy, as well as their capacity to inspire faith and belief.	Employees that inspire client trust. They instill a sense of security in their customers' purchases. Employees who are consistently courteous. Employees that are capable of responding to a customer's query.
Tangibility	Physical buildings, supplies, staff, and contact materials all have an appearance.	Employees who present themselves neatly and professionally. Materials synonymous with the service that are visually enticing.
Empathy	The allocation of compassionate, one-on-one service to the client.	They pay close attention to each client. Employees who treat consumers with compassion. We are looking out for the best interests of our clients. Employees who are aware of their clients' wishes. Hours of operation that are convenient.
Responsiveness	It is a disposition to assist consumers and offer timely support.	Customers should be kept informed of the dates and times of services. Clients get prompt support. Willingness to assist consumers Preparedness to respond to consumer demands.

Reliability of data is one of the essential tools to verify the validity of testing the primary hypotheses of the study. It determines the validity of the scale used in the study to achieve the desired results from its application. The consistency criterion or the questionnaire score standard over time or among assessors indicates the degree of reliability of the response shown by the sample. The Cronbach Alpha and Pearson Correlation Coefficient were used to assess the reliability and validity of our QoS questionnaires in this study. Alpha Cronbach is the industry standard for reliability. It is 0.7. Our questionnaire has a Cronbach alpha of 0.87, meaning that it is sufficiently precise and consistent in its results. To analyze the relationship between the average score and the subject's actual results, the Pearson Correlation Coefficient was used. The average factor of the questionnaires was accurately measured in accordance with the general norm. A coefficient greater than 0.7 indicates a high degree of reliability, and a higher coefficient may suggest a better fit between the results and the calculation target. For ready-to-eat fast-food restaurants in our current study, this questionnaire will include a brief and practical guide to do so with the least amount of disruption and in a way that leads to achieving customer satisfaction and improving the quality of services provided by the sample restaurants. This study will identify priority areas for further changes and modernization of fast-food restaurants in Iraq.

Table 2. The SERVQUAL attributes

Dimension	#	Code	Service Attributes
Tangible	1	T1	The restaurant's parking lot and building exteriors are visually appealing.
	2	T2	The restaurant has an attractive seating room.
	3	T3	The restaurant's staff is well attired, decent, and tidy.
	4	T4	The restaurant's menu is clearly accessible.
	5	T5	The seating area is open and inviting.
	6	T6	The restaurant seems to be tidy and orderly.
	7	T7	The restaurant delivers prompt service.
	8	T8	The restaurant's quick service menu corrects any errors.
	9	T9	The restaurant's operation is dependable and predictable.
Reliability	10	RL1	The restaurant has a reliable guest count.
	11	RL2	The restaurant will prepare your food exactly as you have specified.
	12	RL3	The food is delicious.

Dimension	#	Code	Service Attributes
	13	RL4	The food is prepared at the proper temperature.
	14	RL5	Food is prepared newly.
	15	RL6	Food selection varies.
	16	R1	Food is delivered in portion sizes that are fair.
Responsiveness	17	R2	During peak hours, the restaurant offers service on time.
	18	R3	The restaurant serves fast food.
Assurance	19	A1	The restaurant goes beyond and beyond to accommodate your unique order.
	20	A2	Employees should still be willing to assist others.
	21	E1	Employees should be dependable and trustworthy.
Empathy	22	E2	Staff members can be courteous.
	23	E3	The restaurant's staff is capable and eager to provide you with details about menu items, ingredients, and preparation methods.

4. Results

The paper aims to evaluate the service quality in the restaurants in AL-Nakheel Mall in Baghdad city. This Mall has four restaurants are:

- CHILLY HOUSE
- CITY CENTER
- FOOD HOUSE
- ICE PACK AND
- SHMESANI.

The demographic characteristics of the respondents were subjected to descriptive statistical analysis. The respondents' demographic profiles were examined to understand the degree of consumer satisfaction with fast-food restaurants. Table 2 shows the results, while Table 3 displays respondents' demographic details, including gender, age, and length of stay (years). Females made up 25% of the survey, while males made up 25%. (75 percent). About a third (37%) of them were over the age of 50. Between 6 and 10 years, 42 percent of respondents (42%) remained regular customers.

Table 3. respondents' demographics information

Types	Categories	Frequency	Percentage %
Gender	Male	75	75.00%
	Female	25	25.00%
	21–30	10	10.00%
Age	31–40	30	30.00%
	41–50	23	23.00%
	>50	37	37.00%
	1.5–5	20	20.00%
Expert duration of stay (years)	6–10	42	42.00%
	11–15	23	23.00%
	>20	15	15.00%

This approach employs descriptive statistics rather than inferential statistics. The sample size is not calculated based on any assumptions. The result obtained from many fast-food restaurants has a higher level of external validity. The recommendations produced by a single FFR, on the other hand, are unique to that FFR. The differences between participants' experience (PE) and expectation (EX) scores, measured separately, were used to measure each service attribute's distance scores. As shown in Equation (1), the SERVQUAL score (SS) for each feature was calculated by subtracting the perception score (PE) from the expectation score (EX):

$$\text{SERVQUAL score (SS)} = PE - EX \quad (1)$$

PE stands for the individual's impressions of given service delivery, while EX stands for the individual's aspirations. The average score on the expectation questionnaire was 4.41, indicating that respondents had strong expectations for service attributes. T4: "The restaurant's menu is clearly understandable..." was one of the top three items on the expectation questionnaire. T2: "There is a visually appealing seating room in the restaurant." T5: "Dining space is spacious and comfortable" (mean = 4.48), T4: "Dining room is spacious and comfortable" (mean = 4.48), and T4: "Dining room is spacious and comfortable" (mean = 4.56).

Table 4. Analysis of SERVQUAL Results

Dimensions	Code#	Actual Performance		Expected performance		Gaps	Relative Importance	*t*-Test	
		Mean	Standard Dev.	Mean	Standard Dev.			*t*-Value	*p*-Value
Tangible	T1	3.86	1.28	3.96	1.37	-0.1	79.2%	−0.91	0.19
	T2	3.80	1.17	4.48	1.14	-0.68	89.6%	−1.21	0.12
	T3	3.83	1.07	4.40	0.68	-0.57	88%	−4.81	0.00 **
	T4	3.64	1.14	4.56	1.07	-0.92	91.2%	−2.64	0.00 **
	T5	3.34	1.22	4.48	0.65	-1.14	89.6%	−5.21	0.00 **
	T6	3.38	1.28	4.44	1.11	-1.06	88.8%	−2.78	0.00 **
	T7	3.47	1.35	4.16	1.11	-0.69	83.2%	−2.38	0.00 **
	T8	3.51	0.94	4.12	0.90	-0.61	82.4%	−4.31	0.00 **
	T9	3.93	0.94	4.08	0.71	-0.15	81.60%	−3.31	0.00 **
Reliability	RL1	3.60	1.11	3.96	1.18	-0.36	79.20%	−3.75	0.00 **
	RL2	3.47	1.28	4.08	0.74	-0.61	81.6%	−5.84	0.00 **
	RL3	3.51	1.33	4.28	1.36	-0.77	85.6%	−2.67	0.00 **
	RL4	3.76	1.12	4.36	1.35	-0.6	87.2%	−1.18	0.12
	RL5	3.67	1.07	4.24	0.58	-0.57	84.8%	−4.94	0.00 **
	RL6	4.11	0.91	4.20	1.16	-0.09	84%	−1.18	0.12
Responsiveness	R1	3.67	1.08	4.12	1.03	-0.45	82.4%	−4.07	0.00 **
	R2	3.38	1.00	4.12	1.11	-0.74	82.4%	−4.78	0.00 **
	R3	3.38	0.96	4.12	1.21	-0.74	82.4%	−4.20	0.00 **
Assurance	A1	3.18	1.17	4.08	1.27	-0.9	81.6%	−4.22	0.00 **
	A2	3.57	1.18	3.96	1.06	-0.39	79.2%	−3.31	0.00 **
Empathy	E1	3.91	0.95	4.20	0.93	-0.29	84%	−2.52	0.00 **
	E2	3.57	1.15	4.04	0.78	-0.47	80.8%	−4.07	0.00 **
	E3	3.67	1.11	4.40	0.97	-0.73	88%	−3.58	0.00 **

The mean score on the experience questionnaire was 3.61, showing that participants considered the service's success to be significantly above average (shown as Table 4). RL6: "Food selection is varied" (mean = 4.11), T9: "Service is efficient and consistent" (mean = 3.93), and E1: "Staff should be respectful and truthful" (mean = 3.91), respectively. Three of the most significant items on the interpretation questionnaire. When the mean scores from the aspirations and success questionnaires are compared, a strong negative service deficit in all dimensions becomes apparent (shown in Table 4). Negative values meant that fast-food restaurants fell short of consumer needs. Nineteen characteristics were found to be slightly different for a p-value less than 0.05. T5: "Food is new" (gap =1.14); T6: "Food selection is varied" (hole = 1.06). T4: "The restaurant has a clearly understandable menu." The top three gaps between desires and experiences (gap = 0.92) is as follows. In the other hand, raw SERVQUAL ratings do not take into account the relative value of operation measurements, and hence can not be used to draw conclusions. To compensate, weighted scores were determined, and the following results were obtained. Fast food restaurants performed admirably on the SERVQUAL real and efficiency dimensions. In the significant dimension, five of the nine tangible qualities achieved strong satisfaction scores. Three of the six reliability characteristics were graded as highly satisfying (in Quadrants I and 4), while the other three were rated as poor satisfaction with a high degree of significance (located in Quadrant II). The majority of traits in the dimensions of openness, assurance, and empathy were in Quadrants II and III and were graded as having a good attitude. To ascertain the critical characteristics and their relationship to consumer needs, a distance study based on the (SERVQUAL) model is used. It quantifies the gap between perceived and anticipated service efficiency. Table (5) explain the results as follows:

The mean of all the questionnaire items reached (4.1697); this value is larger than the value of compromise between customer satisfaction and dissatisfaction, which got to value (3). The value of the weighted mean was between (3.4 – 4.2), reflecting the strength of customer reaction; therefore, the value of importance level was at a high level, reflecting customers' high satisfaction. The standard deviation value was (0.677), to which most of the answers reacted. The relative importance value was (83.39%), which documents most of the sample's satisfaction. Table 4 show the importance levels related to the questions between the highest level (q 4) was (4.56), and its standard deviation (0.583), and the relative importance (91.20%), it also indicates that the expectation of most customers of the sample was satisfied with the service quality of restaurants. These values

concentrated on the importance of using the (SERVQUAL) model to measure the gap in fast-food restaurants. Item (24) reached the lowest deal, in which the value of weighted mean was (3.88), and the standard deviation was (0.666). The relative importance comes (77.60%), which means the item number (24) is the lowest importance among all items in measuring the quality service by using the (SERVQUAL) model in fast food restaurants.

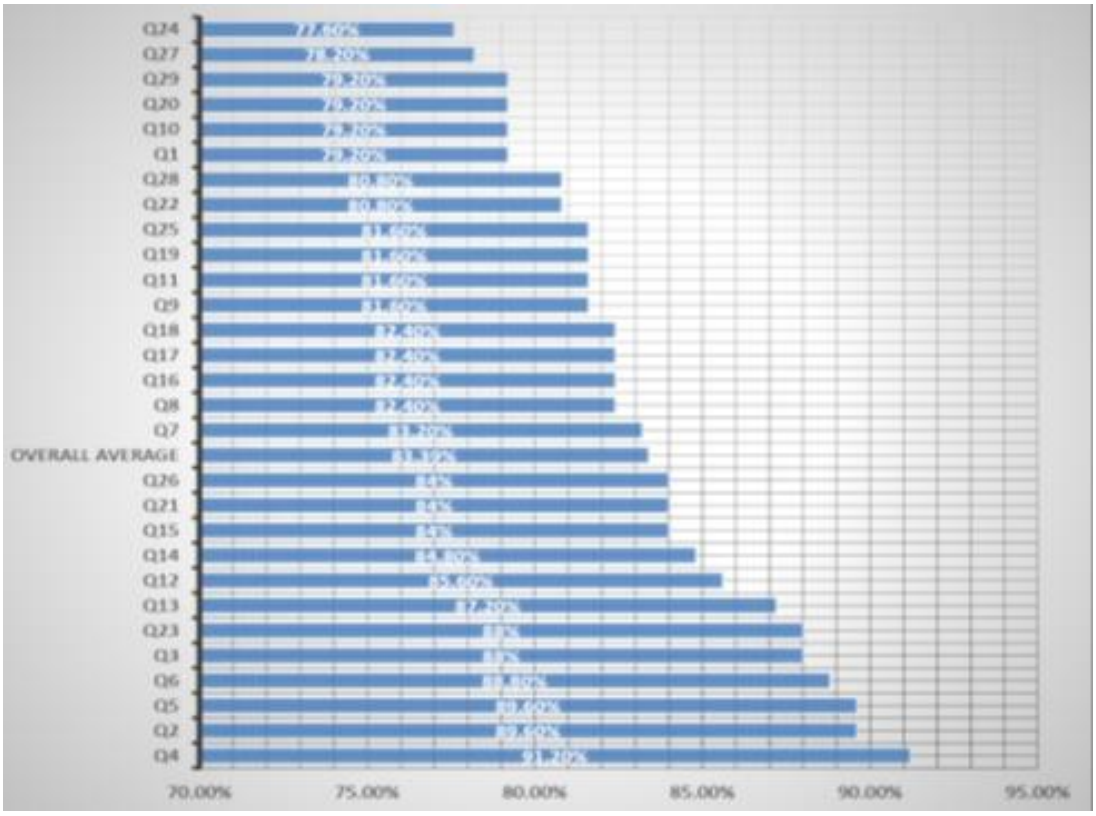

Figure 2. The relative importance of quality dimensions based on the SERVQUAL model

Figure 2 indicates the statistical results, which divide the questionnaire into two groups. The first group contained the weighted mean items than the total weighted mean related to questions (q4,q2,q5,q6,q3,q23,q13,q12,q14,q15,q21,q26). Which configurated from the highest value to the lower weight by relative importance, that means that the first group plays the prominent role in measuring the service quality by using (SERVQUAL) model in the fast-food restaurants. The second group contained the items which reached the weighted average mean to lowest value from the total weighted mean depending on the answers of the customers in the questionnaire, which included the questions (q7, q8, q16, q17, q18, q9, q11, q19, q25, q22, q28, q1, q10, q20, q29, q27, q25). The weighted mean value in this group is the lowest value, which means it plays a secondary role in measuring service quality. The (canonical correlation) between the two groups was (0.431), which is less than (0.500), indicating a poor relationship between the two groups, which focuses on the first group while fast-food restaurants need to assess service efficiency.

5. Conclusion

Though different forms of fast-food ventures continue to demonstrate their advantages over traditional local restaurants in Iraq, acceptance of such schemes remains a complex issue. The test is essential to ascertain the true outcomes. The challenge of evaluating a fast-food restaurant will span the entire operation, from food and service pricing to the evolution of the food industry's use of technology over time. The focus varies according to the stage being measured. This research demonstrates that adequate outcomes are achieved following service delivery. The human aspect is much more critical and necessitates an interconnected thinking process in order to have full consumer satisfaction. (SERVQUAL) model is a service quality metric that was developed empirically to determine the perceived service quality difference in fast-food restaurants. It can be inferred that the overall perceived standard was rule, as experience fell short of meeting the customers' high standards. It can be deduced

that consumers of fast-food restaurants in Al-Nakheel Mall are dissatisfied with the level of service provided by these establishments. The aim of this research is to ascertain the restaurant's level of service efficiency, followed by the identification of the measurements with the largest negative difference. (SERVQUAL), the model can be generalized to a variety of customer retention surveys in a variety of industries. In restaurants, service efficiency is a key element in gaining a strategic edge. This research will assist managers in identifying the strengths and shortcomings of their companies' service efficiency. (SERVQUAL) model (instrument) has been commonly used to assess service quality, addressing concerns such as time measurement, size measurement, and service quality dimensions. The level of intended and perceived service quality is determined by the restaurant qualities, which encompass five dimensions: tangibles, dependability, responsiveness, assurance, and empathy. The restaurant will use these dimensions to deliver and receive consumer survey forms. Additional analysis may be conducted using larger surveys to investigate the consistency of food service in a specific style of restaurant. The following things will help improve the average quality levels at fast-food restaurants:

- Improving reliability: Restaurant management must increase productivity by concentrating on food supply and quality, as well as on timeliness.
- Enhancing Assurance: Employees must be properly qualified and fully conversant with target clients.
- Enhancing tangibility: initial impressions are fleeting. The management should prioritize the cleanliness of the stage, desks, and seats.
- Increasing empathy: this can be accomplished by easily arranging working hours and educating staff to consider the unique needs of consumers.
- Improving Responsiveness: Management's role in delivering high-quality service should not stop with providing customers and responding to their needs.

This analysis does have certain pitfalls. To begin, the sample size can be increased. Just 100 questionnaires were returned due to the brevity of the data collection period. This means that the thesis could last two months. Second, we analyzed only two brands because our study centered on comparing competing grocery chains. While fast food establishments are few in number, future research will take a more comprehensive approach to studying Iraq's entire fast food community. Other experiments examine food service efficiency using a greater sampling size or various combinations of variables for each category of restaurant. The use of additional analysis methodologies for assessing the quality of restaurant service and the expansion of the study's scope may have consequences for this report.

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