

Service Quality and Internal Customer Satisfaction Amidst the Pandemic

Kualiti Perkhidmatan dan Kepuasan Pelanggan Dalam Semasa Pandemik

NOR HAFIZAH IBRAHIM, ZAFIR KHAN MOHAMED MAKHBUL, CHE WAN KAMARUL, HISHYSAM CHE WAN AHMAD & SYARIFAH NURFUADUZ ZAKIAH HABIB DZULKARNAIN

ABSTRACT

The onset of the COVID-19 pandemic has brought about substantial changes in service quality within Higher Education Institutions, particularly impacting Human Resource Management (HRM). Consequently, there is an urgent need to enact measures that enhance service quality, given the pivotal role of HRM services in shaping organisational performance. To achieve this, it is imperative to consistently monitor and augment HRM service quality in alignment with organisational objectives. This study sets out to gauge the levels of satisfaction among HRM customers concerning the quality of HRM services at a specific public university in Malaysia. To achieve this objective, a meticulously crafted questionnaire was developed, taking into account the fundamental determinants of service quality and the dimensions outlined in the SERVQUAL model. A pilot study was undertaken to ascertain the questionnaire's reliability, revealing a commendably high Cronbach's Alpha Coefficient of 0.957. Subsequently, an online survey was conducted, reaching out to the entire population of 17,000 respondents. Employing purposive sampling, the study gathered 802 completed questionnaires. The research methodology hinged on correlation and regression analyses to scrutinise the intricate relationship between service quality dimensions and customer satisfaction. The findings underscored the significant influence of all dimensions - Responsiveness, Assurance, Access, Empathy, and Reliability - on customer satisfaction, with the exception of Tangible. This study provides invaluable insights for managerial decision-making, presenting a strategic roadmap to pinpoint areas for enhancement and to develop forward-looking strategies that adapt to the ever-changing landscape of HRM service quality amid uncertain conditions such as the COVID-19 pandemic.

Keywords: Customer satisfaction; human resource management; public university; service quality; SERVQUAL model

ABSTRAK

Kehadiran wabak COVID-19 telah membawa perubahan yang ketara dalam kualiti perkhidmatan di Institusi Pengajian Tinggi, terutamanya Pengurusan Sumber Manusia. Justeru, langkah segera perlu dilaksanakan bagi memastikan penyampaian perkhidmatan berkualiti. Ini adalah sangat penting, kerana kualiti perkhidmatan HRM memainkan peranan penting dalam menentukan prestasi organisasi. Oleh itu, terdapat keperluan berterusan untuk memantau dan meningkatkan kualiti perkhidmatan HRM dengan teliti agar seiring dengan objektif organisasi. Kajian ini bertujuan untuk menilai tahap kepuasan pelanggan HRM berhubung kualiti perkhidmatan HRM di sebuah universiti awam di Malaysia. Untuk mencapai objektif ini, instrumen kajian (soal selidik) telah dibangunkan, dengan mengambil kira penentu-penentu asas kualiti perkhidmatan dan dimensi-dimensi yang diterangkan dalam model SERVQUAL. Satu kajian rintis telah dijalankan untuk menilai kebolehpercayaan soal selidik ini dengan hasil pekali Alpha Cronbach yang sangat tinggi iaitu 0.957. Kemudian, satu tinjauan dalam talian telah dijalankan, dengan merangkumi seluruh populasi responden sebanyak 17,000. Dengan menggunakan pensampelan bertujuan, kajian ini telah mengumpulkan 802 borang soal selidik yang lengkap. Metodologi penyelidikan ini bergantung pada analisis korelasi dan regresi untuk menyelidik hubungan yang rumit antara dimensi kualiti perkhidmatan dan kepuasan pelanggan. Dapatan kajian menunjukkan pengaruh signifikan bagi kesemua dimensi - Responsif, Jaminan, Akses, Empati, dan Kebolehpercayaan - ke atas kepuasan pelanggan, kecuali dimensi Tangible. Kajian ini memberikan implikasi praktikal kepada pihak pengurusan untuk mengenal pasti ruang penambahbaikan dan merangka strategi masa hadapan yang sejajar dengan perkembangan landskap kualiti perkhidmatan HRM terutamanya dalam menghadapi situasi luar jangka seperti wabak COVID-19.

Kata kunci: Kepuasan pelanggan; pengurusan sumber manusia; universiti awam; kualiti perkhidmatan; model SERVQUAL

INTRODUCTION

The increasing spread of COVID-19 has brought significant consequences for the well-being of both organisations and professionals, with particularly noticeable effects on the field of Human Resource Management (HRM). The imposition of movement control orders, which restrict physical interactions with customers, has been a contributing factor (Rajendran & Selvaratnam 2023), posing challenges to effective service delivery. As a result, a reevaluation of service delivery methods becomes imperative. “Accessibility” can be defined as the ease and convenience of services that customers can access, encompassing approachability and the ease of contact (Pakurár et al. 2019). In the context of the COVID-19 pandemic, digital platforms are perceived as flexible tools that enhance accessibility (Mohamad & Subhi 2023).

The essential role of HRM in achieving organisational success has grown increasingly evident, particularly in the context of the COVID-19 pandemic. HRM plays a pivotal role in ensuring that employees remain productive and resilient amidst these challenging times. Moreover, HRM practices have undergone a transformative evolution, now placing a strategic emphasis on an organisation’s objectives, sustainability, competitiveness, and the delivery of outstanding customer service (Mutiso & Kilika 2017). Consequently, the integration of HRM practices with a culture of innovation has assumed profound significance not only in enhancing an organisation’s capacity to innovate its services but also in bolstering its sustainability (Alosani et al. 2020).

In addition, sustainable HRM practices have risen to the forefront as indispensable tools for augmenting customer satisfaction (Wikhamn 2019), a critical consideration amid the uncertainties that have emerged in the COVID-19 era. In alignment with these advancements, there has been a notable rise in the need for efficient and high-quality services, particularly in the public sector. Here, the paramount goal is to ensure the delivery of outstanding services while simultaneously minimising any lapses in quality assurance (Mukhtar & Ali 2011; Thommana et al. 2015). “Service quality” is characterised by any disparity between the services provided and the expected service standards (Ramseook et al. 2010). It typically entails a thorough assessment by customers of a specific service’s capacity to meet their expectations, consequently exerting an impact

on their degree of satisfaction (El Saghier & Nathan 2013).

A plethora of studies has sought to explore the intricate relationship between customer satisfaction and service quality (e.g., Awan et al. 2011; Bashir et al. 2020; Fida et al. 2020). Extensive research across various service sectors has aimed to understand how customer satisfaction and service quality interact (e.g., Famiyeh et al. 2018; Fida et al. 2020; Othman et al. 2019; Wikhamn 2019). Remarkably, within the context of public universities, there has been a relative scarcity of research addressing customer satisfaction concerning HRM service quality, particularly amid the challenges imposed by the pandemic. In the midst of these transformative changes, the COVID-19 pandemic has profoundly affected the delivery of services by Higher Education Institutions (HEIs). Ironically, the pandemic has expedited the adoption of virtual technologies by HEIs, making investments in new technology and online infrastructure essential to maintain service quality and adapt to the pandemic’s challenges (Camilleri 2021).

Moreover, the Ministry of Education Malaysia, has embarked on initiatives to enhance the service delivery systems of public universities (Malaysia Education Blueprint 2015-2025 [Higher Education] 2015). These endeavours are driven by the vision of public services characterised by integrity, citizen-centricity, accountability, and responsiveness to the unique needs of all citizens, with special consideration for the most vulnerable members of society. This concerted effort fosters transparency and, in turn, facilitates public access to high-quality services (Engdaw 2020). In light of these extraordinary circumstances, understanding and assessing HRM service quality and customer satisfaction at public universities in Malaysia becomes not just important but essential. Hence, this study aims to evaluate HRM service quality and customer satisfaction at a specific public university in Malaysia, considering the unique context of the COVID-19 pandemic and its impact on service delivery.

LITERATURE REVIEW

This section critically examines relevant studies that shed light on the relationship between customer satisfaction and service quality. The review is divided into two main areas of focus: service quality within the domain of HRM and the dimensions that constitute service quality.

SERVICE QUALITY IN HUMAN RESOURCE MANAGEMENT

While there is no universally accepted definition of service quality, it generally involves a comprehensive evaluation by customers of a particular service's ability to meet their expectations, subsequently influencing their level of satisfaction (El Saghier & Nathan 2013). The SERVQUAL model is a commonly employed framework for assessing service quality and customer satisfaction (Raza et al. 2020). Initially, Parasuraman et al. (1985) identified ten determinants encompassing reliability, responsiveness, competence, access, courtesy, communication, credibility, security, realization of customer needs, and tangibles. However, a subsequent study by Parasuraman et al. (1988) refined these determinants, condensing them into five dimensions within the SERVQUAL model: Reliability (the ability to consistently deliver services accurately), Tangibles (encompassing equipment, physical facilities, and employee appearance), Responsiveness (willingness and readiness to assist and promptly respond to customer needs), Empathy (demonstrating noble values like trustworthiness, believability, honesty, caring, and providing personalized attention to customers), and Assurance (staff abilities, including knowledge and courtesy, that inspire trust and confidence in customers). The literature review highlights the considerable emphasis placed by researchers on exploring the relationship between customer satisfaction and the various dimensions of service quality (Famiyeh et al. 2018).

Ostensibly, the quality of services is a matter of significant concern, not only in the private sector but also within the public sector. Key aspects of public service quality encompass service accessibility, transparency, employee attitudes and actions, service adaptability to evolving demands, reliability, employee expertise, knowledge, and trustworthiness (Martinović et al. 2017; Zahari et al. 2008). Engdaw (2020) investigated the impact of public service delivery quality on customer satisfaction, revealing varying perspectives between customers and service providers regarding service delivery quality and customer satisfaction. Customer satisfaction was found to be positively linked with responsiveness, tangibility, assurance, and reliability, while displaying a negative correlation with empathy. The provision of quality service significantly contributes to customer satisfaction, with an average satisfaction

rate of 84%, in stark contrast to the mere 3.89% when quality service is lacking.

From an organisational perspective, employees are viewed as a strategic component in the machinery of delivering top-notch services, making them a fundamental factor in achieving the desired quality outcomes. HRM activities serve as the principal conduits through which organisations adeptly manage their human resources (Alosani et al. 2020). Organisations harness and deploy resources through their personnel, with a dedicated focus on crafting and delivering goods and services that cater to the demands of clients. In addition to acquiring the knowledge requisite for comprehending their roles in this intricate process, human resources must also deliver high-quality goods and services. Consequently, effective communication emerges as a pivotal tool in fostering quality (Wagner et al. 2017).

Furthermore, the implementation of HRM practices assumes a pivotal role in shaping employees' attitudes and behaviours (Gudermann 2012). Additionally, sustainable HRM practices have been identified as a critical driver for enhancing the capacity for service innovation, ultimately leading to satisfied internal customers (employees) (Wikhamn 2019). It is imperative to highlight that employee satisfaction is integral to bolstering performance, productivity, customer loyalty, and, as a result, business profitability (Krekel et al. 2019).

DIMENSIONS OF SERVICE QUALITY

This study examines six dimensions of service quality (Reliability, Assurance, Responsiveness, Tangibles, Empathy, and Access) that have been empirically demonstrated to impact customer satisfaction. The aim is to identify the influential factors that significantly affect the service quality of the respective public university's HRM. These dimensions intentionally include the five dimensions of SERVQUAL, with an additional dimension added to align with the specific requirements of the organisational context.

1. Reliability: As highlighted by Hennayake (2017), "reliability" refers to an organisation's capacity to consistently and accurately deliver its promised services. In the realm of reliability, numerous factors contribute to clients' perceptions of accuracy and integrity, including the precision of service delivery. To instil confidence in their clients, organisations must deliver on their promises. In today's digital age,

convincing customers that organisations can deliver on their commitments is of paramount importance (Omar & Seman 2015; Siali et al. 2018). Hence, public universities must ensure that they can consistently meet the needs of their diverse clientele, which includes students, faculty, and administrative staff. Any lapses in service delivery, such as delays in processing HR-related requests or inaccuracies in administrative procedures, can have a significant impact on customer satisfaction. Previous research suggests that, according to the SERVQUAL model, the most crucial dimension of service quality is reliability (Lam 2002; Zeithaml et al. 1990). Empirical evidence also indicates that service providers should prioritise all aspects of service quality, particularly reliability, to enhance customer satisfaction (Khan et al. 2018). Additionally, service reliability, physical appearance, and accessibility all contribute to increased customer satisfaction (Yilmaz et al. 2018).

2. Assurance: “Assurance” encompasses the courtesy, knowledge, and professionalism of HRM personnel, including their ability to convey trust and confidence to both staff and students (Parasuraman et al. 1994). Moreover, keeping customers informed and communicating with them in their preferred language, regardless of their educational background, age, or nationality, constitutes part of the assurance attributes (Pakurár et al. 2019). Consequently, assurance strongly influences employees’ attitudes and behaviours and their ability to provide polite, friendly, confidential, and competent services (Parasuraman et al. 1994). Furthermore, it has been found that customers who have interacted with the service provider for more than a year, consider every aspect of employee professionalism critical in assuring their satisfaction (Kamarudin & Kassim 2020).
3. Responsiveness: Parasuraman et al. (1994) highlighted that “responsiveness” entails willing employees informing clients precisely when tasks will be completed, giving them undivided attention, promoting programs, and promptly responding to their requests. Chou and Han (2011) have posited that responsiveness is among the two most crucial service dimensions, signifying its significance in the realm of HRM services. Additionally, research by Rezaei et al. (2018) on quality assessment revealed that responsiveness

is considered one of the most significant aspects of service delivery. In a separate study, Pakdil and Aydin (2007) found that the responsiveness dimension is the most critical facet, supported by several studies indicating a high degree of responsiveness is linked to high-level customer satisfaction and happiness. Interestingly, it was observed that increased public satisfaction resulted from improvements in tangibles, responsiveness, reliability, assurance, and empathy simultaneously (Mamuaya et al. 2018). Sura and Ahn (2019) revealed in their study that assurance, responsiveness, and reliability significantly impact perceived usefulness, subsequently influencing customer satisfaction through responsiveness. Ramamoorthy et al. (2018) validated previous research findings that reliability and responsiveness are crucial dimensions of service quality, finding that responsiveness significantly impacts both customer satisfaction and behavioural intentions. Similarly, Chakrabarti et al. (2018) disclosed that the responsiveness dimension substantially influences customer satisfaction, albeit with a service provider focus on tangibles over responsiveness.

4. Tangibles: Within HRM services in public universities, “tangibles” may encompass the physical facilities, equipment, and communication materials used in service delivery (Parasuraman et al. 1985; 1988; 1994; Pakurár et al. 2019). The tangible aspects, including facilities and equipment, are vital components in service organisations for employees to perform daily tasks (Khalid et al. 2021; Mang’unyi & Govender 2017; Parasuraman et al. 1985). Moreover, these tangible elements represent the physical appearance of services, which staff and students evaluate for quality. In this context, well-maintained facilities and modern equipment are crucial tools for efficient HRM service delivery (Kakouris & Finos 2016). Tangibles are consistently identified as a critical factor in assessing overall customer satisfaction (Akbaba 2006; Bhanugopan 2004; Carvalho & Medeiros 2021; Syed Ahmad 2019). Likewise, Chakrabarti et al. (2018) emphasised the importance of the tangibles dimension in influencing customer satisfaction in the service industry, notably among young people (Munim & Noor 2020). Therefore, meeting or exceeding staff and students’ expectations in these tangible

- elements is crucial for enhancing HRM service quality and their satisfaction.
5. **Empathy:** In the context of HRM services within public universities, “empathy” holds a significant role. Empathy embodies the notion that each client is distinct and unique (Pakurár et al. 2019). It entails showing care, providing personal attention (Parasuraman et al. 1994), and offering special treatment and consideration during customer interactions (Perule et al. 2020). Quantitative studies exploring the dimensions of the service quality model typically include measurements of credibility, security, access, and empathy (Parasuraman et al. 1994). Research consistently shows that empathy significantly impacts customer satisfaction (Nag & Joshi 2020). Empirical evidence underscores the importance of the empathy dimension in enhancing customer satisfaction (Slack et al. 2020; Haverila et al. 2020). However, in a different study, Engdaw (2020) revealed a negative association between empathy and customer satisfaction in the context of public service delivery quality.
 6. **Access:** “Access” pertains to the ease and convenience of services that staff and students can utilise, encompassing factors such as approachability and ease of contact (Pakurár et al. 2019). Accessibility is critical in ensuring that staff and students can readily access HRM services when needed, which can significantly contribute to direct or indirect effects on customer satisfaction and loyalty (Flavian et al. 2004). Research underscores the significance of access to information as a notable predictor of customer loyalty (Twum et al. 2020). Despite that, Abdullah (2006) suggests that, rather than emphasising numerous distinct attributes as key determinants of service quality, tertiary institutions should prioritise fundamental components validated by prior research. Access, which includes factors like approachability, availability, ease of contact, and convenience, stands out as a vital element in ensuring high-quality service in the higher education sector.

Drawing from the theoretical and literature review, we hypothesise that the six service quality dimensions, as illustrated in Figure 1, have a significant influence on customer satisfaction. The inclusion of the access dimension in this study aligns with the research context’s critical nature, highlighting that public universities must consider

approachability, availability, ease of contact, and convenience to meet the needs of their internal customers (Abdullah 2006; Pakurár et al. 2019), particularly in the midst of the COVID-19 pandemic.

METHODOLOGY

This study comprises three key stages. Firstly, it entailed a thorough examination of existing literature to formulate the adapted SERVQUAL measurement model comprising six dimensions: Reliability, Assurance, Responsiveness, Tangibles, Empathy, and Access (as depicted in Figure 1). Previous research has robustly indicated a substantial correlation between service quality and customer satisfaction. Consequently, these dimensions were selected to evaluate the quality of HRM services provided at the respective public university in Malaysia.

Secondly, the specific items corresponding to each dimension were tailored to align with the context of the respective public university. Subsequently, these scale items were formulated and validated by an in-house HR expert to ensure content validity. A survey-based questionnaire designed to evaluate HRM service quality was then finalised, incorporating feedback and recommendations gathered during the assessment of both overall and individual dimensions. A detailed description and sample items for the six dimensions can be found in Table 1. The reliability of the scales was primarily assessed through the Cronbach-alpha coefficient test, utilising a set of items that gauged overall customer satisfaction via a pilot study involving 30 respondents.

Finally, the questionnaire was disseminated to HR department customers (internal employees) across various branches throughout Malaysia from the 9th to the 30th of July 2020. The purposive sampling method was utilised, resulting in a total of 802 eligible respondents for subsequent data analysis (Krejcie & Morgan 1970). The survey was administered online, with Likert Scale ratings assigned to each dimension (5: Strongly Agree; 4: Agree; 3: Neutral; 2: Disagree; 1: Strongly Disagree). The demographic analysis in this study presents respondent distribution based on gender, age, position, location, and other pertinent factors. Moreover, correlation and regression analyses were executed to meticulously scrutinise the intricate relationship between service quality dimensions and the satisfaction of internal customers.

SQ-HRM MODEL



FIGURE 1. The Modified SERVQUAL Model for HRM

TABLE 1. Description of the Respective Dimensions

Dimension	Description	Sample Items
Reliability	Ability to deliver services accurately and reliably as promised	The services are provided in a timely manner
Assurance	The courtesy, knowledge and professionalism of employees	The HRM' employees acquired the desired knowledge
Responsiveness	The readiness and willingness of employees to assist the customer	The HRM' employees demonstrated a willingness to assist during the process
Tangible	The physical equipment including tools or mechanisms to deliver services	The appropriate tools and mechanisms are provided to deliver services
Empathy	The ability of employees to demonstrate the empathy values	The HRM' employees provided individual attention to the customer
Access	The accessibility of information and services	The services provided are easily accessible

RESULTS

The reliability test stands as a crucial component of data validation (Nunnally 1978), underscoring the consistency between two measures. Moreover, the results from the pilot study indicate that the overall Cronbach's Alpha value for the items is 0.957, thereby affirming compliance with the minimum threshold of 0.60 (Hair et al. 1998). This study encompassed a total of 802 participants, spanning ages from 20 to 60 years. The demographic characteristics of the respondents were examined in terms of age, gender, location, position, and visit frequency (see Table 2). Notably, the majority of respondents were

female (62%), marking a distinctive feature of the study profile. Furthermore, the largest proportion of respondents fell within the age range of 30 to 39 years (46%), with a predominant presence at campuses in Shah Alam (37%), followed by Negeri Sembilan (15%) and Selangor (14%). Figure 2 illustrates the frequency of mechanisms employed by customers to access HRM services, with the online mechanism being the most widely utilised, accounting for over 70% of utilisation. Figure 3 offers an overview of the types of services availed by HRM customers, with Performance Appraisal ranking highest among the options.

TABLE 2. Demographic Background of HRM Customer Item

Item	n (%)
Location	297 (37%)
Shah Alam	118 (15%)
Negeri Sembilan	111 (14%)
Selangor	67 (8%)
Perak	33 (4%)
Johor	32 (4%)
Sarawak	31 (4%)
Terengganu	30 (4%)
Pulau Pinang	20 (2%)
Pahang	17 (2%)
Kelantan	16 (2%)
Perlis	12 (2%)
Melaka	10 (1%)
Kedah	8 (1%)
Sabah	
Frequency of acquiring services	
> 10 times	549 (68%)
4 – 6 times	86 (11%)
7 - 10 times	85 (11%)
1 - 3 times	82 (10%)
Age	
20 - 29	60 (7%)
30 - 39	367 (46%)
40 – 49	224 (28%)
50 - 60	151 (19%)
Gender	
Male	306 (38%)
Female	496 (62%)
Position	
Supportive staff (1-40)	404 (50%)
Academician (51-54)	142 (18%)
Administrative staff (41- 48)	82 (10%)
Academician (41- 48)	81 (10%)
Administrative staff (52-54)	47 (6%)
Contract	22 (3%)
Temporary	13 (2%)
Professor/Special Grade (VK7-VK5)/(VU7-VU4)	11 (1%)

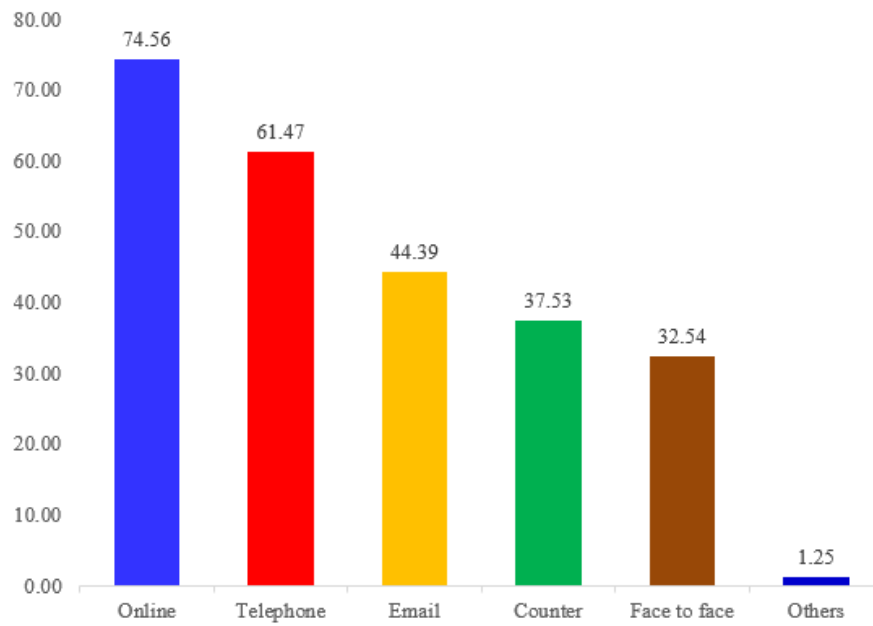


FIGURE 2. Frequency of Mechanisms Utilised by HRM Customers

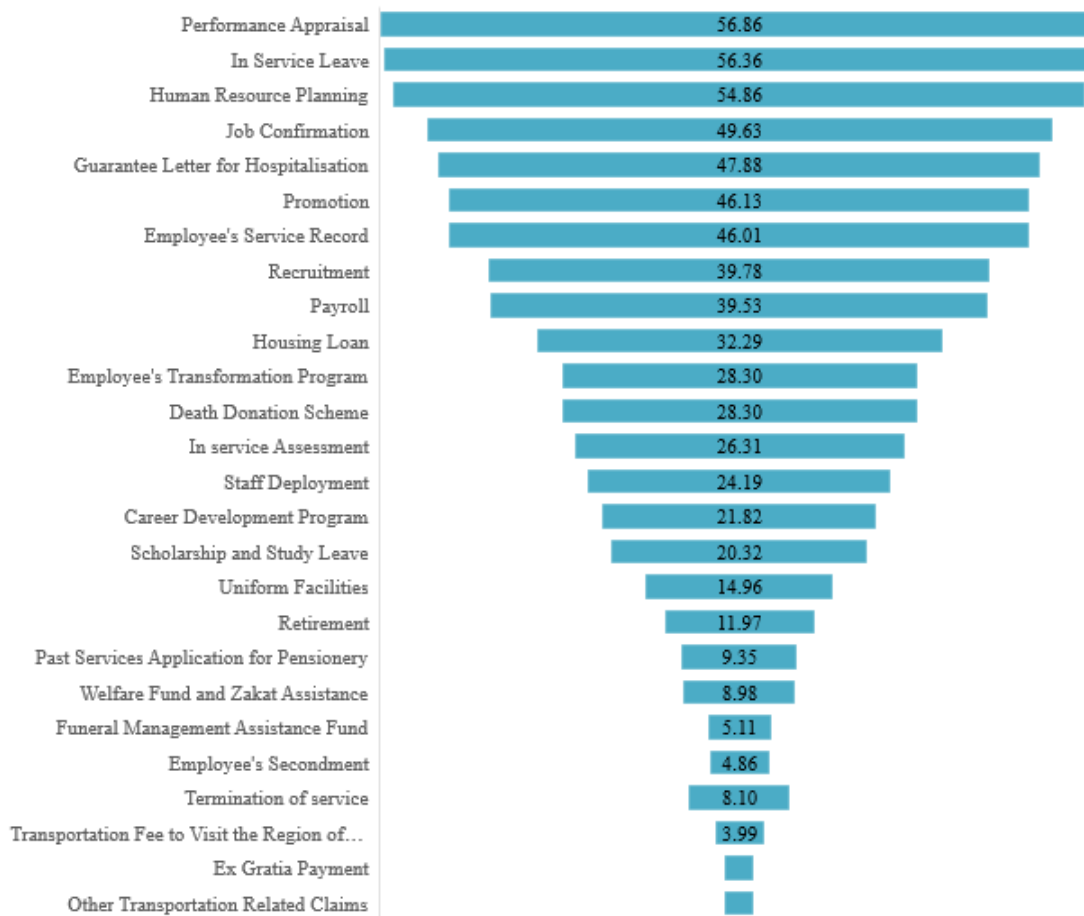


FIGURE 3. Type of Services Obtained by HRM Customers

The principal consideration concerning the validity of the service quality measure utilised in this study pertains to construct validity. In accordance with Churchill (1979), in the evaluation of construct validity, it is imperative to address both convergent and discriminant validity. Table 3 demonstrates substantial positive correlations

among the dimensions, indicating convergent validity. Convergent validity implies that closely related constructs are indeed correlated, in line with our expectations. For example, a robust positive relationship exists between Access and Tangible, as evidenced by their correlation of 0.863.

TABLE 3. Inter-Item Correlation Matrix

Dimension	Access	Tangible	Reliability	Assurance	Empathy	Responsiveness
Access	1.000					
Tangible	0.863	1.000				
Reliability	0.738	0.777	1.000			
Assurance	0.722	0.713	0.738	1.000		
Empathy	0.691	0.662	0.701	0.833	1.000	
Responsiveness	0.747	0.734	0.730	0.775	0.802	1.000

In Table 4, the correlation matrix illustrates that all dimensions (Access, Tangible, Reliability, Assurance, Empathy, Responsiveness) exhibit positive correlations with customer satisfaction,

ranging from 0.754 to 0.850. These positive correlations suggest that as service quality improves across these dimensions, customer satisfaction tends to increase.

TABLE 4. Correlations of the Six Service Quality Dimensions and the Customer Satisfaction

Dimension	Customer Satisfaction
Access	.788**
Tangible	.756**
Reliability	.754**
Assurance	.806**
Empathy	.825**
Responsiveness	.850**

Note: **correlation is significant at the 0.01 level (2-tailed)

Table 5 presents the results of regression analysis, providing insights into the proportion of variance in the dependent variable (customer satisfaction) explained by the independent variables (service quality dimensions). An R

Square value of 0.819 indicates that 81.9% of the variation in customer satisfaction can be accounted for by these six dimensions. Simultaneously, the remaining 18.1% can be attributed to unexamined factors beyond the scope of this study.

TABLE 5. Regression Analysis of HRM Service Quality on Customer Satisfaction

R	R Square	Adjusted R Square	Std Error of Estimate
0.906	0.821	0.819	0.332

In Table 6, the results of the regression analysis for the dependent variable of service quality, assessed on a scale from 1 to 5 (Strongly Disagree - Strongly Agree), are presented. The analysis reveals that all coefficients for the six dimensions exert a positive influence on customer satisfaction. Notably, Access, Reliability, Assurance,

Empathy, and Responsiveness exhibit statistically significant positive coefficients (β), signifying that enhancements in these dimensions positively impact HRM service quality. In contrast, Tangible exhibits a non-significant coefficient, suggesting that it does not have a significant impact on HRM service quality within the context of this study.

TABLE 6. Relative Importance of the Respective Dimensions in Predicting HRM Service Quality Level

Dimension	Standardised coefficients (β)	Significant (P)
Access	0.211	0.00**
Tangible	0.033	0.36
Reliability	0.079	0.00**
Assurance	0.116	0.00**
Empathy	0.256	0.00**
Responsiveness	0.327	0.00**

Note: **significant at the 0.05 level

MANAGERIAL IMPLICATION

Drawing from the empirical findings, it is advisable that HRM services focus their attention on five key dimensions: Access, Reliability, Assurance, Empathy, and Responsiveness, as these have demonstrated a robust positive correlation with customer satisfaction (with the exception of Tangible). Given the public university's dispersed and extensive locations (as shown in Table 2) coupled with the ongoing challenges posed by the pandemic, ensuring easy access to information and services becomes paramount for HRM. Therefore, HRM must prioritise approachability and seamless contact (Pakurár et al. 2019). This strategic emphasis on accessibility will have both a direct and indirect impact on customer satisfaction, happiness, and loyalty (Flavian et al. 2004; Twum 2020), ultimately bolstering the public university's ability to retain its high-performing talent.

Furthermore, in the face of a rapidly evolving landscape brought about by the industrial revolution, HRM must swiftly adapt and transform its service delivery systems. Continuous improvement initiatives, including the implementation of quality enhancement programmes (Mukhtar & Ali 2011), fostering an innovation-driven culture (Alosani 2020), and enhancing communication channels with customers, should be undertaken. These measures are crucial for establishing efficient HRM practices and gaining a competitive edge while ensuring employee satisfaction as internal customers (Wikhamn 2019)

To instil confidence in clients, HRM must consistently deliver on their commitments (Hennayake 2017). Prior studies have also highlighted reliability as a pivotal dimension in the SERVQUAL model (Lam 2002; Zeithaml et al. 1990). Therefore, improvement efforts should prioritise delivering on promises made to customers. Additionally, assurance is paramount for HRM to convey by keeping customers well-informed

and communicating with them in their preferred language, irrespective of their education level, age, or nationality (Pakurár et al. 2019).

Responsiveness, closely linked to the willingness and readiness of employees to assist customers (Parasuraman et al. 1994), significantly influences both behavioural intentions and overall happiness (Pakdil & Aydin 2007; Roy et al. 2018). This implies that HRM service quality, especially in terms of responsiveness, indirectly affects the psychological well-being of employees and their subsequent behaviour. Despite that, empathy remains a crucial factor, particularly during times of crises like the ongoing pandemic. HRM should convey that each client is unique and distinctive, demonstrating care and offering personal attention (Pakurár et al. 2019). The findings of this study align with the view that empathy is a significant dimension of service quality that positively impacts customer satisfaction (Nag & Joshi 2020; Slack et al. 2020).

Surprisingly, the tangible dimension does not seem to significantly impact customer satisfaction in this study. This result contradicts previous findings that identified physical facilities as a critical component in service organisations for internal customers (Khalid et al. 2021; Mang'anyi & Govender 2017; Parasuraman et al. 1985). This shift can be attributed to the current pandemic conditions, which limit physical and face-to-face interactions. Consequently, tangible aspects, including physical facilities, are deemed less critical for accessing services. Therefore, it is vital to focus on intangible service quality dimensions to enhance customer satisfaction.

It is important to emphasise that employee satisfaction is vital for improving performance, productivity, and customer loyalty, ultimately contributing to business profitability (Krekel et al. 2019). Additionally, such efforts align with the Ministry of Education Malaysia's goals of enhancing public universities' service delivery systems (Malaysia Education Blueprint 2015-2025

[Higher Education] 2015). As a public institution, the respective HRM is expected to provide quality, adequate, and effective services (Engdaw 2020).

DISCUSSION AND CONCLUSION

Service quality is considered an integral component of management, playing a crucial role in ensuring customer satisfaction. Consequently, the relationship between customer satisfaction and service quality has garnered significant attention in the literature (e.g., Awan et al. 2011; Bashir et al. 2020; Famiyeh et al. 2018; Fida et al. 2020). This study aimed to evaluate the level of HRM service quality and customer satisfaction using the modified SERVQUAL model. The study utilised five core dimensions, encompassing Reliability, Assurance, Responsiveness, Tangibles, and Empathy, with the addition of Access as an additional dimension to align with contextual requirements (Abdullah 2006; Pakurár et al. 2019). According to the regression weights in the measurement model, Access, Reliability, Assurance, Empathy, and Responsiveness demonstrated a significant relationship with customer satisfaction, with the exception of Tangible (refer to Table 6).

The findings support the notion that interpersonal interactions occurring during service delivery, involving service providers' Assurance, Empathy, and Responsiveness, exert the most significant influence on customers' assessments of service quality (Chou & Han 2011; Rezaei et al. 2018). The results further endorse Pakdil and Aydin's (2007) assertion that the responsiveness dimension holds paramount importance. Multiple studies indicate that a high level of responsiveness correlates with heightened customer satisfaction and happiness. Consequently, HRM should concentrate on enhancing service providers' competencies, especially in interpersonal skills, to bolster their professional attributes, including courtesy, knowledge, and professionalism (Parasuraman et al. 1994). Furthermore, service providers should exhibit the right attitudes and behaviours while demonstrating the capacity to deliver courteous, friendly, confidential, and competent services (Parasuraman et al. 1994). Additionally, it was noted that customers who have interacted with the service provider for more than a year place significant importance on each component of professionalism in ensuring their satisfaction (Kamarudin & Kassim 2020).

Beyond individual employees, HRM must ensure accurate information provision, undivided attention, efficient response to requests, and reliable service delivery as promised, all of which are essential for demonstrating responsiveness and reliability (Hennayake 2017; Parasuraman et al. 1994). Moreover, the accessibility component has become indispensable for service quality during the pandemic. Consequently, there should be a heightened focus on expanding service accessibility, making services available to customers regardless of location and time, potentially through a digital platform. Additionally, it is crucial to ensure that the HRM system supports fast and dependable service functionality (Kakouris & Finos 2016).

This research contributes to the field of service quality theory, addressing contextuality, methodology, and practicality. Firstly, in terms of theoretical contributions, this study employed a modified SERVQUAL model that measures context-specific issues. It also sheds light on HRM services literature by acknowledging the roles of human factors in enhancing service quality within a public university setting. Secondly, this study enhances methodology by achieving validity, reliability, and a better-fitting model. The selected respondents were the appropriate individuals to answer the questionnaire as they represent the primary customers of HRM services, contributing to the development of accurate and credible research findings. Thirdly, concerning practical implications, the research model can serve as a guideline for managers in public universities for future HRM improvements. It provides insights into how service quality can be enhanced by focusing on internal customers and enhancing the relevant service quality dimensions.

While this study accomplished its objectives, several limitations should be considered before generalising the results. Firstly, since it is a cross-sectional study using data collected over a specific period, it could not capture the patterns and trends in the relationship between service quality dimensions and customer satisfaction. Therefore, conducting a longitudinal study is recommended to gain a more comprehensive perspective. Secondly, this study introduced a single additional dimension (Access) to the existing model. Hence, future research should explore additional antecedents to yield conclusive findings. Lastly, the data were gathered from a specific public university in Malaysia and did not encompass other higher education institutions due to contextual requirements. Hence, future studies

should encompass a broader educational institution context, enhancing our understanding of the modified SERVQUAL model's impact on internal customer satisfaction.

ACKNOWLEDGEMENT

We extend our heartfelt appreciation to the internal HRM specialists who have contributed their valuable insights and assistance in crafting the instrument employed in the current study. This research is funded by UKM-Graduate School of Business, research code: GSB-2023-001.

REFERENCES

- Abdullah, F. 2006. The development of HEDPERF: a new measuring instrument of service quality for the higher education sector. *International Journal of Consumer Studies*, 30(6): 569-581.
- Ahmad, S. Z., Ahmad, N. & Papastathopoulos, A. 2019. Measuring service quality and customer satisfaction of the small-and medium-sized hotels (SMSHs) industry: Lessons from United Arab Emirates (UAE). *Tourism Review* 74(3): 349-370.
- Akbaba, A. 2006. Measuring service quality in the hotel industry: a study in a business hotel in Turkey. *International Journal of Hospitality Management* 25(2): 170-192.
- Alosani, M. S., Al-Dhaafri, H. S. & Abdulla, A. A. 2020. Investigating the role of HRM practices on service innovation: Empirical evidence from UAE government agencies. *Management Research Review* 44(1): 1-24.
- Awan, H. M., Bukhari, K. S. & Iqbal, A. 2011. Service quality and customer satisfaction in the banking sector: A comparative study of conventional and Islamic banks in Pakistan. *Journal of Islamic Marketing* 2(3): 203-224.
- Bashir, M. A., Ali, M. H., Wai, L. M., Hossain, M. I. & Rahaman, M. S. 2020. Mediating effect of customer perceived value on the relationship between service quality and customer satisfaction of e-banking in Bangladesh. *International Journal of Advanced Science and Technology* 29(2): 3590-606.
- Bhanugopan, R. 2004. Perceptions on quality customer service in the hospitality industry in Papua New Guinea: An evaluation. *Asia Pacific Journal of Tourism Research* 9(2): 177-187.
- Camilleri, M. A. 2021. Evaluating service quality and performance of higher education institutions: a systematic review and a post-COVID-19 outlook. *International Journal of Quality and Service Sciences*.
- Carvalho, R. C. D., & Medeiros, D. D. D. 2021. Assessing quality of air transport service: A comparative analysis of two evaluation models. *Current Issues in Tourism* 24(8): 1123-1138.
- Chakrabarti, S., Trehan, D., & Makhija, M. 2018. Assessment of service quality using text mining-evidence from private sector banks in India. *International Journal of Bank Marketing* 36(4): 594-615.
- Chou, C.C., Liu, L.J., Huang, S.F., Yih, J.M. & Han, T.C. 2011. An evaluation of airline service quality using the fuzzy weighted SERVQUAL method. *Applied Soft Computing Journal* 11: 2117-2128.
- Churchill Jr, G. A. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research* 16: 64-73.
- El Saghier, N. & Nathan, D. 2013. Service quality dimensions and customers' satisfactions of banks in Egypt. *Proceedings of 20th International Business Research Conference*: Vol. 13.
- Engdaw, B. D. 2020. The Impact of Quality Public Service Delivery on Customer Satisfaction in Bahir Dar City Administration: The Case of Ginbot 20 Sub-city. *International Journal of Public Administration* 43(7): 644-654.
- Fadilah Siali, Wen, W.S. & Hazaji, M.U.A. 2018. Booming of online shopping in Malaysia: Do customers satisfy with parcel delivery service? *International Journal of Academic Research in Business and Social Sciences* 8(12): 415-436.
- Famiyeh, S., Kwarteng, A. & Asante-Darko, D. 2018. Service quality, customer satisfaction and loyalty in automobile maintenance services. *Journal of Quality in Maintenance Engineering* 24(3): 262-279.
- Fida, B. A., Ahmed, U., Al-Balushi, Y. & Singh, D. 2020. Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. *Sage Open* 10(2): 2158244020919517.
- Flavian, C., Torres, E. & Guinaliu, M. 2004. Corporate image measurement: A further problem for the tangibilization of internet banking services. *International Journal of Bank Marketing* 22(5): 366-84.
- Goumairi, O., Aoula, E. S. & Souda S. B. 2020. Application of the SERVQUAL Model for the evaluation of the service quality in Moroccan Higher Education: Public Engineering School as a case study. *International Journal of Higher Education* 9(5): 223-229.
- Gudermann, M. 2012. Exploring the effect of HR service delivery quality on service climate perception. Master Diss., University of Twente, Netherlands.
- Hair, J. F., Anderson, R. E., Tatham, R. L. & Black, W. C. 1998. Multivariate data analysis. 5th edition. Englewood Cliffs, NJ: Prentice-Hall.

- Haverila, M., Haverila, K., & Twyford, J. C. 2020. Identification of key variables and constructs in the context of wine tasting room: Importance-performance analysis. *International Journal of Wine Business Research* 33(1): 80-101.
- Hennayake, H.M.G.Y.J. 2017. Impact of service quality on customer satisfaction of public sector commercial banks: A study on rural economic context. *International Journal of Scientific and Research Publications* 7(2): 156.
- Kakouris, A.P. & Finos, P.K. 2016. Applying SERVQUAL to the banking industry. East-west *Journal of Economics and Banking* 19(2): 57-71.
- Kamarudin, A. A., & Kassim, S. 2020. An analysis of customer satisfaction on employee professionalism: A comparison between Islamic and conventional banks in Malaysia. *Journal of Islamic Marketing*.
- Khalid, S. M., Ali, K. A. M., Makhbul, Z. K. M., Ali, M. H., & Wahid, S. D. M. 2021. Exploring the effects of a modified higher education performance service quality model on organisational sustainability: The case of Malaysian Polytechnics. *Sustainability* 13(14): 8105.
- Khan, A. G., Lima, R. P., & Mahmud, M. S. 2018. Understanding the service quality and customer satisfaction of mobile banking in Bangladesh: Using a structural equation model. *Global Business Review*, 0972150918795551.
- Krejcie, R. V. & Morgan, D. W. 1970. Determining sample size for research activities. *Educational and Psychological Measurement* 30(3): 607-610.
- Krekel, C., Ward, G. & De Neve, J.-E. 2019. Employee wellbeing, productivity, and firm performance. *SSRN Electronic Journal* 04: 1-44.
- Lam, T. K. 2002. Making sense of SERVQUAL's dimensions to the Chinese customers in Macau. *Journal of Market-Focused Management* 5(1): 43-58.
- Mamuaya, N. C. I., Tumiwa, R. A. F., & Kawatu, F. S. 2018. Analysis of service quality and public satisfaction on local government agencies in Manado City. *International Journal of Business and Management Invention* 7(6): 16-28.
- Mang'anyi, E.E. & Govender, K.K. 2017. Using the higher education performance framework to assess service quality and satisfaction among private university students. *International Review of Management and Marketing* 7: 299-309.
- Martinović, M., Pavlič, I. & Šuman Tolić, M. 2017. Measurement of local public services' quality using SERVQUAL: The case of Dubrovnik. *Ekonomika Misao i Praksa* 26(2): 593-610.
- Ministry of Higher Education 2015. *Malaysia Education Blueprint 2015-2025* (Higher Education). Retrieved October 17th, 2018 from https://www.um.edu.my/docs/default-source/about-um_document/media-centre/um-magazine/4-executive-summary-ppm-2015-2025.pdf?sfvrsn=4
- Mohamad, M.S. & Subhi, N. 2023. Hubungan stres psikologikal dengan kesihatan mental dalam kalangan pensyarah muda. *Akademika* 93(3): 213-224.
- Mukhtar, R. & Ali, N. A. 2011. Quality governance of human aspects of quality initiatives in the public service sector. *Current Issues of Business and Law* 6(1): 111-128.
- Munim, Z. H., & Noor, T. 2020. Young people's perceived service quality and environmental performance of hybrid electric bus service. *Travel Behaviour and Society* 20: 133-143.
- Nag, A. K. & Joshi, R. S. 2020. SERVQUAL model approach to service quality management. *Journal of Xi'an University of Architecture & Technology* 12(3): 5144-5157.
- Nunnally, J. C. 1978. *Psychometric theory*. New York, NY: McGraw-Hill.
- Omar, H.F.H., Kamarudin, S. & Kamaruzziman, S. 2015. Determining the influence of the reliability of service quality on customer satisfaction: The case of Libyan e-commerce customers. *International Journal of Learning and Development* 5(1): 86.
- Othman, B., Harun, A., Rashid, W. & Ali, R. 2019. The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. *Management Science Letters* 9(11): 1763-1772.
- Pakdil, F. & Aydin, Ö. 2007. Expectations and perceptions in airline services: An analysis using weighted SERVQUAL scores. *Journal of Air Transport Management* 13(4): 229-237.
- Pakurár, M., Haddad, H., Nagy, J., Popp, J. & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability* 11(4): 1113.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. 1985. A conceptual model of service quality and its implications for future research. *Journal of Marketing* 49: 41-50.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing* 64(1), 12-40.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. 1994. Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing* 58(1): 111-124.
- Perule, N., Shetty, D. K., Naik, N., Maddodi, B. S., Malarout, N. & Jain, M. 2020. A systematic review for the use of the SERVQUAL model in banks in India. *Test Engineering and Management* 83: 8604-8620.
- Ramamoorthy, R., Gunasekaran, A., Roy, M., Rai, B. K., & Senthilkumar, S. A. (2018). Service quality and its impact on customers' behavioural intentions and satisfaction: an empirical study of the Indian life insurance sector. *Total Quality Management & Business Excellence* 29(7-8), 834-847.

- Raza, S. A., Umer, A., Qureshi, M. A. & Dahri, A. S. 2020. Internet banking service quality, e-customer satisfaction and loyalty: The modified e-SERVQUAL model. *The TQM Journal* 32(6): 1443-1446.
- Redman, T. & Mathews, B. P. 1998. Service quality and human resource management: A review and research agenda. *Personnel Review* 27(1): 57-77.
- Rezaei, J., Kothadiya, O., Tavasszy, L. & Kroesen, M. 2018. Quality assessment of airline baggage handling systems using SERVQUAL and BWM. *Tourism Management* 66: 85–93.
- Rajendran, S., & Selvaratnam, D.P.S. 2023. Kesan Covid-19 terhadap golongan B40 dan strategi menanganinya di Selangor, Malaysia. *Akademika* 93 (3): 39-51.
- Slack, N., Singh, G., & Sharma, S. 2020. The effect of supermarket service quality dimensions and customer satisfaction on customer loyalty and disloyalty dimensions. *International Journal of Quality and Service Sciences* 12 (3): 297-318.
- Sura, S., & Ahn, J. 2019. The effects of service quality determinants on social networking site-based commerce: the Malaysian customers' perspective. *Total Quality Management & Business Excellence* 30(13-14), 1480-1494.
- Thommana, J., Dey, S. S. & Dock, S. 2015. Public agency performance management for improved service delivery in the digital age: Case study. *Journal of Management in Engineering* 31(5): 1-11.
- Twum, K. K., Yalley, A. A., Agyapong, G. K. Q. & Ofori, D. 2020. The influence of public university library service quality and library brand image on user loyalty. *International Review on Public and Nonprofit Marketing* 2: 207-227.
- Wagner, A., Marino, A.E.D, Martinelli, M., Polacinski, E., Wegner, R.S., Godoy, L.P. 2017. The quality of services in a higher education institution: An evaluation for the integration of AHP, SERVQUAL and QFD methods. *Disciplinarium Scientia* 12(1): 109–129.
- Wikhamn, W. 2019. Innovation, sustainable HRM and customer satisfaction. *International Journal of Hospitality Management* 76: 102-110.
- Yilmaz, V., Ari, E., & Gürbüz, H. 2018. Investigating the relationship between service quality dimensions, customer satisfaction and loyalty in Turkish banking sector: An application of structural equation model. *International Journal of Bank Marketing* 36(3): 423-440.
- Zahari, W. W. Y. & Maziah, I. 2008. FM-SERVQUAL: A new approach of service quality measurement framework in local authorities. *Journal of Corporate Real Estate* 10(2): 130-144.
- Zeithaml, V. A., Parasuraman, A. & Berry, L. L. 1990. *Delivering quality service: Balancing customer perceptions and expectations*. New York: The Free Press.
- Nor Hafizah Ibrahim (corresponding author)
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA
E-Mail: fizaasyraf81@gmail.com
- Zafir Khan Mohamed Makhbul
UKM-Graduate School of Business
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA
E-Mail: zafir@ukm.edu.my
- Che Wan Kamarul Hishysam Che Wan Ahmad
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA
E-Mail: hishysam@gmail.com
- Syarifah Nurfuaduz Zakiah Habib Dzulkarnain
School of Quantitative Sciences
Universiti Utara Malaysia
06010, Sintok, Kedah, MALAYSIA
E-Mail: syazakiah@gmail.com