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LINKING SERVICE QUALITY OF MALAYSIAN RESEARCH UNIVERSITIES AND ACADEMICS' DEMOGRAPHIC CHARACTERISTICS

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Abstract

Several strategies have been designed to upgrade the university in Malaysia to a level that can compete with the best universities in the world. For improving Malaysian higher educational institutions' performance, three attributes of core university services have been given priority which includes teaching services, research services and augmented services. These three core services are the contributing factors to influence the ranking of universities in Malaysia. Thus, this study is to examine the perception among academics based on length of service and gender in Malaysian public universities on the three core university services aforementioned. 344 questionnaires have been collected which represents the response rate of 22.93%. The inferential statistical methods were used to analyse the data in this study. The findings show that the perception of quality teaching services were no significant difference as well as with the perception of quality research services and augmented services between females and male academics. On the other hand, perception of teaching quality service and augmented services also showed no significant difference between different groups of years of service. The findings of this study are useful for managing quality services in university services as well as can be used as marketing strategy in regards to improvise the existing services in attracting and retaining local and international students.

Keywords: ANOVA, comparative analysis, perceived quality, t-test, university services.

1. Introduction

Malaysia is now acknowledged as one of the best hubs for tertiary level education in Asia. In fact, the development of the nation's workforce and economy is contributed by the significant role of Malaysian higher education institutions. Malaysian higher education institutions provide quality education services for local and international students. By acknowledging the potential of education sector in generating income to the country, the Malaysian government has made serious efforts to boost transformation on several key areas of tertiary education in the Eleventh Malaysia Plan (IIMP) which covers the period 2016–2020. In addition, the government also introduced a blueprint, specifically for Malaysia Higher Education which known as MEB (HE) from the year 2015–2025 to serve as a guideline for Malaysian universities, to plan for strategies to enhance the quality standard of universities. In the blueprint, there were core areas targeted to be improved; the teaching and learning quality services, research and innovation, empowerment of the institutions, and intensifying internationalization. This blueprint also will acknowledge the rights, benefits, and responsibilities for all stakeholders in higher education institutions. The Malaysian government aims to boost up the achievement of universities in Malaysia to be the best position of the world and provide the best service for all students. It is also hoped by providing excellent quality services by universities in Malaysia, the number of international students in Malaysia would increase up to 250, 000 students by 2025.

2. Problem Statement

There are various theories and concepts in regards to quality of services of higher education. These includes SERVQUAL, Total Quality Management (TQM), Kaizen, and Six Sigma (Srikanthan & Dalrymple, 2002, 2003; Sultan & Wong, 2010; Sunder, 2016). Past studies have shown that the service quality philosophy has been applied in higher education institutions in many Western countries such as the USA and UK as well as in Asian countries such as Malaysia (Galeeva, 2016; Khoo et al., 2017; Subrahmanyam, 2017). Many scholars have defined the quality dimension with regards to services. Indeed, seminal work on quality dimensions has been conducted by Parasuraman et al. (1985) and Zeithaml et al. (1996). As mentioned by Parasuraman et al. (1988) it is difficult to measure the service quality of organization and provide the same quality services to all customers due to its characteristics such as heterogeneous, intangible, inseparable, and perishable (Yoon & Suh, 2004). Sultan and Wong (2010) suggest that services and education are the two core functions undertaken by higher education institutions. The services function refers to, for example, enrolment activities and amenities such as cafeterias, recreation, library etc. The education services function, on the other hand, refers to teaching and learning services. In addition, education services also include research and community services (Srikanthan & Dalrymple, 2005, 2007).

Several researchers have investigated the concept of quality of higher education institutions. However, how best to define the quality of services of higher education has sparked extensive discussion among scholars (Becket & Brookes, 2006; French et al., 2014; Newton, 2007). The quality of services of higher education is difficult to understand and very few consensuses on its specific definition. Based on a review of several definitions, the quality of services of higher education is defined as providing services

beyond the customer's expectation of education (e.g. Jain et al., 2011; Parasuraman et al., 1985; Sahney et al., 2004). In a competitive education market, an understanding of providing excellent services is highly relevant for managers in higher education institutions because the understanding indicates the value that the students and other stakeholders receive. As overall, the service manager must ensure that augmented services should also be provided besides the main services in the university so that each of these services compliment and meet customers' (i.e. students) level of satisfaction. It is vital because when a service has distinctive value this enables potential customers to differentiate that service from those of competitors (De Jager & Gbadamosi, 2010; Melewar et al., 2018).

3.   Research Questions

The identification of these services creates an advantage that can help managers in higher education institutions to improve customer satisfaction among stakeholders such as students and academics. So, how can this be done? It can be done through proper planning that is based on the identification of the various service levels, starting with basic level, which is the core service or core customer value that addresses the core benefit of the services that the consumers experience (Armstrong et al., 2014; Middleton et al., 2009). The intangible features of core services also reflect the characteristics and needs of the target market segment (Kotler & Armstrong, 2010). For example, university students not only experience teaching and learning services, they also experience other services at university such as the library, hostel accommodation, cafés, and clinics. At the next level, the managers at the university must ensure that the core services benefit students and/or other stakeholders. This involves various activities to develop services in regards to the service design, the features of a service, the quality level as well as the brand name (Kotler & Armstrong, 2010), pricing, and physical evidence (Middleton et al., 2009). All these aspects of a service need to be addressed in order to ensure that stakeholders will always experience satisfaction with that services. Furthermore, academics involve directly in the main services of a university. Understanding the academia perceptions on the quality of core services of Malaysian public universities perhaps can provide important insights that can assist managers of universities and stakeholders to further improve the quality of universities' core services. Thus, some questions were outlined and needed some answers which include: Do gender and years of service influence academics' perceptions of the quality of core services in Malaysian public universities?

4.   Purpose of the Study

The higher education institutions as service providers makes a significant contribution to a nation as higher education especially universities aim to provide the students with the real working situation and they also would manage all resources in their organizations (Oliveria, 2009). The higher education institution can be categorized as an intangible service because it provides interaction between individuals. Therefore, it is important that such institutions focus on satisfying their customers by providing good quality services (Fong and Wai, 2008). In the meantime, higher education institutions need to take into account the interests and expectations of their various stakeholders, such as students, employees, alumni, parents and funding agencies (Rózsa, 2010). From the university perspective, employees can be categorized into two groups:

academics (lecturers) and non-academicians (officers and administrators). It could be said that academics are the most important stakeholders in a university because they have direct interaction with the university's final customers, the students. However, there are very few research studies that focus on university service quality as perceived by academics. Therefore, this study aims to access the perception among academics based on length of service and gender in Malaysian public universities on three core university services namely teaching services, research services, and augmented services.

5. Research Methods

Primary and secondary sources were used in this research. The primary source of this study were collected by distributing a number of questionnaires, while the secondary data were collected from many sources such as journals, reports and the Internet. The secondary data were used to develop the questionnaire for this study. This study covered five research universities in Malaysia. The population of academics in these five universities is 9,932 people. Approximately 1,500 academicians from these universities were initially involved in the survey. Of that number, only 344 returned their questionnaires, which equates to a response rate of 22.93 per cent. Although the number of collected questionnaires is less than 50% from the sample size, nevertheless, a sample size of 200 or more is acceptable for analysis (Bagozzi & Yi, 2012; Kline, 2010). It is the fact that the data collection of this study took almost a year to complete. Most of the respondents had to be reminded several times to complete and return the questionnaire. In order to ensure that the questionnaire was collected smoothly, a number of enumerators were appointed at each of the universities to collect the questionnaires.

5.1. Instrument development

The development of the research instrument was based on previous studies. All the items used in the questionnaire were selected on the acceptable and highly reliable measurement scale. Before the questionnaire was distributed among the respondents, it was sent to two experts to recheck the validity of the items. As a result, some modifications were made to the items, including amending spelling errors and the wording of the items. This step was undertaken to ensure that the questionnaire was suitable to be sent to the respondents. Next, the questionnaire was pre-tested by 20 academics. A reliability test was performed to assess the reliability of each construct. The reliability results for each construct were strong and acceptable, so no further modifications were made to the questionnaire. The final version of the questionnaire is ready to be sent for the main survey.

5.2. Item measurement

There were four sections in the questionnaire. The first section contained of 18 items that were aimed to measure the importance of the services of the university. The second section also contained of 18 items and these were designed to measure the service quality of the services of the university. The third section contained four items to measure overall satisfaction with the services of the university. The final section was designed to collect demographic data on the academics (i.e., gender, age, education level, seniority (years of service), and average income). A seven-point Likert scale was used to measure the items in each construct. In section one of the questionnaire the scale ranged from extremely unimportant (1) to extremely

important (7); in section two the questionnaire the scale ranged from strongly disagree (1) to strongly agree (7); and in section three from strongly dissatisfied (1) to strongly satisfied (7).

5.3. Data analysis

The data were first analysed for normality and the results showed that they were normally distributed. Then the data were analysed for reliability. The analysis for reliability was run and the Cronbach's alpha results showed that all the constructs were highly reliable with scores above 0.6 (Hair, Anderson, Babin, and Black, 2010). The Cronbach's alpha for each construct was as follows: construct 1 = 0.887, construct 2 = 0.886, and construct 3 = 0.897. This means that the scale of the questionnaire had high reliability. The inferential analysis was used to answer the research question of the study. SPSS version 18 were performed for all descriptive analyses of the study.

6. Findings

Analysis T-test was used to analyse the influence of the gender characteristic of academics. The study sought to determine whether gender influences the perceived quality of services in universities. On the other hand, one-way ANOVA was performed to analyse years of service and how would this characteristic influence their perception with quality of services in university.

6.1. T-test findings

Table 01 presents the independent sample T-test results. The results indicate that there is a significant difference in the perception of the quality of teaching services according to the mean scores between the two gender groups (t = -1.933, p = 0.045) with the mean difference being higher for female than for male academics. There is no significant difference for the mean scores in terms of the perception of the quality of research services between the two gender groups (t = -0.460, p = 0.409) with the mean difference being higher for female than male academics. There is also no significant difference of the mean scores with regards to the perception of the quality of augmented services between male and female groups (t = -3.117, p = 4.654) with the mean difference being higher for female than for male academics.

Table 01. Independent sample t-test results on gender characteristic

Dimension	Mean		T	F	Sig.
	Male	Female			
Teaching services quality	3.84	3.91	-1.93	4.05	0.045*
Research services quality	4.01	4.04	-0.46	0.40	0.409
Augmented services quality	4.93	5.17	-3.11	4.65	4.654

Note: *significant at p = ≤0.05

6.2. ANOVA findings

Table 02 presents the ANOVA results. The results show that, in terms of years of service, there is no differences across the three service period groups in regards to the teaching services quality (F = 1.198, p = 0.303). However, research quality services showed a significant difference across the three service period groups (F = 3.516, p = 0.031). Tukey's test was conducted as part of Post hoc analysis to identify the mean differences between the three service period groups (see Table 03). The results of that test indicate

that there is a significant difference in the perception of the research services quality between academics who have worked at their university for 6 years and below and those that have a service period of 16 years and above. Meanwhile, the perception of the augmented services quality showed no significant difference across the three service period groups (F = 2.939, p = 0.054).

Table 02. ANOVA results for service period characteristic

Dimension	Service Period	Mean	F	Sig.
Teaching services quality	6 years and below 7–15 years 16 years and above	3.827 3.899 3.812	1.198	0.303
Research services quality	6 years and below 7–15 years 16 years and above	4.099 4.051 3.869	3.516	0.031*
Augmented services quality	6 years and below 7–15 years 16 years and above	5.047 5.119 4.865	2.939	0.054

Note: *Significant at p = ≤0.05

Table 03. Tukey HSD results

(I)Service period in current university	(J) Service period in current university	Mean Difference (I-J)	Std. Error	Sig.
6 years and below	7–15 years	.0480	.0705	.775
	16 years and above	.2295*	.0903	.031
7–15 years	6 years and below	-.0480	.0705	.775
	16 years and above	.1815	.0805	.064
16 years and above	6 years and below	-.2295*	.0903	.031
	7–15 years	-.1815	.0805	.064

Note: * Significant at the 0.05 level.

7. Conclusion

The main objective of this study is to access the perception among academics based on length of service and gender in Malaysian public universities. The first analysis aimed to measure the perceptions of female and male academics in order to determine whether there were similarities or differences in the perceptions of the two groups. Based on the results, female and male academics have similar perceptions of the quality of research services and augmented services. However, female academics have a different perception of the quality of teaching services compared to male academics. This indicates female academics are very concern about what they should deliver to students, perhaps the teaching service they give ensuring

students understand with what they learn about courses/subjects. Or another point is that perhaps female academics, they have the attitude of giving the best to their students. The second analysis aimed to identify whether there were any differences in the perceptions of academics about core university services based on their length of service. The academics were grouped into three categories of service period: 6 years and below, 7-–15 years, and 16 years and above. The results showed that there is no significant difference in the perception of the quality of augmented services and teaching services across the three service period groups. However, academics, regardless of the number of years of service at university, exhibit a significant difference in their perception of the quality of research services. The significant difference is obvious between academics who have worked at the university for less than 6 years and academics who have a service period of 16 years and above. This suggests that academics who have served the university for less than 6 years perceived quality in a different way of research quality compared to academics who have worked at university for 16 years and above. This, it could suggest that young academics interest in research is higher that their seniors, and thus, they concern about the quality of research services. As overall, this study suggests that gender and service year of period have influenced on the understanding of particular issue such as perception of service quality of university. The findings of this study may beneficial to managers of the university in regards to improve the services provided at university from the perspective of academics. The related policy of education in Malaysia context can be revised (if applicable) based on the findings of this study, where, the academics have their difference perceptions with service quality of Malaysian universities. Further analysis is suggested to measure the relationships among variables with advanced method of analyses such as multiple regression or advance analysis such as structural equation modeling (SEM). The study also can be applied to non-research universities in Malaysia.

Acknowledgments

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