THE IMPACT OF PERCEIVED SERVICE QUALITY OF “CIAC” VISA SERVICE PROCESS TECHNOLOGY ON STUDENTS SATISFACTION

T. Turay1, A. Shahzad2, M. Altaf3, H. Hussain4, U. Habiba5
1,2,3 Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia.
4 Department of Commerce, University of Sargodha, Pakistan.
5 National College of Business Administration and Economics Lahore, Pakistan.

ABSTRACT

The utmost aim of this research is to examine the impact of international students’ perceived service quality of CIAC visa service process technology on their Student’s satisfaction used by CIAC in handling international students’ visa process. Data was collected from 200 international students studying at Universiti Utara Malaysia using convenience-sampling technique. Five hypotheses were proposed to link all the five dimensions of service quality such as assurance, reliability, tangible, responsiveness, and empathy to student’s satisfaction. Relationship between variables were measured through Partial Least Square Structural Equation Modelling (PLS-SEM) by the application of Smart PLS 3.0. Results of the study found that only four dimensions of service quality of CIAC visa service process technology have the impact on international student’s satisfaction and the tangibility dimension having non-significant relationship with student’s satisfaction. This study contributes to the body of knowledge by knowing the dimensions of service quality in developing positive perception of technology in customers’ mind in order to gain student’s satisfaction.

Keywords: service quality, perceived service quality, student’s satisfaction
1) INTRODUCTION

Service quality is an important determinant of business success. Service quality has gained more attention by academicians and practices in the nineties era, therefore the last decade of last century was known as the era when the concern of service quality increases (Srikanthanan, 1999) is among the most critical aspects in the strategic management of firms (Ekinci et al., 2003) where most of the researches suggested excellent service delivery as a contributor towards business success. For the reason, customer-oriented organization put customer satisfaction as the highest goal of the organization to achieve. Therefore, customer satisfaction is considered as the performance indicator of customer-oriented companies (Grigoroudis and Siskos, 2009, Altaf et al., 2011, Othman and Shahzad, 2016). In service industry, quality is a crucial factor that determine satisfaction (Sumaedi et al., 2012).

Satisfaction is closely related to perception. In fact, Consumer satisfaction itself is consumer perception (Parasuraman et al., 1988). Consumer perception hold the critical point when it comes into evaluation of service in term of the customer expected and perceived service. Service quality has been a centre focused for academicians and practices especially when Berry et al. (1985) brought this topic in their research. In service marketing’s area, service quality is the core concept in the process of gaining satisfaction and retention (Parasuraman et al., 1988).

In 1988, Parasuraman and co-researchers had established the 22 item scales to measure the gap between customers’ expectation and perceived service. SERVQUAL turn out to be the most acceptable measurement in the determination of perceived service quality (Parasuraman et al., 1988). Through the series of continuous research, those respectful service quality scholars came to definition of service quality. They stated that the consumer evaluates service quality experience as the result of the distance between their expectation and perceived quality (Service quality = Perception – Expectation). SERVQUAL provides a complete conceptualization of service quality with measurement’s instrument in assessing perception of service quality (Amin et al., 2013). In addition, the authors stated that SERVQUAL has been a well-known model for academia’s and practitioners to assess the customer perception of service quality for a variety of service industries.
The SERVQUAL application have been tested and used in assessing quality of service in service sector such as banking sector (Poolthong and Mandhachitara, 2009), hospitality sector (Nadiri and Hussain, 2005), airline services (Sultan and Simpson Jr, 2000), health care services (Baker et al., 2014), and in higher education as well (Arambewela and Hall, 2006, Zafiropoulos et al., 2005). Moreover, in higher education sector, student’s satisfaction becomes the parameter of good service quality and as one of the institution competitive advantages’ sources (Arambewela and Hall, 2006). In higher educational level, students are always become pivot due to stiff competition among universities and internationalization (Ling et al., 2010). The students’ satisfaction is a challenge for higher education to understand and to deliver service that have quality standard to achieve Student’s satisfaction. In retaliation with international student’s satisfaction, providing and giving good service quality will increase international students’ satisfaction. The international students’ satisfaction is the preceding factor of student’s loyalty and retention (Yousaf et al., 2012b, Yousaf et al., 2013, Al-Swidi et al., 2012), also as a positive word of mouth (Townley, 2001). Moreover, Letcher and Neves (2010) highlighted that there is high connection between satisfaction and self-confidence.

Another research toward students’ satisfaction had been done by Yunus et al. (2010). They did a research to two hundred students in four Polytechnics in Malaysia. The aim of their research was to find out the relationship between students’ motivation, service quality and their satisfaction. The research found that empowerment, motivation, and service quality have the effects on student’s satisfaction. In addition, the research confirmed service quality as the major factor that gives the major contribution in giving its effect on student’s satisfaction. Satisfaction of the customer is an important aspect for any institution, especially in highly competitive business environment. The crucial part about customer satisfaction is customer satisfaction can give the effect on consumer behaviour (Clemes et al., 2008, Yousaf et al., 2013) and consumers’ trust (Omar et al., 2013), as well profitability (Anderson et al., 1994).

The most important thing is the aim of this paper is to find out whether International students’ perceived service quality CIAC Visa Service Process Technology has the impact on students satisfaction in handling international students visa process. SERVQUAL dimensions i.e. responsiveness, assurance, tangible, empathy, and responsiveness become the measurement the international students perceived service quality (Parasuraman et al.,
Although, there were several past studies had been done in evaluating the students’ perceived service quality in relation to their satisfaction but the past studies on international student’s visa process quality and it relationship has seldom been discussed in literature.

2) LITERATURE REVIEW

2.1) Customer Satisfaction

Customer satisfaction is included as the factor that can give the impact on long term business performance. The study of consumer satisfaction has always been one of the central issues in marketing in today’s competitive marketplace, Many organizations understand that good business can be achieved by understanding customers requirements and with the development of customers relationship. Sanchez-Gutierrez et al. (2011), mentioned that customers’ previous experience of satisfaction and dissatisfaction is critical because of its effect on the expectations of customers’ next purchase decision. They also added that customers who have good experienced with service encounters tend to be loyal and voluntarily refer the service to their family and friends (Altaf et al., 2017). Customer satisfaction is closely link with quality (Zafiropoulos et al., 2005). The higher service quality delivery the more satisfied is the customer (Petruzzellis et al., 2006). Customers satisfaction is depend on customer’s expectations and service quality’s perception (Christou and Sigala, 2002, Ekinci et al., 2006).

2.2) Perceived Service Quality

In general, quality defined as excellence or superiority. In defining perception of service in relation with the quality’s definition, perceived service quality is the consumer's evaluation about overall Excellency of a product (Parasuraman et al., 1988). Customer evaluations of service quality is not only about service attributes; but also involving customer’s thought and memorable service experiences (Jiang and Iles, 2011). Customer perception is better compared with performance (Pakdil and Aydin, 2007). The problem of consumer perception of service quality is when the customers have high standard of expectation (Parasuraman et al., 1988, Parasuraman et al., 1994).
Customer satisfaction has crucial role in service quality measurement. Many studies observe that perceptions of service quality affect satisfaction, meaning that service quality is the source of customers’ satisfaction (Parasuraman et al., 1988, Kitapci et al., 2014, Raza et al., 2017). As shown in figure-1, perceived quality is a component of customer satisfaction since service quality is focused specifically on dimensions of service. Whereas, satisfaction influences by perception of service quality, product quality, and price, as well as with situational factors and personal factors (Parasuraman et al., 1988, Djermani et al., 2016).

![Figure 1: Customer Perception Quality and Satisfaction](source: Parasuraman et al. (1988))

### 2.3) Service Quality

The research on Service quality has been an interesting subject of discussion for more than two decades. The interesting part of service quality is the abstract concept service makes service quality become a complex subject. It is not easy to be measured service quality. The difficulties of measuring service quality are due to the changes of individual preferences. The changing of individual preferences is as the result of time changing (Saurina and Coenders, 2002). Service quality is as a key to success for a firm in differentiating itself from competitors (Jamal and Anastasiadou, 2009). Several studies have proved that service quality can attract new customer and retaining them (Altuf et al., 2012, Yousaf et al., 2012a). The high service quality also has the ability to develop the institution image and create good word of mouth (Cronin et al., 2000, Kang and James, 2004).
Originally, SERVQUAL was designed to evaluate customer perception of service quality in retail business institution (Parasuraman et al., 1988). Service quality is defined as customer’s perception of how well a service meets or exceeds their expectation (Zeithaml, 1990). Service quality is also as important factor of customer perceptions that link to customer satisfaction and become the significant elements in customer’s evaluation of service. The importance of SERVQUAL theory is when it comes in measuring customer satisfaction in term of their perception with expectation of service quality. SERVQUAL measurement become an everlasting complete tools in conceptualizing and measuring service quality (Zeithaml et al., 1990). Hence, the purpose of designing SERVQUAL scale was to measure the distance between customer’s expectations and perceptions of the actual service delivery by referring to five dimensions of SERVQUAL. In addition, SERVQUAL it is an efficient model in helping an organization in bridging the distance between perceived and expected service (Schiffman et al., 2010).

Parasuraman et al. (1988), identified 97 items with spread all over the 10 dimensions on service quality. However, Parasuraman et al. (1988) conducted data collection and scale purification on the 97 items attributes. It resulted that the 97 items were reduced to 22 items located among five dimensions of service quality. These five dimensions of service quality are: tangible, responsiveness, empathy, assurance and reliability. SERVQUAL model then transformed into five dimensions. The five dimensions of SERVQUAL as the representation of the important dimensions in customers’ eyes. The five dimensions of service quality are as reference point of customer’s perception. Table 1, captures the detail of five dimensions SERVQUAL.

Table 1: The Five Dimensions of Service Quality

<table>
<thead>
<tr>
<th>Service Quality Dimensions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>The ability of service provider to perform service dependably and accuracy.</td>
</tr>
<tr>
<td>Assurance</td>
<td>The employee knowledge and courtesy; their ability to inspire</td>
</tr>
<tr>
<td>Tangibility</td>
<td>Appurtenance of physical facilities, equipment that generate services</td>
</tr>
<tr>
<td>Empathy</td>
<td>Caring, Individual attention</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>The employee have willingness to help customer and provide prompt services</td>
</tr>
</tbody>
</table>

Source: Parasuraman et al. (1988)
2.4) Research Model and Hypotheses

In this study, the research model is constructed based on the combination of mean-end model (Parasuraman et al., 1988) and satisfaction model (Parasuraman et al., 1994). Figure 2 shows the relationship between the two variables. In this study, the independent variable is perceived service quality and international students’ satisfaction as dependent variable.

2.5) Service Quality, Perceived Service Quality, and Student’s Satisfaction

Service quality is the important factors that determine the success or the failure of service firms. Moreover, the critical element of service quality lies on the impact of service quality to customer satisfaction and perception (Alrubaiee, 2011). Many researches had been done in examining the connection between students’ perceived quality and satisfaction. Sumaedi et al. (2012), found the effect perceived service quality, perceived price on Student’s satisfaction. They found that perception of service quality has the significant impact toward students’ satisfaction. Another previous researches by Hasan et al. (2009). Soutar and Mcneil (1996), also revealed that students perceived quality has high contribution in giving the impact on students’ satisfaction.

HI: Perceived Service quality has significant impact on students’ satisfaction

Service quality is as one of the important factors for service provider success. The critical element of service quality is direct link of service quality to customer satisfaction and perception (Alrubaiee, 2011). Service quality scale (SERVQUAL) is based on the concept that quality actually derived from customers’ subjective evaluation of their service experience. Therefore, customer perception is better compared with o performance (Pakdil and Aydin, 2007).

Perceived quality is a component of customer satisfaction since service quality is focused specifically on dimensions of service. Whereas, satisfaction influences by perception of product quality, service quality, and price, as well as with situational factors and personal factors (Parasuraman et al., 1988). In this research, the study is focused on the perceived service
quality and consumers satisfaction. Parasuraman et al. (1988), also mentioned that Service quality is focused on evaluation that reflects the customer’s perception or reliability, assurance, responsiveness, empathy and tangibles.

Furthermore, the most important role of service quality is in the impact in developing customer satisfaction. High service quality significantly influences customers’ satisfaction and consumers’ loyalty, and repurchase (Ghotbabadi et al., 2015).

2.6) Dimensions of Service Quality and Student’s Satisfaction

2.6.1) Reliability

Reliability is the factor that gave the most impact on consumer perception (Parasuraman et al., 1988). The reliability of the institution can be seen in its ability in performing the service as it was promised. As, Zeithaml et al. (2009) mentioned that the customers are more willing to do the business with the company that can perform the promised service. In the relevancy with this research, the practice of reliability of Centre of international students affair and cooperation department such as the employees of CIAC are interest in solving international students’ problem, the employees perform the prompt services, giving the promised service, the employees have the ability to do the job correctly, and the employees are reliable and the students can depend on them in solving their problem.

H1a: Reliability dimension has positive impact on international students’ satisfaction.

2.6.2) Assurance

In term of assurance of CIAC, the ability to arousing and gaining the confidence and trust from international students is necessary. Since this department is dealing with risky service such as taking care of applying new or renewal international students’ visa where the international students put themselves in risk when their submitting their passport to this department. The example of employees job description in assurance dimension, i.e. the employees are expected to have the ability to gather the international students’ confidence, as well as safety feeling in dealing the service with them. In order to gain the confidence and trust from the international
students, the employees of this department must have knowledge in giving the answer toward the internationals students’ questions and inquiries.

H1b: Assurance dimension has positive impact on international students’ satisfaction

2.6.3) Tangible

The crucial part about tangible is to represent the image of the service that will be given to the customers (Zeithaml et al., 2009). Tangible can be seen in appealing appearance physical evidence of the institution such as employees’ appearance, written material, equipment, technology (Zeithaml et al., 2009). To create service quality strategy, tangible dimension can be combined with other dimension of service quality such as the combination of tangible, responsiveness, and empathy such as understanding the international students’ needs by providing on time service, good and comfort waiting area.

H1c: Tangible dimension has positive impact on international students’ satisfaction

2.6.4) Empathy

This dimension discuss about giving the attention based on the individuals’ requirement as the customers are unique and they need to be understood (Zeithaml et al., 2009). The employees can express their empathy for the international students by giving personal and individual attention for the students. Moreover, having the convenient office hour in order to be able to serve international students is also can indicator of empathy to the students.

H1d: Empathy dimension has positive impact on International students’ satisfaction

2.6.5) Responsiveness

Responsiveness is indicated by the willingness of employees to help and to provide the prompt service to the customers (Zeithaml et al., 2009). To be mastered in responsiveness dimension, the CIAC have to see the service process from international students’ point a view. This department must have well trained staff and responsive front line employees.
H1e: Responsiveness dimension has positive impact on international student’s satisfaction

3) THEORITICAL FRAMEWORK

![Figure 2: Research Model and Hypotheses](image)

4) METHODOLOGY

This study was designed to analyze the relationship between International students’ perception of service quality regarding the visa process technology and their satisfaction toward the Center for International Affairs and Cooperation (CIAC). This section consist of the discussion on research framework, hypotheses which included the proportions of hypothesis development, design of the research, measurement of variable, data collection, and technique of data analysis.

4.1) Sample and Data Collection

As this study concentrated on the service quality provided to the international students and its impact on student’s satisfaction on CIAC service delivery, especially in students’ visa handling process. The target population of this study was international students at Universiti Utara Malaysia. The respondents of this study were international students from 20 countries that include Afghanistan, Algeria, Bangladesh, China, India, Indonesia, Iraq, Jordan, Libya, Mauritius, Nigeria, Oman, Pakistan, Palestine, Somalia, Tanzania, Thailand, Uzbekistan, Yemen, and Zimbabwe.
The questionnaires were distributed to 200 post-graduate international students. The respondents for this study were the international students who had experienced the service from CIAC, especially visa handling department.

4.2) Measures

The questionnaires were adopted to measure the International student’s perceived service quality that they received from CIAC at Universiti Utara Malaysia. The questionnaires designed using English language which the English language as the compulsory language for international students to enter UUM. Questionnaires contain three parts. The first part of the questionnaire is demographic characteristics of International students, the second part is the service quality perception statement, and the third part is the statement regarding International Student’s satisfaction.

Service quality is a multiple-item scale. It was suggested by Parasuraman et al. (1985). It had been used for measuring customers’ service quality perception in many services business (Aljoudimi et al., 2015). Parasuraman et al. (1988), established the 22 item scales to measure the distance between customers expectation and perceived service. SERVQUAL turn to be the most acceptable measurement in the determination of perceived service quality (Parasuraman et al., 1988, Parasuraman et al., 1985). The perception and expectation variables were measured on a seven-point Likert-type scale ranging from “7 = strongly disagree” to “1 = strongly disagree”.

4.3) Profile of the Respondent

The demographics side of the 200 respondents are as it resumes in table 3, female respondents were 30% and the remaining participants were male. The respondents were mostly Nigeria (24%) and followed by Indonesia (23%). About 15.5% of the respondents were in between the age of 35 to 40 and 22.5% were in the age of 26-30 years old. The majority of the respondent (32%) was in the age of 20-25 years. In term of educational level, the PhD students were as the majority of respondent (46%) and the second larger respondents were degree students (28.5%). The most respondents who participated in this survey were mostly have been studying in UUM for 1-2 years (67.5%) and follow by 3-4 years length of study (22%)
Table 2: Profile of Respondents

<table>
<thead>
<tr>
<th>Profile</th>
<th>Description</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>140</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Country</td>
<td>Afghanistan</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Algeria</td>
<td>11</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Bangladesh</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td>46</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Iraq</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Libya</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Mauritian</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Nigeria</td>
<td>48</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Oman</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Pakistan</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Palestine</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Somalia</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Uzbekistan</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Yemen</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Zimbabwe</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Age</td>
<td>20-25</td>
<td>64</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>31-34</td>
<td>34</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>35-40</td>
<td>27</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>41-45</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>46-50</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Above 50</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Program of Study</td>
<td>Degree</td>
<td>57</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>92</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>DBA</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>
5) RESULTS OF THE STUDY

Through the application of Partial Least Square 3.0, this study conducted two steps analysis (Anderson and Gerbing, 1988). The first test was about the measurement model. In this first step of PLS analysis the test of validity and reliability of the measurement. Afterward, the test of the structural model was also conducted such as testing the hypotheses (Hair et al., 2013). The bootstrapping was also conducted to do the test on significance of the path coefficients.

5.1) Measurement Evaluation and Discussion

Gholami et al. (2013), suggested composite reliability (CR), average variance extracted (AVE), and the items loading as criteria to evaluate the measurement model. As suggested by Hair et al. (2016), the composite reliability value must be > than 0.70, the AVE values must be > than 0.50, and the Loading should be > than 0.70.

Referring to the value of loading, AVE, and composite reliabilities that suggested by Hair et al.(2014), in this study, as it is resumed in table 4 all of the loading were greater than 0.70. The loading in this research are all in between 0.822 to 0.914. In term of composite reliabilities of measurement model, in this research the composite reliabilities value were also greater than 0.9. For AVE value were higher than 0738.

Table 4, shows that all the items being measured are reliable. The reliability of the items are indicated by the composite reliabilities for all the items are all in between 0.822 and 0.914. In retaliation with the explanation by Sekaran (2006). The consistency and stability of measurement indicates by the Cronbach’s Alpha that close to 1. The closer Alfa Cronbach’s to one, the highest is the reliability. Result of the measurement model confirms that the measurement model is fit for further analysis.
According to Fornell and Larcker (1981), discriminant validity can be tested by making comparison between the value of the variance of the construct and the square root of the AVE for the construct. The square root of AVE value must be greater than the correlation value within the constructs.

Table 5 captures that in this study all the Square root of AVE values are greater than the value of correlation between construct. The square root of
AVE values are indicated in the diagonal elements are greater than the elements of column and row, for instance the square root of Ave of Assurance is 0.874, the square root AVE in Empathy is 0.859, the AVE square root value of reliability is 0.862, the square root value for responsiveness is 0.88, the AVE square root for satisfaction is 0.88, and the AVE square root value for tangible is 0.894 are greater than the following numbers.

Table 4: Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assurance</td>
<td>0.874</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Empathy</td>
<td>0.752</td>
<td>0.859</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Reliability</td>
<td>0.833</td>
<td>0.772</td>
<td>0.862</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Responsiveness</td>
<td>0.797</td>
<td>0.799</td>
<td>0.793</td>
<td>0.888</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Satisfaction</td>
<td>0.796</td>
<td>0.781</td>
<td>0.833</td>
<td>0.815</td>
<td>0.880</td>
<td></td>
</tr>
<tr>
<td>6. Tangibility</td>
<td>0.625</td>
<td>0.538</td>
<td>0.587</td>
<td>0.587</td>
<td>0.565</td>
<td>0.894</td>
</tr>
</tbody>
</table>

Note: All bold values are square root of AVE

Accordingly, by evaluating the result in table 4 and table 5, it can be concluded that both convergent validity and discriminant validity of this study were fulfilled the suggested criteria.

Figure 3: The Structural Model
5.2) Results of Structural Model Analysis

According to Hair et al. (2016), in examining structural model, the evaluation of \( R^2 \), standard beta, standard error, and t-value must be conducted. The result of t-value can be obtained by using bootstrapping method. Moreover, the assessing the predictive relevance and \( f^2 \) must be done for structural model analysis. The result of structural model can be seen in table 6.

Table 5: Structural Model Results

<table>
<thead>
<tr>
<th>Relationships and Hypothesis</th>
<th>Std Beta</th>
<th>Std Error</th>
<th>t-value</th>
<th>Decision</th>
<th>( R^2 )</th>
<th>( f^2 )</th>
<th>( Q^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1b: Assurance → Satisfaction</td>
<td>0.174</td>
<td>0.083</td>
<td>1.760</td>
<td>Supported</td>
<td>0.775</td>
<td>0.023</td>
<td>0.554</td>
</tr>
<tr>
<td>H1d: Empathy → Satisfaction</td>
<td>0.175</td>
<td>0.073</td>
<td>2.392</td>
<td>Supported</td>
<td>0.041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a: Reliability → Satisfaction</td>
<td>0.335</td>
<td>0.086</td>
<td>4.112</td>
<td>Supported</td>
<td>0.136</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1e: Responsiveness → Satisfaction</td>
<td>0.268</td>
<td>0.086</td>
<td>3.126</td>
<td>Supported</td>
<td>0.081</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1c: Tangibility → Satisfaction</td>
<td>0.013</td>
<td>0.059</td>
<td>0.220</td>
<td>Not Supported</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To know how close the data fit in the regression line. Cohen (1988), suggested that the \( R^2 \) value must be greater than 0.35 (substantial \( R^2 \) value). As it captures in table 5, the \( R^2 \) value of this study was 0.775 which was > 0.35. If it compares with the substantial \( R^2 \) that suggested by Cohen (1988), this study has high coefficient regression which is 0.775. \( R^2 \) give the estimation of the strength of the relationship between the model and the response variable. Broadly, the higher the \( R^2 \) indicates the better the model fits to the data that being study.

In measuring the effect size or \( f \)-square, Cohen (1988) stated that guideline value that can be used to determine the effect size. The recommended values by Cohen are 0.02, 0.15, and 0.35, this value representing small, medium, and large size effects. Referring to those effect, by looking through \( f^2 \) value in table 5, it can be detected that reliability, empathy, responsiveness dimensions have medium effect size in term of the relationship with satisfaction.

Besides evaluating the \( R^2 \) and \( F^2 \) values as the prediction of the accuracy, the \( Q^2 \) value as the predictive relevance criteria for good model must be also
conducted (Geisser, 1974). The $Q^2$ value is gathered through the uses of blindfolding.

According to Hair et al. (2016), $Q^2$ should have the value larger than 0, ranging between 0.02 (small), 0.15 (medium), and 0.35 (large) predictive relevancy. In this case, table 5 shows that the total of all $Q^2$ values are > than 0 which is 0.554. It is recommended that the model of this study have good predictive relevance.

6) DISCUSSION AND CONCLUSION

In the search of finding out the impact of international students’ perceived quality on their satisfaction toward Centre of International Affair and corporation service delivery, the framework of Parasuraman et al. (1988) was applied. Zeithaml et al. (2007), stated that Service quality is the component of the customer satisfaction, which focused on evaluation that reflect a customer’s perception of reliability, assurance, responsiveness, empathy and tangibles (Parasuraman et al., 1988). Service quality is necessary to apply in achieving customer satisfaction.

The results of the study found that there four among five dimensions of service quality having positive impact on international students’ satisfaction toward the CIAC service delivery in handling student visa process. The dimension of service quality that has the most significant impact on International students’ satisfaction is reliability dimension. This finding is also supported by the statement from (Parasuraman et al., 1988) which mentioned that reliability is the factor that gave the most impact on consumer perception. The dimension that has medium impact on international students’ satisfaction after reliability is responsiveness, follow by empathy and assurance.

In the eyes of UUM’s International students, students require error free services because the immigration issues are very much sensitive in nature. In detail, reliability is also involving the ability of the employees to perform error-free records and delivering the service as schedule.

In term of assurance dimension of CIAC department, the employees who are knowledgeable and having high courtesy is preferred by International students, rather than the comfort aspect of the tangibility that offered by
the department. Assurance dimension is closely related with trust development. Moreover, assurance related service quality is broadly known as a critical success factor for the institution in differentiating itself from others. Lovelock and Wirtz (2004), examined five dimensions of service quality and concluded that the reliability dimension of service quality has always be the most critical dimension in generation of customer satisfaction. Reliability of the employees must be enhancing since the poor service lead to failure to deliver the promise service that cause dissatisfaction.

Hence, it has been concluded that all the dimension of service quality are important for student’s satisfaction in case of CIAC visa process except tangibility dimension. Students can only view the reliability, responsiveness, assurance and empathy regardless of what equipment they are using for generating services.

REFERENCES


Visa Processing Service Quality and Student's Satisfaction


Zafiropoulos, C., Fragidis, G., Kehris, E., Dimitriadis, S. & Paschaloudis, D. Service quality assessment in higher education, the case of Technological Educational Institute (TEI) of Serres, Greece. 9th International Conference on Marketing and Development: Marketing Contributions to Prosperity and Peace, 2005. 8-11.
Zeithaml, Bitner & Gremler 2009. Services marketing: Integrating customer focus across the firm.