THE DETERMINANTS OF INTERNATIONAL STUDENTS' SATISFACTION IN THE CONTEXT OF UNIVERSITY EDUCATION PROGRAMS

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ABSTRACT

The aim of this study is to examine international student's satisfaction in the sustainability of higher education in China. The study focuses on the components as service quality, program quality and university reputation. Students' response was measured through an adapted questionnaire on a 5-point Likert scale. The study was conducted by taking a sample of 320 respondents. The results of hierarchical regression analysis reveal that all attributes have significant and positive impact on international student's satisfaction in higher education in China. In addition, the study has provided important insights into service quality, program quality and university reputation in the body of higher education. However, campus infrastructure and social life and course administration are the most influential factors respectively for service quality and program quality. In this study, some limitations and implications are presented at the end of the conclusion of this study.

Keywords: International Student's Satisfaction, Service Quality, Program Quality, University Reputation, University Education

1. Introduction

One of the determining factors of national competitiveness is the quality of its education. This quality stems from the combination of a high-quality learning process and public satisfaction with the service provided (Hanaysha et al., 2012). High quality service to students is a prerequisite of maintaining competitiveness in the market of higher education. Service quality caught the attention of academics and practitioners in the 90s era. Higher education institutions, which want to gain a competitive advantage in the future, may need to start looking for effective and creative ways to attract, maintain and strengthen their relationships with students. A relationship that is created between the expectations of students and their satisfaction with the quality of service that provides educational institution plays an important role in shaping the

reputation of academic institutions worldwide. Thus, this reality also requires universities to focus on student satisfaction and providing quality education that will meet students' expectations and probably beyond their expectation in order to maintain international students.

With respect to Mihanović et al., (2019) pointed out that student satisfaction is influenced by service quality, teaching method and university reputation. Although, previous researchers have tried to examine the direct link between service quality and student satisfaction, while absolutely ignoring the program quality (Osman et al., 2017). This study was conducted in the Chinese universities most especially those in Beijing to bridge this gap left out by other researchers. In this perspective, it seemed essential to try to understand, through this study, why international students are in the process to study in China, is it because the universities in China provide quality education, thus, service quality, program quality and university reputation which can affect student satisfaction in the context of higher education?

Therefore, to measure student satisfaction, universities need to focus on components like service quality, program quality and university reputation. Thus, this study attempts to discover the link between student satisfaction, service quality, program quality and university reputation in order to attract, maintain and support international students in the acquisition of better knowledge.

2. Literature Review

2.1. International Student's Satisfaction

Today, in the higher educational sector, student satisfaction is becoming the parameter of service quality and one of the sources of institutional competitive advantage (Arambewela & Hall, 2009). This quote allows researchers to say that customer satisfaction can be considered as a factor that can have an impact on the performance of universities over the long term. Meanwhile, student satisfaction is a challenge for higher education to understand and provide a service that meets the quality standards to achieve student satisfaction in an increasingly competitive. For example, Lee & Hwan(2005) emphasized that customer satisfaction was an essential part of service organization and was extremely linked to service excellence.

According to Munteanu et al., (2010), student satisfaction is an increasingly important indicator of the quality of teaching performance and can be considered as a measure of the results of the education process.With regard to Mihanović et al., (2019) found out that the student's satisfaction with university contents, university bodies and services, teaching, teaching methods and academic reputation affects the satisfaction of international student life and student life satisfaction affect the student performance.It is therefore interesting and necessary to discover how international students evaluate their experiences as learners and customers of these institutions.

2.2. Service Quality

Service quality is a determining factor in the success of a business. In recent decades, marketing academics and marketing practitioners have become more interested and zealous in the service quality to sustain their customers. Service quality is consumers' judgment of excellence and superiority of service delivery (Zeithaml et al., 2010). According to many studies, the importance of service quality in higher education institutions is evident (Angell et al., 2008; Ham & Hayduk, 2003). As witnessed by Hanaysha et al. (2012), the service quality in the field of education and higher learning particularly is not only essential and important, but it is also an important parameter of educational excellence.

To face this reality, it is imperative that universities continually evaluate and look for ways to improve the quality of their services especially to international students. Indeed, there is a problem in measuring the service quality due to its abstract nature or complexity of the subject area. According to researchers as Saurina & Coenders(2002), difficulties in measuring service quality are due to changes in individual preferences. The change of the individual preferences is the result of the change of time. There have been several models in the literature to measure service quality. The most famous one was the SERVQUAL model developed by Parasuraman et al.(1988). This SERVQUAL model has been successfully applied in different contexts (Buttle, 1996) and requires the attention of practitioners and academics (Ting et al., 2011).

As a result, it can see other models used in higher education for measuring service quality such as HEDPERF (Higher Education Performance) designed by Firdaus(2006), which ranks five determinants of service quality in higher education (non-academic aspects, academic aspects, reputation, access and problems related to the program); HiEDQUAL developed by Annamdevula & Bellamkonda(2012), which includes five factors including content of teaching and courses, administrative services, academic facilities, campus infrastructure and support services in higher education sector. In this study, service quality is defined by three factors: administrative services, academic facilities, and campus infrastructure and social life in education sector. We believe that these factors are important in influencing student experience in a university, which in turn affects international student's satisfaction.

Much researches have been done to examine the link between service quality and student satisfaction. They found that service quality had a significant impact on student satisfaction (Sumaedi et al., 2011). To provide further empirical evidence, particularly for universities in China, Beijing for the case of this study, the first hypothesis of the study is postulated as follows:

H_1: Service quality has a significant positive influence on international student's satisfaction.

2.3. Program Quality

One of the aims of the university is the transmission of knowledge and it is important to know how this knowledge is transmitted, that is, how students acquire this knowledge? From this perspective, universities must provide students with quality education. This quality education is important to students and can activate international student's satisfaction through the following elements: the teaching method, the program and its improvement, as well as the upgrading of professional knowledge and skills (Aminuzzaman, 2007). We believe that all these elements are important but teaching students is a primary mission of higher education institutions. These are sufficiently linked to the "program quality", which is included in this study to further justify international student's satisfaction in this study.

In the field of higher education literature, the majority of existing research on international student's satisfaction has not focused on the program quality especially which may be an antecedent of satisfaction. In recent years, researchers have been interested in this subject, whether theoretical or empirical studies. The program quality is found and considered as an additional variable adapted to the context of higher education and it is evident that academic factors, curriculum and teaching method are the most essential determinants of international student's satisfaction this current decade(Angell et al., 2008;Firdaus, 2006). Thus, Navarro et al.(2005) suggested that student satisfaction largely depends on teaching staff, teaching method, and course administration. This study considers that these factors (course administration, teacher knowledge, and teaching method) are critical to influencing student knowledge in a university, which in turn influences international student's satisfaction.

While the program quality has been identified as an essential element of student satisfaction in higher education (Ford et al., 1999), research linking program quality to student satisfaction is limited. The importance of developing relationships with students in higher education is obvious. However, focusing on improving student satisfaction in universities is essential to developing student value and loyalty. Curiously, however, very few studies have attempted to develop a link between program quality to student satisfaction. Consequently, the following hypothesis is proposed:

H_2: Program quality has a significant positive influence on international student's satisfaction.

2.4. University Reputation

The university reputation is important to the public when choosing a university to enroll. In general, it can be like the showcase of a university and can influence the choice of international students, while exposing the service quality provided by this university. This means that the university reputation can depend on both the performance of the quality of service offered and the public perception about the entire university image.For the researchers asArgenti &

Druckenmiller(2004), reputation isthe collective representation of multiple constituencies' images of a company, built up over time and based on a company's identity programs, its performance and how constituencies have perceived its behavior. According to this definition, there are some important points about reputation:

- Overall image of a university (from academic quality and service quality). Academic quality presented here is on the learning outcomes as method of teaching, curriculum;

- Repeated meeting of stakeholders' expectations (Nguyen & Leblanc, 2001);

- Performance of the quality of service provided by university and the perception of its behavior.

On the other hand, the reputation is the assessment made by different people (insiders and outsiders) about the university's or company's ability to meet its expectations over time (Fombrun et al., 2004). For Nguyen & Leblanc(2001), reputation is defined as an evaluation that is made after a specific outcome from the public.

In addition, many researchers have recognized the importance and benefit of reputation for university to know and sustain the perception from the public such as with regard to its competition and the students at large(Carmeli & Tishler, 2005). Thus, we argue in thisstudy that university reputation can effect international student's satisfaction. So, the following hypothesis is proposed:

H_3:University reputation has a significant positive influence on international student's satisfaction.

3. Research Methodology

3.1. Procedure

In order to verify our assumptions and achieve our objectives, we conducted a survey of a representative sample of universities in China. Our goal is to discover the link between international student's satisfaction, service quality, program quality and university reputation. Respondents were geographically spread across Beijing universities and the respondents were international students of different levels: Language, Bachelor, Master and PhD. No focus on university or Chinese government scholarship or non-scholarship of respondents was exposed. The data was collected in March 2020. The survey was conducted by an online questionnaire with duration of about 10 minutes to complete it.

3.2. Participants

Representative samples mean asking the right people in the population of interest. Most of the respondents are various international students in China's capital, Beijing. For this research, the author used a non-probability sampling method. This method consists of choosing the most accessible and available international students by electronic message, that is to say, students who have a WeChat[1] account. We collected data from 320 respondents. Some characteristics of the sample are shown below in **Table 1**. There were a higher proportion of males (63%) than females (37%).

Table 1: Descriptive statistics of respondents

	Description	Frequency	Percent	Total
Gender	Male	201	62.8	62.8
	Female	119	37.2	100
Age	18-20	17	5.3	5.3
	21-30	243	75.9	81.3
	31-40	54	16.9	98.1
	Above 40	6	1.9	100

Source: Developed for the research

3.3. Measures

Service quality: The questionnaires were adopted to measure the satisfaction of international students received from the universities in Beijing through the quality of service. The instrument used to test service quality is based on the limited HiEDQUAL model developed by Annamdevula & Bellamkonda (2012). Construction was measured across three basic dimensions of service quality (administrative services, academic facilities and campus infrastructure and social life). A five-point Likert-type scale was used to measure students' perceptions of service quality in their institutions, thus, various universities in Beijing (ranging from1 = strongly disagreement to 5 = strongly agreement).

Program quality: The various items were identified from previous research and further adapted according to the requirement of this study. In the questionnaire, selected items related to program quality (course administration, teacher knowledge, and teaching method) were presented in the form of statements along with five-point Likert scale (ranging from 1 = strongly disagreement to 5 = strongly agreement).

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[1]WeChat is a mobile text and voice messaging communication service developed by Tencent in China, first released in January 2011.

International student's satisfaction: For student satisfaction measurement, instrument used in this research is from (Adee, 1997)which is adapted with the requirement of this study. In this variable, it has seven items with Likert scale ranges from 1 for strongly disagreement to 5 for strongly agreement.

University reputation: For the measurement of the university reputation, instrument used is developed by Beerli et al. (2002), with five points of response (5, 4, 3, 2, 1).

Control variables: In this research, we controlled for some variables such as gender, age, student status and continent in the analysis because they may influence international student's satisfaction. Gender was coded as a binary variable (1 = male and 2 = female). Age was measured using a four-point scale. Student status was measured via a three-point scale and continent via a six-point scale. In addition, prior to the main data collection, the survey instrument was tested with a pilot sample of thirty international students. The results revealed that these international students did not have any difficulty understanding the items.

4. Analysis and Results

Before testing our hypotheses, the authors examined, firstly, the links between the measurement indicators and the constructs and, secondly, the links between the different constructs. The follow-up of this sequence will reassure us of the reliability and the validity of the constructs before the passage to the conclusions of analyzes of causalities.

4.1. Exploratory Factor Analyses

Before starting the various statistical analyzes, it is important to check the validity of the measurement scales used. Principle Component Analysis allows us to verify, in part, the validity of our constructs. Also, the validity of the concepts used the Bartlett sphericity test and the Kaiser-Mayer-Olkin sampling adequacy measure analyzing the strength of the association between the factors. According to the Kaiser-Meyer-Olkin test, the use of a factor analysis for the variables of the study is justified since the criteria of KMO> 0.5(Hair et al., 2003) and the Bartlett sphericity test (p = 0.000) were respected for the set of constructs (see **Table 2**).

To assess the construct validity of the scale, exploratory factor analysis was performed on the 38 scale items. In line with Kaiser (1960), the factors were identified after computing the eigenvalue for correlation matrix and number of factors were determined and retained on the basis of factors having eigenvalue greater than one. International student's satisfaction has an eigenvalue of 6.063 whereas the other predictor variables (i.e. administration service, academic facilities, campus infrastructure, course administration, teachers' knowledge, teaching method and university reputation) have eigenvalues of 3.794, 3.646, 2.657, 3.198, 2.484, 2.869 and 2.382

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respectively. All the factor loadings were between 0.652 and 0.935, evidence of convergent validity.

Table 2: Exploratory factor analysis

Constructs	Items	Loading	Eigenvalue	KMO	Cronbach's Alpha
Administration Service	AS1	.795			
	AS2	.813			
	AS3	.793			
	AS4	.697	3.794	.863	.854
	AS8	.714			
	AS9	.673			
	AS10	.652			
Academic Facilities	AF2	.716			
	AF3	.805			
	AF4	.796	3.646	.866	.870
	AF5	.804			
	AF6	.795			
	AF7	.757			
Campus Infrastructure	CI1	.817			
	CI4	.691	2.657	.769	.828
	CI6	.872			
	CI7	.867			
Course Administration	CA1	.811			
	CA2	.783			
	CA3	.860	3.198	.839	.858
	CA4	.755			
	CA5	.786			
Teachers' knowledge	TK1	.891			
	TK3	.935	2.484	.730	.893
	TK4	.903			
Teaching Method	TM1	.891			
	TM2	.868	2.869	.815	.868
	TM3	.856			
	TM4	.767			
University Reputation	UR1	.903			
	UR2	.843	2.382	.704	.860
	UR3	.925			
Student Satisfaction	SS1	.808			
	SS2	.761			
	SS4	.742	6.063	.858	.875
	SS5	.737			
	SS6	.805			
	SS7	.850			

Source: Developed for the research

In this study, the authors eliminated items whose communalities are too weak less than (<0.5) and those not on the same factor. Once the factor analysis is conducted, it is important to measure the reliability of each measuring instrument. Reliability is the degree to which the instruments used consistently measure the construct under study (Evrard et al., 2000). The indicator used is Cronbach's alpha coefficient, which gives information on the degree of homogeneity of the items in the scale, i.e. the internal coherence of the scale (Gavard-Perret et al., 2012).The value of Alpha Cronbach too high (higher than 0.9) can cause a problem of redundancy between the items and according to the preconization of Carricano & Poujol(2010), the authors proceeded to the elimination of a single item of the variable teacher knowledge, while making sure to have a satisfactory Alpha Cronbach value (see **Table 2**).

Table 3: Composite reliability of the constructs

Constructs	AVE	Composite Reliability
Administration Service	0.542	0.892
Academic Facilities	0.608	0.903
Campus Infrastructure	0.664	0.887
Course Administration	0.640	0.898
Teachers' knowledge	0.828	0.935
Teaching Method	0.717	0.910
University Reputation	0.794	0.920
Student Satisfaction	0.616	0.906

Source: Developed for the research

To verify convergent validity, we used average variance extracted (AVE) as suggested by Fornell & Larcker(2006). Convergent validity refers to the fact that items presumed to measure the same construct must therefore be strongly correlated with each other.All AVE measurements exceed the trend of 0.5, suggesting that the convergent validity of each factor used is accepted. Discriminant validity is demonstrated when the measure of a given construct is weakly correlated to a measure of another construct. With respect to composite reliability, the value of all the constructs presented here is greater than the 0.70 trend recommended by Nunnally & Bernstein(1994). The reliability of the constructs is therefore good in this study (see **Table 3**).

4.2. Correlations Analysis

Pearson correlations among all variables in this study are presented in **Table 4**. Correlations procedure computes the pair wise associations for a set of variables and displays the results in a

matrix. It is useful for determining the strength and direction of the association between two variables. The correlation matrix between different factors is shown in the following table.

Table 4: Correlation analysis

	1	2	3	4	5	6	7	8	9	10	11	12
Gender	1											
Age	-.065	1										
Student status	-.102	.483**	1									
Continent	.161**	-.023	-.129*	1								
Ad-services	.016	.310**	.003	-.044	1							
Ac-facilities	-.077	.160**	-.086	-.068	.568**	1						
C-infrastructure	-.093	.140*	-.184	.103	.390**	.503**	1					
C-administration	-.076	.148*	-.236**	-.066	.649**	.630**	.597**	1				
T-knowledge	.021	.134*	-.162**	.053	.608**	.529**	.619**	.744**	1			
T-method	-.004	.201**	-.080	-.030	.700**	.641**	.509**	.734**	.745**	1		
University reputation	-.045	.200**	-.052	-.076	.648**	.394**	.612**	.678**	.754**	.621**	1	
S-satisfaction	.052	.184**	-.218**	.021**	.504**	.394**	.608**	.625**	.599**	.507**	.703**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research

For the purpose of determining the connectedness of the observed variables, we have used the Pearson's linear correlation coefficient, which is also the most well-known measure of linear correlation. It can see that the correlation between international student's satisfaction and independent variables is positively correlated at level 0.01. In this case, the most important independent variable that is strongly correlated with student satisfaction is university reputation (0.703). And we also conclude that the correlation values between all the independent variables are less than 0.90, thus, there are no multi-colinearity problem exists in this study. This is satisfactory for our research intentions as well as match up positively with value calculated by Goldsmith et al., (2000). About control variables, as can be seen, just two variables (age and student status) are correlated at level 0.01.

4.3. Test of the Hypothesized Model

One of the most appropriate ways to test our assumptions is the use of hierarchical multiple regression analysis. Hierarchical regression analyses consisting of two successive steps were conducted to test the hypotheses.

Table 5: Statistical Results of Testing H$_1$

| | Student Satisfaction | | | |
| | Beta coefficients | | *P*-values | |
	Step1	Step2	Step1	Step2
Control variables				
- Gender	.040	.085	.443	.043
- Age	.380	.131	.000	.009
- Student status	-.402	-.198	.000	.000
- Continent	-.028	-.054	.590	.195
Service Quality				
- Administration Service		.305		.000
- Academic Facilities		-.053		.325
- Campus Infrastructure and social life		.474		.000
R^2 at each step	.159	.333		
ΔR^2		.174		
Durbin-Watson			1.917	

Source: Developed for the research

According to the **Table 5**, the findings of hierarchical regression show that 15.9% of the variance in international student's satisfaction is accounted by the control variables, whereas the dimensions of service quality explained 33.3%. Durbin-Watson test was used to detect the presence of autocorrelation in the residuals from a hierarchical regression analysis. As a rough rule of thumb, if Durbin-Watson is less than 1, there may be cause for alarm. In this case, the value of Durbin-Watson 1.917 proves that there is no problem of serial autocorrelation in the data. The values of beta (β) show that out of the dimensions of service quality, only administration service (β=0.305, p=000) and campus infrastructure and social life (β=0.474, *p*=0.000) significantly affect international student's satisfaction, which supports hypothesis H$_1$.

Table 6: Statistical Results of Testing H$_2$

| | Student Satisfaction | | | |
| | Beta coefficients | | *P*-values | |
	Step1	Step2	Step1	Step2
Control variables				
- Gender	.040	.068	.443	.110
- Age	.380	.182	.000	.000
- Student status	-.402	-.167	.000	.001
- Continent	-.028	.000	.590	1.000
Program Quality				
- Course Administration		.365		.000
- Teacher's Knowledge		.299		.000
- Teaching Method		-.033		.634

R^2 *at each step*	.159	.305
ΔR^2		.146
Durbin-Watson			2.000

Source: Developed for the research

Regarding **Table 6**, the results of hierarchical regression depict that the program quality significantly affects international student's satisfaction by course administration (β=0.365, p=0.000) and teacher's knowledge (β=0.299, *p*=0.000). The control variables explain 15.7% of student satisfaction, whereas the dimensions of program quality explain 30.5%. The value of Durbin-Watson indicates that there is no autocorrelation between residuals. H_2 is supported.

Table 7: Statistical Results of Testing H_3

	Student Satisfaction			
	Beta coefficients		*P*-values	
	Step1	Step2	Step1	Step2
Control variables				
- Gender	.040	.062	.443	.107
- Age	.380	.184	.000	.000
- Student status	-.402	-.263	.000	.000
- Continent	-.028	.031	.590	.419
University Reputation		.658		.000
R^2 *at each step*	.159	.399		
ΔR^2		.240		
Durbin-Watson			1.964	

Source: Developed for the research

On the basis of the hierarchical regression result, it can be said that the university reputation significantly affects international student's satisfaction (β=0.658, p=0.000). The control variables explain 15.7% of student satisfaction, whereas the university reputation explains 39.9%. The value of Durbin-Watson shows that there is no autocorrelation between residuals (see **Table 7**). H_3 is supported.

5. Discussion and Conclusion

The objective of this study is to find out the relationship between international students' satisfaction and the elements of quality educational system. The results confirmed the contention that service quality, program quality and university reputation are consequences of international student's satisfaction.

In this study, only two dimensions are relevant predictors for service quality namely administration service and campus infrastructure and social life. To begin with, administration staff should provide error free services to international students when they ask for them. Staff should be available or accessible in all office working hours to render services to international students without delay. They should be readily available to assist or help students solve their issues pertaining to both academic and administrative issues. Then, campus infrastructure and social life with its beta coefficient has emerged as the most important element for service quality in predicting international student's satisfaction. Campus infrastructure and social life is a stronghold of university sustainability and growth because if there is a competitive and friendly atmosphere for both international students and administrative staff to interact freely without barriers of fears of intimidating on the side of the international students, there will automatically be full satisfaction of the services offered to them. This means that students perceive these two dimensions of service quality as more important qualities that need to be offered by the universities. The findings of this study are consistent with findings of (Annamdevula & Bellamkonda, 2012).

The results also showed that program quality has an effect on international student's satisfaction and the most important dimension for program quality in predicting international student's satisfaction is the quality of the courses provided. Then, only two dimensions are relevant predictors for program quality (course administration and teacher's knowledge).The course administration provided by the university should be specific to address the international students' choice of specialty. The course should be explicit and easily understood by the students. They should be designed in such a way that the students can easily acquire good jobs after studying them.The course should be simplified such that international students can even learn on their own without any difficulties especially of language usage. University should provide varied courses for students to have options to choose from according to their preferences since they all have varied career paths.

In fact, the current dynamics, tread of career paths, and future opportunities for international students to obtaining good jobs are based on program quality received during their university studies. Thus, students are more concerned with program quality because it is an absolute asset and a gateway in their quest for a good job which leads better family lives. These results are similar with findings of (Navarro et al., 2005; Osman et al., 2017).For Osman et al. (2017), when their ultimate goals towards acquiring good jobs are ensured then they start appraising their alma mater that their educational program is meaningful and valuable, which brings ultimate full satisfaction to international students and the general public at large.

It can be seen that university reputation significantly affects international student's satisfaction in the sense that every student wants to go through a university with high public image, thus

university highly recognized with good reputation. This means that university reputation is important in determining the sustainability and growth of every institution since those universities with low public recognition do not get more international students. Thus, when a university is prestigious and has a reputable and the students can easily get jobs after graduating from such universities. Also, universities with renowned teachers who are well known to be famous will definitely influence the public to recommend potential international students into such universities. Well treated graduates of universities can also be of great influence to attracting, maintaining and sustaining more international students into these reputable universities. This shows that graduates from highly recognized universities are well assured of good jobs right from their final year of study programs abroad. Results are consistent with the studies conducted by Azoury et al.(2014); Saleem et al.(2017).

6. Study Contribution

In the light of the above results, here are some managerial implications for the improvement of international students' satisfaction determinants. Therefore, it can be recommended to university managers to focus more on service quality, program quality and university reputation in their decision making processes. Then, for service quality, university managers should pay more attention to campus infrastructure and social life offered to international students at the university for the contribution and sustainability of the study exhibited in maintaining and attracting new students. This will definitely make the continuous students of such universities to recommend new students to these famous universities and by so doing make information about the universities' websites more trusted to the public. This is because, the information is coming from the continuous students, the new students easily trust them since some of them may even be family members and friends from same countries or otherwise.

As a result, university managers should give emphasis to program quality and should be well designed to meet the contemporary challenges and needs of the market and it can be improved for building the image of the university and gaining a competitive advantage. Lastly, they should take into account university reputation because of its influence on choosing and attracting new and potential international students. This is particularly necessary because the way and manner international students are handled and treated reflect the entire image of the university to the general public. Therefore, the survival and growth of every university depend greatly on the feedback of both current and out gone students to the general public. International students' satisfaction greatly impacts the sustainability of every university since universities cannot exist without students mostly especially those hosting only international students. The sustainability of any university depends fully on the level of international students' satisfaction which lead to achieving competitive advantage in this modern arena of competition. Therefore, the level of satisfaction driven by international students from these universities will definitely amount to that

of the sustainability and in some cases more sustainability attained. This study added knowledge to the literature on the subject area.

7. Limitations and Future Research

Nevertheless, the limitations of this study stem from an academic point of view.In terms of measurement issues, the authors used the HiEDQUAL developed by Annamdevula & Bellamkonda(2012), which includes five factors including content of teaching and courses, administrative services, academic facilities, campus infrastructure and support service in higher education sector by using only three of these factors. It would be recommendable in the field of education sector to use other methods of measurement, such as the higher education for measuring service quality such as HEDPERF (Higher Education Performance) designed by Firdaus(2006), which ranks five determinants of service quality in higher education (non-academic aspects, academic aspects, reputation, access and problems related to the program) which were not use in this study. Another research can be conducted by using the famous SERVQUAL model developed by Parasuraman et al.(1988).

 A research can be done in the same area by using face-to-face interview. The target of this study was concentrated on only international students as the customers, but it is identified that the educational sector has other potential customers as a part of the whole education process who must be satisfied as well therefore other studies can be conducted on such customers.

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