INVESTIGATION ON MEDIATING ROLE OF CORPORATE IMAGE OF UNIVERSITY ON THE LINK BETWEEN SERVICE QUALITY AND STUDENT LOYALTY

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Abstract
To develop the county, technical and high skilled workers are in high demand by various industries. Align with this, the government has put high attention on main stream the technical education in Malaysia. In addition, the enrolment to in Technical and Vocational Education and Training (TVET) is expected to be increased as to support higher industry demand. The main purpose of this study is to empirically investigate the mediating role of Corporate Image of University (CIO) on the link between Service Quality (SQ) and Student Loyalty (SL) of Technical Higher Learning Institution (HLIs) in TVET sectors in Malaysia. The previous research discovered that student loyalty level is influenced by Service Quality and Corporate Image of Universities. The relationships between the constructs is positive. However, there is inadequate evidence on mediating effect of Corporate Image of University on the relationship between Service Quality and Student Loyalty in TVET Higher Education Institution (HLI). Convenience sampling was used to distribute the questionnaires to final year student from Universiti Kuala Lumpur. 398 of good questionnaires were analyzed by using Partial Least Square (PLS)-Structural Equation Modelling (SEM). The results shows that there is direct effect of Service Quality to Corporate Image of University and Student Loyalty. There is also direct effect of Corporate Image of University and Student Loyalty. Interestly, there is also mediation effect of Corporate Image of University on the link between Service Quality and Student Loyalty.

Index Terms- Service Quality, University Corporate Image, Student Loyalty, Technical and Vocational Education and Training (TVET).

INTRODUCTION
Higher Learning Institutions (HLIs) is a post secondary school training, teaching at college of education, polytechnic and universities with the main goal of equipping individual person with sound knowledge, creative ideas, skills and societal understanding [1]. In the context of Malaysia, higher learning sector is one of the most important sectors and the competition among the HLIs providers is becoming more aggressive and competitive. Prior to that, reference [2] highlighted that due to stiff competition among the HLIs, ensuring student loyalty is predominantly for survival in the industry. In addition, reference [3]highlighted that the relevance of customer loyalty cannot be underestimated in today's competitive business environment.

In 11th Malaysia Plan, government highlighted on the importance of TVET HLIs towards supporting the demand from industry. According to Malaysia Education Blueprint (MEB), the number of TVET student’s enrolment is also expected to increase from 250,000 to 650,000 in 2025. At the same time, our country have to improve the tertiary enrolment rates from 36% currently to 53% (and higher education enrolment from 48% to 70%) in order to bring Malaysia on par with the highest enrolment levels in ASEAN. This growth scenario will require an additional 1.1 million places by 2025, mainly through growth in technical and vocational education and training (TVET), private higher education institutes and online learning [4]. However, TVET HLIs in Malaysia face challenges such as being called as “unattractive pathway”, stiff competition with other higher education institutes, service quality, fragmented delivery, lack of recognition for technologist, curriculum and competencies among the teaching staff [5]. In addition, although TVET HLIs are running at high operating level, many have not operated at full capacity yet. The overall funding structure also does not fully support quality and performance of TVET providers. Thus, this issue leads to the effects on student satisfaction [6]. It could also affect the enrolment performance and loyalty of the current students [7]. Maintaining student loyalty is very important [8]. Loyal student will retain in the university until completion of study [9] ,support marketing of university through spreading positive word of mouth and recommend to others [10] and reduce drop out [11]. Loyal students will also actively participate in teaching and learning due to high commitment [12]. While, reference [13] highlighted that a loyal student will choose to further study in the same university.

Therefore, there is a need to have deeper study on the effects of service quality, image, and loyalty in TVET HLIs. Past researchers have conducted studies to develop the understanding of conceptual relationships between service quality and loyalty [14] & [15] in conventional universities. The result showed that, there is a relationship between service quality, and student loyalty. Besides service quality, image is identified as another important variable in determining student satisfaction and loyalty. Past research by [16] and [17] found that image has a strong relationship with student loyalty.

However, the past studies have inadequately integrate the relationship between service quality, corporate image and student loyalty in the context of TVET HLIs in Malaysia. The studies on TVET HLIs are focusing more on the relationship between service quality and student satisfaction only such as [18] and [19]. While research by [20] was mainly focuses on the relationship between image and student loyalty.
Thus, the main aim of this study is seek to contribute to the development of a framework that integrates service quality, corporate image and student loyalty in TVET HLIs from student’s perspective. This research reviewed the extensive literature on these four constructs and outlines the expected relationships in one research model.

The objectives of this study are as following

**Objective 1:** To test the relationship between Service Quality and Corporate Image of University

**Objective 2:** To test the relationship between Corporate Image of University and Student Loyalty

**Objective 3:** To test the mediating effect of Corporate Image of University on the link between Service Quality.

**LITERATURE REVIEW**

**A. The link between Service Quality and Corporate Image of University**

The performance of service quality by organization will lead to the development of corporate image by the customer. The technical and functional quality influence the perception on service quality. Service quality then strongly influenced the image of service provider. University image emerges from a customer’s net consumption experiences; hence, perceptions of service quality. Other past studies also proved that there is a relationship between service quality and image. Research [21] and [22] found that there is a direct and positive relationship between service quality and corporate image of the organization in transportation industry. Study by [23] in one of the biggest service industries in Egypt found a strong relationship between service quality and corporate image and reputation. The higher level of service quality will increase the level of organization’s corporate image.

Based on the aforementioned studies, service quality is an important antecedence for corporate image of one organization. In the context of higher education, studies by reference [24] and [25] focuses on the effect of service quality towards satisfaction and loyalty. These studies did not investigate the link between service quality and image of the university as perceived by the student. However, reference [26] in their study found there is relationship between service quality and corporate image of university. Thus, it is interesting to conduct a deeper investigation on the significant and direct effects of the relationship between service quality and corporate image in TVET HLIs in Malaysia. Accordingly, the following hypothesis is proposed.

\( H_1: \text{Service quality has significant and direct effect on corporate image of university} \)

**B. The link between Corporate Image of University and Student Loyalty**

Image is viewed as an important aspect of a company’s ability to maintain its market position. This is because image is viewed and linked to the main component in the success of the organization. Service quality and image of the university's institutional image and reputation strongly affect student loyalty. The loyal graduate will support the university from several aspects such as financial through alumni, positive word of mouth to potential student and other stakeholders.

Study by reference [28] found that corporate image which consisted of university image and reputation, has direct inference on student loyalty. This finding is supported by the latest study by [29] whereby there is a positive and strong relationship between university image and student loyalty. Earlier to that, reference [30] refers to the concept of HLIs image, underlying that the university image strongly impacts on the student's willingness to apply to that HLI, but also on their willingness to recommend it to others. There is a positive relationship between the university image and word-of-mouth communication.

Meanwhile, research by [31] indicates that willingness of student to recommend the university to others is influenced by the corporate image of university and their pleasant experience during the study. In view of the past research, there is a relationship between corporate image and satisfaction. Therefore, this study is intended to measure the significant and direct effect of the relationship between corporate image and student loyalty in TVET HLIs. Accordingly, the following hypothesis is proposed.

\( H_2: \text{Corporate image has significant and direct effect on student loyalty} \)

**C. Corporate Image of University Mediate the Relationship between Service Quality and Student Loyalty**

Reference [32] highlighted that image is impacted by customer perceptions. This study focused on mediating effects of corporate image between service quality with satisfaction and student loyalty. As per previous literature review, service quality is strongly influenced image of the service provider’s firm. In addition, the higher level of service quality will increase the level of image of the organization [33]. From another angle, there is also a relationship between service quality and customer loyalty in many service industries [34] and [35].

Based on abovementioned relationship, image always appears as one of the variables with the greatest direct influence in satisfaction and also has a considerable influence in loyalty. According to reference [36] there is a positive relationship between corporate image of university with student satisfaction and loyalty. However, these studies did not extended the investigation on the mediating effect of corporate image. Thus, it is important to extend the study on the mediating effect of corporate image between service quality with student satisfaction and loyalty in TVET HLIs. Accordingly, the following hypotheses are proposed:

\( H_3: \text{Corporate image mediates the relationship between service quality and student loyalty} \)

Based on the previous studies, the following conceptual framework is developed.

![Figure 1. Conceptual model the effect of SQ and CI on SS and SL in higher TVET universities.](image)

**METHODOLOGY**

The research paradigm underlying this study is positivist epistemology where it deals with nature of knowledge, justification and the rationality of belief [37]. An appropriate research design is essential to determine the types of data, data collection technique and sampling methodology in order to achieve the research objectives. This quantitative study employed a descriptive survey to identify the relationship
between and amongst variables which are service quality, corporate image and loyalty.

In developing the questionnaire design, it is important to ensure on the information relevancy, specific data needs and rationale for each item of information. Since this research is quantitative based, a set of questionnaire is developed that consists of five parts (Part A, B, C and D). Part A represent Demographic (8 items), Part B represent Service Quality (31 items), Part C represents Corporate Image of University ( 9 items) and Part represent Student Loyalty (6 items). Measuring items for Part B, C and D were adopted from previous research whereby the reliability test was conducted. Nevertheless, as to ensure all items are met the reliability test, Pilot test was conducted. The Cronbach's Alpha result for SQ, CIU and SL is 0.943, 0.947 and 0.910 respectively. Thus, it can be concluded that the items are all reliable and able to proceed for full data collection. The response patterns are based on an interval scaled (Likert). The scale is arranged by 1 to 7 which represents the level of agreement with the statement in the survey questionnaire. Scale 1 represents strongly disagree and 7 represent strongly agree. The Likert scale is reliable and has been widely used in the past research. Likert scale is relatively simple and the nature of results is based on a numerical scale.

In this study, based on Krejcie and Morgan (1970) table as per reference [38], the targeted sample size is 375. As to ensure higher returned rate 431 set of questionnaires have been distributed to Final Year student form ten Universiti Kuala Lumpur campuses based on proportionate stratified sampling. A total of 398 of good questionnaire were used for data analysis by using Smart PLS.

**DATA ANALYSIS AND FINDINGS**

Using descriptive statistics analysis, frequencies of demographic variables are obtained. Degree student comprises 84.7% from the entire samples. The remaining of respondents are diploma student (15.3%). Male respondents are slightly higher than female respondents. The percentage is 54.8% and 45.2% respectively. In term of races, Malay respondents are dominant which is 95%. This is followed by Chinese (2.5%), Indian (0.8%) and others (1.7%). Since the majority of respondents are degree students, the percentage of respondent age 21-23 years old is higher than the other categories. 64.8% of respondents are from age 21-23 years old. Meanwhile, 22.9% are from age 18-20 years old. The lowest percentage is respondent from age above 26 years old. In terms of academic performance, majority of the students achieved CGPA 3.00 and above. Degree student comprises 84.7% from the entire samples. The remaining of respondents are diploma student (15.3%). Male respondents are slightly higher than female respondents. The percentage is 54.8% and 45.2% respectively. In term of races, Malay respondents are dominant which is 95%. This is followed by Chinese (2.5%), Indian (0.8%) and others (1.7%). Since the majority of respondents are degree students, the percentage of respondent age 21-23 years old is higher than the other categories. 64.8% of respondents are from age 21-23 years old. Meanwhile, 22.9% are from age 18-20 years old. The lowest percentage is respondent from age above 26 years old. In terms of academic performance, majority of the students achieved CGPA 3.00 and above. The result shows as table 2.

**PLS-SEM data analysis** according to Hair et al (2017) there are two steps involved. The first step is measurement model and the second step is structural model.

**Measurement Model** aims to measure the reliability and validity of the constructs for both formative and reflective construct. In this study, SQ and CIU is formative construct. The Convergent Validity achieved the threshold hold of 0.7. Both construct as well have no collinearity issue whereby the VIF value is less than 5. Importantly all outer loading for these formative constructs achieved higher than 0.5. The measurement model conducted at SL found that, the Cronbach’s Alpha is more than 0.9 while the Composite Reliability is more than 0.6. In addition the outer loading is more than 0.7 and AVE more than 0.5 as well. The discriminant validity also met the requirement of Fornell and Larcker and cross loading.

**Structural Model** has been conducted to examine the model’s predictive capabilities and relationship between the constructs. There are 4 major steps that involve. First, the collinearity result shows that all measuring item met the requirement of VIF less than 5. Secondly, the T-Value for the relationship between SQ with CIU and CIU with SL found that the T-Value reading exceeded 1.96 threshold value. Third, the predictive value for CIU is moderate with the predictive value for SL is high. Forth, the effect size for CIU is moderate (0.569) while the effect size of SL is strong (0.751).

The hypotheses testing result for H1 and H2 are as table 1.

**Table 1. Hypothesis testing**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>β</th>
<th>T-Value</th>
<th>P Values</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Service Quality -&gt; Corporate Image</td>
<td>0.75</td>
<td>31.962</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>H2 Corporate Image of University -&gt; Student Loyalty</td>
<td>0.26</td>
<td>4.16</td>
<td>0.00</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Mediating Test** has been conducted by running the ‘specific indirect’ effect analysis using bootstrapping method. Mediation analysis is tested through SmartPLS protocol. According to reference [40], PLS is able to provide more accurate estimation of mediating effects by accounting for the error that attenuates the estimated relationship. In addition, it will improve the validation of theories [41] The mediating analysis involved the assessment of Std Beta, Std error, T-Value, P value and Confident Interval. The main purpose is to assess the significant level of mediating effect according to the hypotheses. In this section, there are four hypotheses that has been developed to assess the mediation effect. The result shows as table 2.

**Table 2. Mediating test**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Std Beta</th>
<th>Std Error</th>
<th>T-Value</th>
<th>P value</th>
<th>VAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4 Service Quality (SQ) -&gt; Corporate Image of University (CIU) -&gt; Student Loyalty (SL)</td>
<td>0.3</td>
<td>0.045</td>
<td>7.797</td>
<td>0.0</td>
<td>49.7</td>
</tr>
</tbody>
</table>

Based on table 2, CIU partially mediated the relationship between SQ with SL. The VAF values obtained was 49.7% respectively. Since there is mediating effect of CIU on the link between SQ and SL, it is concluded that the H3 is supported.

**CONCLUSION**

Based on the research findings, there is a direct relationship and significant effects among the variables (service quality, corporate image of university and student loyalty). In addition, there are mediating effects of corporate image of university.
Based on VAF value, the mediating effects category is partial mediation. Thus, all hypotheses in this research are supported and consistent with literature review. Since the main focus of this study is the relationship between the variables and mediating effects, the sampling employed proportionate stratified sampling and followed by convenient sampling method. The data were obtained from final year students. This study has confirmed that there is a relationship among the constructs and mediating effect. Thus, future study, should consider a better generalization of the research if in case that researcher has no limitation of time and budget. It is suggested that the scope of study to be extended to other level of program and semester at master, diploma and certificate level as well.

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