DOI: https://doi.org/10.24191/ijsms.v6i2.15578

Effects of Academic Quality and Service Quality on University Students' Satisfaction

Hanis Aqilah Binti Rusnipa[1], Marshita Binti Hashim[2] and Shukriah Binti Sa'ad[3]

[1,2,3]Faculty of Accountancy, Universiti Teknologi MARA Selangor, Kampus Puncak Alam, Selangor

[3] shukriah736@uitm.edu.my

Received: 5 May 2021
Accepted: 30 August 2021
Published: 30 September 2021

ABSTRACT

This study was conducted on the premise that Higher Education Institutions (HEIs) with strong reputation have superior market positions in the higher education sector. It empirically examined academic quality, service quality, and student's satisfaction in the context of HEIs. The investigation was conducted using quantitative research. Four hundred twenty-six questionnaires were collected from students in public and private HEIs in Klang Valley. Correlation analysis and multiple regression were used to analyze the influence of variables and hypotheses testing for the study. The findings showed a significant relationship between academic quality and service quality with students' satisfaction. The results show that HEIs should continue to reinvest in their resources and skills to ensure that their institutions are in a better position to meet the needs of their students and, at the same time, improve the branding and reputation of their institutions. Future studies should include other factors that may influence HEIs' reputations (both positively and negatively). The findings may provide valuable guidelines to Malaysian HEIs in improving specific areas of academics quality and service quality.

Keywords: *Academic quality; service quality; students' satisfaction; higher education institutions*

INTRODUCTION

Higher education institutions (HEIs) are beginning to realize that they are part of the service industry and therefore need to emphasize their reputations and students' satisfaction. HEIs face a lot of pressure to maintain their reputations. They need to market themselves to gain a competitive advantage and recruit students to enroll in their institutions (Arena, Arnaboldi & Azzone, 2010). HEIs require a comprehensive sustainability strategy that acknowledges the institutions' responsibility to the wider society and increases their resilience in the current uncertain economic and political climate (Looker, Roberts & Monk, 2018). As a result, HEIs have to commit to specific quality criteria and adopt market orientation strategies to differentiate them from competitors by providing high-quality services that have a lasting impact on the institutions and students they serve. The education system needs to keep evolving to stay abreast with, if not ahead of, global trends. The Ministry of Education (MOE) has made significant progress in fulfilling its core aspirations for higher education, most notably broadening access and expanding overall system and institutional qualities. Hence, in 2013, MOE started developing the Malaysia Education Blueprint 2015–2025 (Higher Education). The Blueprint aims to propose major changes in how the Ministry and system will operate to create a higher education system that ranks among the world's leading education systems, enabling Malaysia to compete in the global economy.

The Malaysia Education Blueprint 2015–2025 (Higher Education) aims to empower HEIs in Malaysia to have greater decision-making rights, autonomy, and accountability. This Blueprint is built on five aspirations, namely access, quality, equity, unity, and efficiency, and outlines ten shifts that will spur continued excellence in the higher education system. These shifts aim to address key performance issues in the system, particularly concerning quality and efficiency and global trends that are disrupting the higher education landscape. The Malaysia Education Blueprint 2015–2025 (Higher Education) has highlighted steps taken to maintain the quality of private and public HEIs in Malaysia. The aim is to make significant gains in student enrolment (MOE, 2015). One of the purposes of this Blueprint is to implement risk management in these institutions to ensure the continuous performance of the HEIs (MOE, 2015). Educational reform did not happen overnight, and it requires ongoing efforts from all parties to improve the overall performance of HEIs. This Blueprint provides a comprehensive idea

of how Malaysia can continue improve its education system and help HEIs detect, assess, lower, and prevent risks in their institutions.

Given some of the bad publicity the higher education sector has received, it is no surprise that the reputation of Malaysian HEIs is not at the same level aspired by the strategic plan. With the level of uncertainty and risks involved, it is important to have an effective risk management plan to ensure HEIs management is focused on mitigating the risk areas that matter and can respond to the challenges that lie ahead. According to a survey conducted by PricewaterhouseCoopers (PwC), reputation is the fourth most significant risk area experienced by HEIs (Looker et al., 2018). The survey has identified risks related to HEIs reputations, including financial sustainability, students recruitment, cybersecurity, and campus deterioration. HEIs are service management institutions. Therefore HEIs need to ensure they can maintain and grow their reputations and maintain good stakeholders perception (including students, regulators, funders, and partners). This reputation develops through the projection of one positive image that will improve the public's confidence about the quality and achievements of the affiliated institution.

HEIs now operate in an increasingly competitive context—they need to market themselves against colleges, private universities, and polytechnics to gain a competitive advantage and recruit students to enroll in their institutions (Arena et al., 2010). Hence, HEIs are increasingly interested in identifying factors that can maximize their students' satisfaction, especially factors that relate to brand image and reputation. Arpan, Raney and Zivnuska (2003) stated that higher education reputation includes the various beliefs about a university that contributes to an overall evaluation of the university. Reznik and Yudina (2018) stated that higher education reputation can be seen from two different perspectives: the first one is an external reputation which is evaluation of the higher education's activities by representatives of its external environment and the second perspective is an internal reputation which can be defined as the opinion of teaching staff, personnel, applicants, doctoral candidates and students of the higher education regarding their institutions.

In this study, the relationship between service quality, academic quality, and student's satisfaction with the HEIs is considered. The connection can be realized when students enroll in HEIs. They need to go

through various service processes and gain multiple experiences when they enroll and study in HEIs. Therefore, there is a need to examine the effects of academic quality and service quality on students' satisfaction. HEIs need to measure their academic quality and service quality to ensure students' satisfaction towards their institutional reputation is maximum. This study examines the relationship between academic quality and service quality towards the students' satisfaction in HEIs.

LITERATURE REVIEW

Academic Quality

Competition in the academic field further strengthens the strategic importance of examining student satisfaction, which is considered a key consumer in higher education activities, aiming to use a variety of efficient development strategies and attract and retain students to study in programs at their institutions in the future. Many aspects of the overall higher education experience contribute to students' overall satisfaction in their institutions (Letcher & Neves, 2010).

According to Letcher and Neves (2010), self-confidence of the student, the curriculum, quality of teaching of subject matter, extra-curricular activities and career opportunities, student advising, quality of teaching, and instructor feedback are related to student satisfaction in terms of the academic quality of the university. Furthermore, students' academic performance in higher education is influenced by various socioeconomic, psychological, and environmental factors. All the factors, in general, are the factors that have a relationship with student satisfaction.

Service Quality

Perceived quality is a consumer's consideration of the quality of a service or product they used. Technically, it is difficult to determine quality objectively. Product specifications can only be explained objectively, but how well the product meets the criteria specified can only be determined by the user or expert and the students (Ali & Ahmed, 2018). Hence, perceived quality is a broader or in-depth assessment of service (Quintal, Sultan & Wong, 2012). Therefore, it is a general perception generated from the

objective information received by them and their reputation and not necessarily from the personal experience of the students alone (Ali & Ahmed, 2018). In this study, the HEIs are classified as organizations that provide educational services to prospective and existing students—putting them under the services sector.

Student Satisfaction

Kotler and Clarke (1988) define satisfaction as a state felt by a person or recipient who performs an experience or outcome that meets his expectations. In other words, satisfaction is a function of relative level expectation and performance observation. In the context of education, expectations can be achieved before students enter higher education, indicating that it is important for researchers to determine in advance what students expect while studying so that the HEIs can improve their quality and their reputation at once for the future (Carey, Cambiano & Vore, 2002).

Usually, it is easier to take care of existing customers than to attract new customers, and satisfied customers will return to the service offered to the organization. The same thing can be implied in higher education. It is easier to retain students for higher education programs than to attract new students because the former are already customers of higher education where they complete their undergraduate program. In addition, it also shows the need to continue to involve students as a method to improve the quality of teaching and learning environment that will result in the improved quality perception of educational institutions, and this will directly build the institution's reputation in the eyes of students (Garwe, 2015).

Academic Quality and Students' Satisfaction

Academic performance in a higher education setting is influenced by various socio-economic, psychological, and environmental factors. Sudirharto, Rosita and Irwansyah (2019) found that serious attention to the quality of services provided by universities and colleges is needed because the better the quality of services offered, the higher students' satisfaction. Based on the satisfaction ranking, it is revealed that the most dominant factor influencing students' satisfaction is the professionalism of lecturers (e.g., easy to understand lecture sessions and provision of relevant study materials).

HEIs need to assess and identify exemplary teaching practices (Hénard, 2010). Past studies clearly showed that students' perceptions of teaching are not only influenced by teachers' knowledge, mastery, and understanding of the subject, but also their teaching and personal characteristics as well as interactions between teachers and students (Bobe & Cooper, 2020; Wong, Tong & Wong, 2016). Arambewela and Hall (2009) stated that quality of teaching can be measured based on students' satisfaction using students' perceptions in different dimensions of the teaching space experience. Their study used educational constructs in the form of feedback from lecturers, easy access to lecturers, and good teaching quality that can improve academic quality and students' satisfaction. Among the purposes of evaluating students' satisfaction in higher education is assessing the quality of programs offered by HEIs to their students (Mai, 2005). The curriculum is the academic program taken by the students when they enroll in a course. Curriculum dimensions are also known as subject content, program problems, academic problems, and course content (Farahmandian, Minavand & Afshardost, 2013).

Past researchers also found that the quality of courses and other curriculum-related problems related to the university could affect overall students' satisfaction (Arambewela & Hall, 2009; Farahmandian et al., 2013; Osman & Saputra, 2019). One of the contributing factors to students' satisfaction in Armenia is related to the essential requirements. Martirosyan (2015) explained that students would be more satisfied with more precise and reasonable conditions.

It is crucial to provide adequate facilities for students as it will also impact the HEI's reputation. Quintal et al. (2012) examined the relationship between university facilities and students' satisfaction and found that students are satisfied if the service attribute indicates an excellent performance. The research clearly showed that when students are benefited, their attitude towards higher education improves, showing higher satisfaction (Ali & Ahmed, 2018; Quintal et al., 2012). According to Hanssen and Solvoll (2015), the factor that most strongly influences students' satisfaction with university facilities is the quality of its social areas, auditoriums, and libraries. Carroll-Barefield (2006) stated that the facilities provided by HEIs for their distance students are vital in ensuring students' satisfaction.

DOI: https://doi.org/10.24191/ijsms.v6i2.15578

Service Quality and Students' Satisfaction

Parasuraman, Berry and Zeithaml (1988) listed ten useful determinants to measure service quality in any service industry. The ten dimensions include reliability, responsiveness, competence, courtesy, access, understanding, credibility, security, tangibility, and communication. However, Hamilton, Crompton and More (1991) suggested that service quality consists of five dimensions which are tangibles, reliability, responsiveness, assurance, and empathy. Several researchers used the SERVQUAL model to measure service quality in different service industries with modified constructions to suit the specific services area (Weerasinghe, Lalitha & Fernando, 2017). Parasuraman et al. (1988) in their study on service quality, focused on three issues, namely service quality definition, causes of service quality problems, and ways organizations can implement to improve service quality offered by their institutions. This study assumed that satisfaction is obtained when the perception of the quality of service meets or exceeds the expectations of users (Ruby, 1998).

Past studies agreed that service quality is one of the foundations of customer satisfaction in all sectors (Hanaysha, Abdullah & Warokka, 2011; Parasuraman et al., 1988). Assessment of students' satisfaction is critical in determining the quality of service in HEIs. Parasuraman et al. (1988) used five dimensions of service quality. The researchers found that all measurements in service quality have a significant positive relationship with students' satisfaction in private HEI. The finding is consistent with prior and current studies showing students are satisfied with the service offered and delivered by their HEIs (Suyanto, Usu & Moodoeto, 2019).

Hanaysha et al. (2011), which conducted their study at a Malaysian university, found that HEIs need to continue acquiring, maintaining, and building stronger relationships with students. The researchers found a significant relationship between the five dimensions of service quality and students' satisfaction. While Suyanto et al. (2019) conducted a study at an Indonesian university, found that service quality influences students' satisfaction, similar to past studies done in other countries. This study showed that if the quality of service increases students' satisfaction, it will increase positively through the institution's image.

Twum and Peprah (2020) conducted their study on service quality at the School of Business, Valley View University in Ghana. This study found that students have high expectations for the services provided in said School. The results also showed that all dimensions of service quality have a significant relationship with students' satisfaction. This study stated that the institution should meet the needs of students by giving individual attention to solving the unique challenges experienced by students.

Schertzer and Schertzer (2004) defined academic planning as to how HEI plans to provide services for its students. The process will assist educators and administrators in helping students to adapt to a new environment, develop an open-minded thinking process, gain problem-solving and other soft skills, and further improve their learning experience. It will affect the students' image of higher education. Prior studies also found that perceived academic planning directly impacts students' satisfaction (Ali & Ahmed, 2018; Quintal et al., 2012). This is because a good academic environment is important not only in creating good teaching and learning culture but also in nurturing students' personal and educational developments (Ruby, 1998).

Hypotheses Development

1. Academic Quality

Prior studies showed that academic quality has a significant positive effect on students' satisfaction. Hasan, Ilias, Mohd and Razak (2008) found that students' perceived quality affected their satisfaction. Prior studies also suggested that academic quality is associated with students' satisfaction (Ali & Ahmed, 2018; Carroll-Barefield, 2006; Farahmandian et al., 2013; Negricea, Edu & Avram, 2014; Quintal et al., 2012). Students are concerned about the academic quality of their higher education. Thus, academic quality is sufficient to influence satisfaction in this regard. Based on this consideration, the following hypothesis is developed:

H1: There is a significant relationship between academic quality and students' satisfaction.

DOI: https://doi.org/10.24191/ijsms.v6i2.15578

2. Service Quality

Service quality is considered a key component in students' decision-making process in selecting HEIs and students' retention rate in the said institutions. Previous studies also showed that service quality significantly and positively affects students' satisfaction (Hanaysha et al., 2011; Hasan et al., 2008; Suyanto et al., 2019; Twum & Peprah, 2020). Based on this consideration, the following hypothesis is developed:

H2: There is a significant relationship between service quality and students' satisfaction.

METHODOLOGY

This study focuses on students in HEIs in Malaysia, specifically in the Klang Valley area. In 2018, there are 211,627 and 666,617 students studying at public and private higher education institutions in the Klang Valley (*Department of Statistics Malaysia Official Portal*, 2019). Based on these figures, Sekaran & Bougie (2016) recommended that the appropriate sample size for the study to be 384 students.

This study will follow the measurement of academic quality and students' satisfaction used by Arambelewa and Hall (2009), Farahmandian et al. (2013), and Quital et al. (2012). Student satisfaction is defined as a short-term attitude resulting from evaluating students' educational experience, services, and facilities in higher education (Elliott & Shin, 2002). While for service quality, this study uses the SERVQUAL scale to measure service quality. SERVQUAL is widely used and earned great popularity in the service quality research field (Hamilton et al., 1991; Weerasinghe et al., 2017). The item was categorized according to the five dimensions of service quality: tangibles, assurance, empathy, reliability, and responsiveness. This study uses similar measures by Hamilton et al. (1991). Definitions of four dimensions of service quality (reliability, responsiveness, assurance, and empathy dimensions) are given as follows:

1. The reliability dimension is the ability to perform services promised to users accurately and reliably by the organization.
2. The responsive dimension is the willingness to help customers and provide immediate service. In the context of higher education, it is

the eagerness to serve and a commitment to act in the best interest of future and current students.

3. The assurance dimension is the ability, knowledge, and decency of employees and their ability to convey trust, empathy, and attention individually to the customer. In the context of higher education, lecturers and staff can earn students' confidence by performing services in a knowledgeable and professional manner.
4. The empathy dimension can be defined as showing individual attention to the customer, which is the students' case.
5. Tangible dimension is referred to physical facilities, equipment, personnel, and communication materials. In other contexts, it includes the physical appearance of the office, employees in the organization, and any materials associated with service delivery.

As this study used multiple regression, the result also shows that the data are normally distributed. The following regression model was formulated to study the effect of academic quality and service quality on students' satisfaction.

$$\hat{y} = \widehat{\beta_0} + \widehat{\beta_1} x_1 + \widehat{\beta_2} x_2 + \mathrm{e}$$

where,

y = Students' Satisfaction
x_1 = Academic Quality
x_2 = Service Quality
e = Error term

Data Collection

An online survey questionnaire was distributed to students of public and private HEIs located in the Klang Valley. The questionnaire was divided into four main parts. Part A is related to the demographic profile of the students, Parts B and C are related to the study's independent variables: academic quality and service quality, while the last part, Part D, is related to the study's dependent variable: students' satisfaction of the HEIs. This study used the four-point Likert scale ranging from strongly disagree to strongly agree.

Out of the 1,000 research instruments shared online, 470 questionnaires were returned. Forty-four respondents were excluded from

the analysis because they did not answer the questionnaire correctly or left several incomplete items in the questionnaire. The survey yielded a 42.6 percent response rate resulting in 426 usable responses.

FINDINGS AND DISCUSSIONS

Reliability Analysis

As seen in Table 1 below, the Cronbach's Alpha results are above 0.7 for all factors, namely Academic Quality, Service Quality, and Students' Satisfaction, ranging from 0.875 to 0.964. Therefore, the results were judged acceptable and reliable.

Table 1: Alpha Reliability for Each Variable

Factor	No. of Items	Cronbach's Alpha	No. of Remaining Items
Academic Quality	17	0.931	17
Service Quality	45	0.964	45
Students' Satisfaction	6	0.875	6

Demographics of Respondents

Table 2 summarises the demographics of the respondents. There were 125 male students (29.34%) and 301 female students (70.66%). The percentage indicates that the majority of respondents were female students. The most considerable portion of the students involved was from public HEIs, representing 75.12% (320 students), while 106 students (24.88%) were from private HEIs in Malaysia.

Table 2: Profile of Respondents – Gender, Type of Higher Education and Level of Education

Variable		Gender					
		Female		Male		Total	
		N	%	N	%	N	%
Type of Higher Education	Public	225	52.82	95	22.30	320	75.12
	Private	76	17.84	30	7.04	106	24.88
	Total	301	70.66	125	29.34	426	100
Level of Education	Undergraduate	226	53.05	95	22.30	321	75.35
	Postgraduate	38	8.92	19	4.46	57	13.38
	Professional Qualification	37	8.69	11	2.58	48	11.27
	Total	301	70.66	125	29.34	426	100

This study was based on three categories: undergraduate, postgraduate, and professional qualification. Under the "undergraduate" category, the following majors were grouped: diploma, matriculation, foundation, and degree. The "postgraduate" category included masters and Ph.D., while the "professional qualification" category consisted of students who had further their study to obtain a professional certificate. Majority of respondents or 226 students, were under the undergraduate category (75.35% of the total population), and the balance was from postgraduate (13.38%) and professional qualification (11.27%) categories.

Correlation Coefficients

Table 3 shows that students' satisfaction is positively related to academic quality with a Pearson correlation coefficient of r = .733, and the significance value is less than .001. Hence, we are confident that there is a genuine relationship between students' satisfaction and academic quality ($p < .001$). Students' satisfaction is also positively related to service quality, with a coefficient of r = .680, which is also significant at $p < .001$. Academic quality appears to be positively associated with service quality, r = .841, $p < .001$.

Table 3: Correlations

		Academic Quality	Service Quality	Student Satisfaction
Academic Quality	Pearson Correlation	1	.841**	.733**
	Sig. (2-Tailed)		.000	.000
Service Quality	Pearson Correlation	.841**	1	.680**
	Sig. (2-Tailed)	.000		.000
Students' Satisfaction	Pearson Correlation	.733**	.680**	1
	Sig. (2-Tailed)	.000	.000	

**a. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=426

Analysis of Regression

In this study, multiple regression analysis was employed to determine the direct effects of academic quality on students' satisfaction. The result of regressions (Table 4) shows details on the adjusted R square, indicating that the model explained 54.8% of the variance in students'

satisfaction. This value is generally considered a moderate effect size (Moore, Notz & Fligner, 2013).

Table 4: Model Summary

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.742a	.550	.548	1.854

a. Predictors: (Constant), Service Quality, Academic Quality
b. Dependent Variable: Students' Satisfaction

Table 5: Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.465	.772		3.195	.002
	Academic Quality	.221	.024	.550	9.131	.000
	Service Quality	.034	.009	.217	3.606	.000

Table 5 presents the significant influence of academic quality ($\beta = 0.221$, $p < 0.01$) on students' satisfaction. The results show that there is a significant relationship between academic quality and students' satisfaction. Thus, H_1 is supported in this study. This study also determined the direct effects of service quality on students' satisfaction. The findings in Table 5 reveal the significant influence of service quality ($\beta = 0.034$, $p < 0.01$) on students' satisfaction. Thus, H_2 is also supported in this study.

Table 6: Coefficients (Academic Quality)

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
	(Constant)	3.998	.723		5.533	.000
	Total Teaching	.008	.056	.007	.150	.881
	Total Curriculum	.319	.054	.266	5.935	.000
	Total Facilities	.458	.036	.557	12.750	.000

Further analysis shows that students' satisfaction in the HEIs in Klang Valley is significantly influenced by academic quality dimensions,

which are curriculum (b =0.319, p < 0.01) and facilities (b = 0.458, p < 0.01). Surprisingly, teaching does not significantly contribute to students' satisfaction (see Table 6).

Results for Hypothesis 1 on academic quality and students' satisfaction are also supported by prior studies which suggested that academic quality is associated with students' satisfaction (Ali & Ahmed, 2018; Carroll-Barefield, 2006; Farahmandian et al., 2013; Negricea et al., 2014; Quintal et al., 2012). Naturally, students are more concerned with the academic quality of their HEIs. Ali and Ahmed (2018) stated that academic quality is very important for students' satisfaction and loyalty to their HEIs. Students feel better when their university has a good image and students' satisfaction is one of the prerequisites to form a positive university image. When students are satisfied with the quality provided by their HEIs, they deliver positive feedbacks to the outside world, which helps build a good perception of the university.

Evidence shows the importance of academic quality in influencing students' satisfaction towards higher education. This is in line with Farahmandian et al. (2013) study. They examined students' satisfaction with several factors, namely advising, curriculum, teaching quality, financial assistance, tuition costs, and facilities. Based on the findings, majority of students were satisfied with the said factors offered by the HEIs. This study concluded that HEIs would be able to effectively satisfy their students if they can prioritize the main factors that help them evaluate their students' perception of academic quality. Thus, academic quality is sufficient to influence satisfaction in this regard. HEIs should constantly improve academic quality in their institutions to ensure that students' satisfaction is always maintained. Besides that, good quality academics offered by HEIs will help students acquire new skills and knowledge that will influence their jobs and future developments (Kalam, 2015).

Furthermore, students today enter the higher education platform with new attitudes and talents and various outcomes from experience, social and cultural changes. These changes alter the level of students' expectations and satisfaction with the educational environment. Leaders and management of HEIs need to think continuously, progressively, and proactively to achieve internationally recognized quality.

Result in Table 7 shows that students' satisfaction among the HEIs in Klang Valley is also significantly influenced by three service quality dimensions namely empathy ($b = 0.225$, $p < 0.01$), reliability ($b = 0.168$, $p < 0.01$) and assurance ($b = 0.169$, $p < 0.01$). Two other service quality dimensions, namely tangibility and responsiveness, do not have a significant contribution to students' satisfaction.

Table 7: Coefficients (Service Quality)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	3.767	.848		4.444	.000
	Total Empathy	.225	.052	.272	4.302	.000
	Total Tangible	.029	.022	.074	1.287	.199
	Total Responsiveness	.030	.052	.035	.570	.569
	Total Reliability	.168	.055	.182	3.089	.002
	Total Assurance	.169	.041	.224	4.132	.000

A number of studies proved service quality in HEIs affects students' satisfaction, which suggested that service quality is associated with students' satisfaction (Hanaysha et al., 2011; Hasan et al., 2008; Suyanto et al., 2019; Twum & Peprah, 2020). Parasuraman et al. (1988) showed that satisfaction is an emotional position derived from emotions combined with previous user feelings about user experience. As pointed by Hanaysha et al. (2011), Malaysian learning institutions have successfully implemented their strategic service quality improvement. This information will leverage customers' intention and brand awareness of Malaysian learning institutions' quality, especially for international students. Malaysian higher learning institutions need to work continuously towards ensuring that the service provided can meet or exceed the expectation of students.

The result is also in line with Twum and Peprah (2020) study on students of the School of Business. Students are very satisfied with the services provided by HEIs based on the SERVQUAL dimension. HEIs must meet the needs of students by paying individual attention to solve the unique challenges faced by each student. This clearly shows that, generally, students are satisfied with the service offered and delivered by their HEIs (Suyanto et al., 2019). These findings indicate a positive indicator of service quality in influencing students' satisfaction in a higher education setting.

CONCLUSION

This study has provided background, comprehensive literature review, determining related methodology, and analyzed the data collected in determining students' satisfaction of higher education and a means to maintain university reputation. This study suggests that service quality and academic quality should take into account and positively affect the university's corporate reputation.

The aims of this study is to examine the relationship between academic quality and service quality towards students' satisfaction. The results show that both qualities have significant relationships with students' satisfaction in a higher education setting. Moreover, students' satisfaction is one of the important indicators for measuring the success or performance of HEIs. Students' satisfaction will influence the HEIs strategic direction and improve HEIs reputations.

This study concludes that HEIs will effectively satisfy their students if they prioritize the main factors that help them evaluate their students' perception of academic quality. Thus, academic quality is sufficient to influence satisfaction in this regard. HEIs should continuously improve academic quality in their institutions to ensure that students' satisfaction is always maintained. Further analysis shows that students' satisfaction with the HEIs in Klang Valley is achieved via the curriculum and facilities that the HEIs offer. However, the results show that teaching in the academic quality dimension did not have a significant influence on students' satisfaction. Carefully crafted, good quality academic programs can increase students' satisfaction, and HEIs reputation is an important tool to attract students to enroll in an HEI in the future.

Service quality is one of the variables that can lead to students' satisfaction. Therefore knowledge of the relationship between the two factors is important for HEIs to build students' satisfaction through continuous service quality improvement. Students' satisfaction with the HEIs in Klang Valley is significantly influenced by empathy, reliability, and quality assurance. Two other dimensions of service quality (tangibility and responsiveness) did not contribute substantially to students' satisfaction. In terms of service quality, HEIs need to ensure that students' perspectives on

DOI: https://doi.org/10.24191/ijsms.v6i2.15578

these institutions are maintained to ensure the good reputation of these HEIs in the long run.

IMPLICATION AND RECOMMENDATIONS

Private and public HEIs in Malaysia must continue to improve their institution's quality consistently, and at the same time, improve their reputations in the eyes of others. This step can be considered an important path towards achieving a competitive advantage in the higher education industry. This study is important because it will measure the level of quality offered and the level of satisfaction among students. Results of the study can be used to provide valuable information about the elements and dimensions prioritized by students in assessing academic quality, services quality, and students' satisfaction.

This study reported a statistically significant relationship between overall students' satisfaction and academic quality. It is recommended that institutions begin to develop or adopt students' satisfaction surveys to obtain periodic feedback from students on services and educational programs offered at their institutions. Incorporating student feedback in the decision-making process will ensure that institutions are in better positions to meet the needs of their students and, at the same time, enhance the good name of their institutions. This is because, ultimately, students are the recipients of the services offered by HEIs.

In addition, one of the recommendations that should be considered by top management as a priority is to maintain the good image of the HEIs. This is important because the quality given to their students will build their HEIs reputation. This is because reputation is not built in a day but is built continuously by organizations based on their user perspective and from the standpoint of HEIs, service quality, and academic quality given to their students. HEIs with a strong reputation have a superior market position in the higher education sector. However, HEIs should continue to reinvest in resources and skills to maintain their competitiveness and at the same time improve their quality to students.

Besides that, by the end of 2019, the whole world has started to face the COVID-19 pandemic, which has profound consequences on everyday

life worldwide. This pandemic has also affected the generally traditional, offline implementation of schools and HEIs. With the temporary closure of educational institutions, all classes need to be conducted online. As this study was conducted at the height of the COVID-19 outbreak, the management can view their students' satisfaction towards HEIs during this pandemic and understand what students require to improve their online learning experience.

ACKNOWLEDGMENT

The authors gratefully acknowledge the Program Go Nat & Go Global Publication support from the Faculty of Accountancy of Puncak Alam Campus, Universiti Teknologi MARA Cawangan SELANGOR.

REFERENCES

Ali, M., & Ahmed, M. (2018). Determinants of students' loyalty to university: A service-based approach. *SSRN Electronic Journal*, *84352*. https://doi.org/10.2139/ssrn.3261753

Arambewela, R., & Hall, J. (2009). An empirical model of international student satisfaction. *Asia Pacific Journal of Marketing and Logistics*, *21*(4), 555-569. https://doi.org/10.1108/13555850910997599

Arena, M., Arnaboldi, M., & Azzone, G. (2010). Student perceptions and central administrative services: The case of higher education in Italy. *Studies in Higher Education*, *35*(8), 941-959. https://doi.org/10.1080/03075070903420708

Arpan, L. M., Raney, A. A., & Zivnuska, S. (2003). A cognitive approach to understanding university image. *Corporate Communications: An International Journal*, *8*(2), 97-113. https://doi.org/10.1108/1356328031047535

Bobe, B. J., & Cooper, B. J. (2020). Accounting students' perceptions of effective teaching and approaches to learning: Impact on overall student

satisfaction. *Accounting and Finance*, *60*(3), 2099-2143. https://doi.org/10.1111/acfi.12364

Carey, K., Cambiano, R. L., & Vore, J. B. De. (2002). Student to faculty satisfaction at a midwestern university in the United States. *Higher Education Research and Development South America*, *23*(21), 92-97.

Carroll-Barefield, A. (2006). Assessing the administrative support needs (library and technical) of allied health students enrolled in a distance education program. *Internet Journal of Allied Health Sciences and Practice*, *4*(3), 10.

Department of Statistics Malaysia Official Portal. (2019). Department of Statistics Malaysia (DOSM). https://rb.gy/atdjfe

Elliott, K. M., & Shin, D. (2002). Student Satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, *24*(2), 197-209.
https://doi.org/10.1080/136008002200001351

Farahmandian, S., Minavand, H., & Afshardost, M. (2013). Perceived service quality and student satisfaction in higher education. *IOSR Journal of Business and Management*, *12*(4), 65-74.
https://doi.org/10.9790/487x-1246574

Garwe, E. C. (2015). Student voice and quality enhancement in higher education. *Journal of Applied Research in Higher Education*, *7*(2), 385-399. https://doi.org/10.1108/JARHE-05-2014-0055

Hamilton, J. A., Crompton, J. L., & More, T. A. (1991). Identifying the dimensions of service quality in a park context. *Journal of Environmental Management*, *32*(3), 211-220. https://doi.org/10.1016/S0301-4797(05)80052-0

Hanaysha, J., Abdullah, H., & Warokka, A. (2011). Service quality and students' satisfaction at higher learning institutions: The competing dimensions of malaysian universities' competitiveness. *Journal of Southeast Asian Research*, *2011*, 1-10. https://doi.org/10.5171/2011.855931

Hanssen, T.-E. S., & Solvoll, G., (2015). The importance of university facilities for student satisfaction at a Norwegian University. *Facilities,* 744-759.

Hasan, H. F. A., Ilias, A., Mohd, R. A. R., & Razak, M. Z. A.. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International Business Research*, *1*(3), 163-175. https://doi.org/10.5539/ibr.v1n3p163

Hénard, F. (2010). *Learning our lesson: Review of quality teaching in higher education*. http://www.oecd.org/edu/imhe/qualityteaching

Kalam, A. (2015). *Importance of education in life*. Klient Solutech. https://rb.gy/tk2wpb

Kotler, P., & Clarke, R. N. (1988). Marketing for health care organizations. *Journal of Business Research*, *16*(1), 89-90. https://doi.org/10.1016/0148-2963(88)90083-5

Letcher, D., & Neves, J. (2010). Determinants of undergraduate business student satisfaction. *Research in Higher Education Journal*, *6*, 1-26.

Looker, I., Roberts, I., & Monk, C. (2018). *Managing risk in higher education: Higher education sector risk profile-2018*. PricewaterhouseCoopers. https://www.pwc.co.uk/government-public-sector/education/documents/higher-education-sector-risk-profile-2018.pdf

Mai, L.-W. (2005). A comparative study between UK and US: The student satisfaction in higher education and its influential factors. *Journal of Marketing Management*, *21*(7-8), 859-878.

Martirosyan, N. (2015). An examination of factors contributing to student satisfaction in Armenian higher education. *International Journal of Educational Management*, *29*(2), 177-191.

Ministry of Education Malaysia. (2015). *Executive Summary Malaysia Education Blueprint 2015-2025 (Higher Education)*.

Moore, D. S., Notz, W. I., & Fligner, M. (2013). *The basic practice of statistics* (8th ed.). WH Freeman.

Negricea, C. I., Edu, T., & Avram, E. M. (2014). Establishing influence of specific academic quality on student satisfaction. *Procedia - Social and Behavioral Sciences*, *116*, 4430-4435. https://doi.org/10.1016/j.sbspro.2014.01.961

Osman, A. R., & Saputra, R. S. (2019). A pragmatic model of student satisfaction: A viewpoint of private higher education. *Quality Assurance in Education, 27*(2), 142-165. https://doi.org/10.1108/QAE-05-2017-0019

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*(1), 12-40.

Quintal, V. A., Sultan, P., & Wong, ho Y. (2012). Service quality in a higher education context: An integrated model. *Asia Pacific Journal of Marketing and Logistics*, *24*(5), 755-784. https://doi.org/10.1108/13555851211278196

Reznik, S. D., & Yudina, T. A. (2018). Key milestones in the development of reputation management in Russian Universities. *European Journal of Contemporary Education*, *7*(2), 379-391.

Ruby, C. A. (1998). Assessing satisfaction with selected student services using SERVQUAL, a market-driven model of service quality. *Journal of Student Affairs Research and Practice*, *35*(4), 331-341. https://doi.org/10.2202/1949-6605.1059

Schertzer, C. B., & Schertzer, S. M. B. (2004). Student satisfaction and retention: A conceptual model. *Journal of Marketing for Higher Education*, *14*(1), 79-91. https://doi.org/10.1300/J050v14n01_05

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). West Sussex: John Wiley & Sons Ltd, UK.

Sudiharto, Rosita, A., & Irwansyah. (2019). The effect of reputation and academic service qulaity towards student satisfaction. *Advances in Social Science, Education & Humanities Research, 423,* 437-446.

Suyanto, M. A., Usu, I., & Moodoeto, M. J. (2019). The role of service quality on building student satisfaction. *American Journal of Economics 2019, 9*(1), 17-20. https://doi.org/10.31933/dijms.v1i4.197

Tik Tsuen Wong, A., Tong, C., & Wai-Yin Wong, J. (2016). The relationship between institution branding, teaching quality and student satisfaction in higher education in Hong Kong. *Journal of Marketing and HR*, *4*(1), 169-188.

Twum, F. O., & Peprah, W. K. (2020). The impact of service quality on students' satisfaction. *International Journal of Academic Research in Business and Social Sciences*, *10*(10), 169-181. https://doi.org/ 10.5296/jmr.v2i2.418

Weerasinghe, I. M. S., Lalitha, R., & Fernando, S. (2017). Students' satisfaction in higher education literature review. *American Journal of Educational Research*, *5*(5), 533-539. https://doi.org/10.12691/ education-5-5-9