The Effect of Administrative Service Quality and Lecturer's Teaching Quality on Students' Satisfaction in Higher Learning Institutions in Kota Kinabalu, Sabah

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The developments of human capital are dependent on the capacity of the national workforce, especially those who graduate from higher learning institutions. Apart from academic qualification, experience and skills are necessity as an added advantage to get a job and to meet with the requirements of the current job market. Students who are satisfied with their higher institutions will have the tendency to perform during their studies and new skills or experiences will be developed. Therefore, there is a need for the higher learning institutions top level management to understand the quality assessment for both administrative staff and academics to provide continuous improvement in service quality. This study investigates the effect of administrative service quality and lecturer's teaching quality on students' satisfaction in higher learning institutions. A survey has been conducted and questionnaires have been administered to students in higher learning institutions in Kota Kinabalu, Sabah. A sample of 384 students from both public and private institutions has been collected as the sample evidence for this study. Based on the results, both administrative service quality and lecturer's teaching quality have significant effect on students' satisfaction. As further analysis has been taken to identify the dimensions of service quality that have effect on students' satisfaction and it was found that assurance, responsiveness, and tangibility have significance on students' satisfaction. Empathy and reliability show insignificant result in this study, but it does not mean that both areas of service quality are less important as compared to assurance, responsiveness, and tangibility.

Key words: *service quality, teaching quality, satisfaction.*

Introduction

There is a major concern that Malaysian graduates do not have the capabilities to meet expected demand (Singh & Singh, 2008). In today's world, most organizations are faced with stiff competition, radical change happens and this evolution means most organizations need to adapt new strategies (Al-Fawaeer, Hamdan, & Al-Zu'bi, 2012) in order to sustain in the industry. It is the same for education industry as most higher learning institutions are striving to retain market share in the industry, both public and private institutions.

In order for students to be fit for the job market, they need to acquire the needed skills and knowledge in their respective specific area of study (Arshad & Rahmani, 2013). Hence, it is a vital challenge for higher learning institutions to produce high quality graduates in accordance to the specific needs of the job market. As for the students, it is important to engage in a better academic and non-academic environment in order to gain better achievement (Bigna, et al., 2014; Riyanti, 2018) during their studies. The current education system reflects tremendous recent change (Akbariyeh, 2012) and accreditation is no longer the focal point of service quality (Narang, 2012). Quality in education is assessed on the basis of student fit with the job market (Ahmed, et al., 2012). Therefore, it is important for higher learning institutions to meet the challenge of producing quality graduates as well as meeting job demand.

Most researchers who conduct their studies in service quality are adapting the concept developed by Parasuraman et al in 1985 and identify service quality as an assessment from the students between what they perceived and what is expected (Ibrahim, Lee, & Hassan, 2013). In this study, the model is adopted by Parasuraman et al (1991) and together with the modified model by Ibrahim, Lee, & Hassan (2013) is used specifically in testing Administrative service quality. Administrative service quality in the context of this research is an act of one individual delivering their duty / responsibilities to their customer, which in this case, is the students. This research will focus on five dimensions of service quality which are assurance, empathy, reliability, responsiveness, and tangibility.

As for the lecturers' teaching quality, this study will investigate whether there is an effect between teaching quality and student's satisfaction. Even if teaching quality is part of the dimensions of service quality, according to Ahmad & Bahi (2010) anything related to quality teaching is difficult to measure or define. Academics were found to be the most important assets in any higher learning institutions and there is a need to investigate the lecturer teaching quality in Malaysia, specifically in higher learning institutions in Kota Kinabalu, Sabah. The quality of the academics will ensure the prestige of the university / college and hence it should be continuously developed and improve.

Problem Statement

Only a few researchers could clearly describe the meaning of quality education (Ahmad & Bahi, 2010) and most of the researchers examine the service quality as a whole that could lead to customer satisfaction. Many researchers note that to improve quality operations, there is still research needed in the identified area of lack: empirical research about service quality gap (Sheikh & Moodi, 2013) with satisfaction. Hence, the purpose of this research is to investigate the specific area of service quality, the administrators and academics, that significantly affect the students' satisfaction in higher learning institutions.

Research Questions

In order to achieve the primary research objective of this study, the following research questions were specified.
Q1: Is there an effect between administrative service quality and student's satisfaction?
Q2: Is there an effect between lecturers' teaching quality and student's satisfaction?

The dimensions of administrative service quality in this research are the proxy variables towards students' satisfaction. Since the purpose and objective is to identify which of the dimensions has the significant effect on students' satisfaction. Therefore, the research questions for the proxy variables were specified as following:

Q1a: Is there a significant effect between assurance and student's satisfaction?
Q1b: Is there a significant effect between empathy and student's satisfaction?
Q1c: Is there a significant effect between reliability and student's satisfaction?
Q1d: Is there a significant effect between responsiveness and student's satisfaction?
Q1e: Is there a significant effect between tangibility and student's satisfaction?

Literature Review

In any business strategy, quality is the most important and complex aspects (Golder, Mitra, & Moorman, 2012) and none of any industries that did not sheltered with the regime of quality (Ahmed, et al., 2012) including higher learning institutions. Many studies have been carried out with the expectation that they may serve as reference points in customers' evaluation of service performance (Parasuraman et al, 1994). In higher learning institutions, the administrative staffs, lecturers, students, and other client such as parents, are the primary stakeholders (Jager & Gbadamosi, 2010). This research undertakes the effort to identify the effect of administrative service quality and lecturers' teaching quality on students' satisfaction.

The service quality (admin staffs and lecturers) issues in higher learning institutions is very important (Jager & Gbadamosi, 2010) and the system of higher learning institutions in the current environment has been operated as market-oriented environment (Narang, 2012). Therefore, continuous investigations and monitoring on service quality had been conducted by many researchers to understand the improvement needs. Continuous improvements in service quality for both administrative staff and lecturer's teaching quality can provide important contributions not only to meet the quality standards (Al-Alak & Alnaser, 2012) but also to increase the students' intentions to perform well (Ahmed, et al., 2012).

Administrative Service Quality (ASQ)

Administrative service quality in this context may refer to the management side of higher learning institutions, specifically the admin staffs that had direct interactions with the students. A service in this form of understanding is an interaction between the management or admin staff and the students as customer (Ching, Su, & Yi, 2013) where the quality improvements may involve everyone in the institutions (Ahmad & Bahi, 2010). Higher learning institution seek to provide high quality services to exceed their student's expectation in all parts of their educational curricula and administrative process that could result in student's satisfaction (Al-Alak & Alnaser, 2012; Mustafa et al., 2012). It is known that good service quality provided by the institutions will contribute to students' satisfaction (Hu, Kandampully, & Juwaheer, 2009).

Parasuraman et al. (1991) has developed SERVQUAL scale in order to measure the service quality and customer perceptions towards service quality. The context of SERVQUAL has been widely used in various subjects (Jager & Gbadamosi, 2010) such as banking industries, retail, education and etc. The SERVQUAL scale has 22 items under five dimensions that assess student's perception towards service quality (Narang, 2012). The dimension of SERVQUAL used in this study are similar as developed by Parasuraman et al (1991), which include assurance, empathy, reliability, responsiveness, and tangibility. The context of SERVQUAL in this study were not merely to identify what the student perceived towards service quality in higher learning institutions, but it is more on the internal management process (Narang, 2012; Razak, Sarpan & Ramlan, 2018) and students experiences during their studies, where students are treated as a long term customers. The administrative staff are likely to deal with the student in a long-term period (Pitman, 2000) and hence it is important to measure the administrative service quality in order to build the long-term relationship.

Lecturers' Teaching Quality (LTQ)

The quality of higher learning institutions depends on the quality of the teaching staff (Mikalauskas, Jasinskas, & Svagzdiene, 2012), which includes the quality of classroom delivery (Douglas, Douglas, & Barnes, 2006) and effective communication with the students

(Mikalauskas, Jasinskas, & Svagzdiene, 2012). In order to meet the students' expectations, the lecturer must go beyond by understanding the changes (e.g.: technological, environment, social, and etc.) and go along with the change (Arshad & Rahmani, 2013) to improve an in-depth study (Chang & Chao, 2012). The lecturer's teaching quality depending on their various teaching method, flexibility and should include different educational methods that use the theory about diverse ability of a students and the importance of a conducive learning environment (Chen, 2013). Lecturers with high teaching quality may improve students' satisfaction and this should be given proper attention (Mustafa, et al., 2012). Lecturers in higher learning institution should recognize the important role of engagement (Bigna, et al., 2014) that consistent with learning objectives (Hoseini, Mazloum, Jafarnejad, & Foroughipour, 2013).

Students in higher learning institutions are the customer, and there is a need to review the relationship between the lecturer and the students. There is a positive relationship between students' satisfaction and lecturers' teaching quality (Shimou & Dahl, 2012). Lecturer's teaching quality is considered as service quality in general, but the measurement to prove the relationship may not be suitable to adopt the SERVQUAL entirely as developed by Parasuraman et al (1991), or Total Quality Management (TQM) (Narang, 2012). Some researchers developed the EduQual as a modified scale from SERVQUAL (Narang, 2012) to measure service quality provided by the higher learning institutions, and are adopting various scales that fit with the specific needs of investigations. Therefore, it is important to identify student's satisfaction with teaching quality (Bigna, et al., 2014) and the lecturer skills using various techniques of teaching method that could satisfy the students (Keelson, 2011).

Students' Satisfaction

Students' satisfaction may refer to customer satisfaction where it involves emotional reaction (Shih, 2011), differences between expectations and real performance of their experiences (Tan, Suki, & Suki, 2012; Shanaki, Ranjbar, & Shakhsian, 2012). Since students are part of the service quality process (Mustafa, et al., 2012), the institutions should view their students as their customer (Narang, 2012; Douglas, Douglas, & Barnes, 2006; Banwet & Datta, 2003) like any other service industry. Students and the academics are the higher learning institutions customers (Ahmed, et al., 2012) but Pitman (2000) argued that academics should not be treated as a 'customer' since this has no relationship with the administrative staff. Hence, this study will highlight the administrative staff and the academics as two independent variables that will affect the students' satisfaction. By improving the service quality between administrative and lecturers, student's satisfaction can be enhanced (Al-Alak & Alnaser, 2012). One way to improve students' satisfaction is by decreasing the students' complaints (Badri, Makki, Attia, & Al-Share, 2010) about both administrative service quality and lecturers' teaching quality.

Students' satisfaction will provide positive word-of-mouth, high retention and loyalty towards the institution (Tan, Suki, & Suki, 2012; Ahmed et al, 2012; Shih, 2010; Hanif, Hafeez, & Riaz, 2010). The level of students' satisfaction is determined by the institutions ability to meet their respective students' expectations (Hye & Wizarat, 2011; Danjuma & Rasli, 2012). Students dissatisfaction should be prevented before the creation of students' satisfaction (Chow & Zhang, 2008) because customer satisfaction is a cognitive reaction that emerges in response to a long-lasting set of service encounters (Hu, Kandampully, & Juwaheer, 2009) and students in higher learning institutions should be treated as the primary customer (Narang, 2012).

Methodology

The measurement of the concept of service quality in this study has been adapted from Ibrahim, Lee & Hassan (2013) because this measurement was a fit with the administrative service quality in higher learning institution within the context of this study. As for lecturers' teaching quality, the items have been developed based on Keelson (2011) as his journals were focused on the quality of the lecturer's delivery. Finally, the primary interest in this study is to measure the student's satisfaction while undertaking their program in their respective institutions and are mostly being adapted from Bigna et al (2014) and Zullig, Huebner, & Pun (2009). Thus, the research framework was developed as per Figure 1.

Figure 1. Research framework
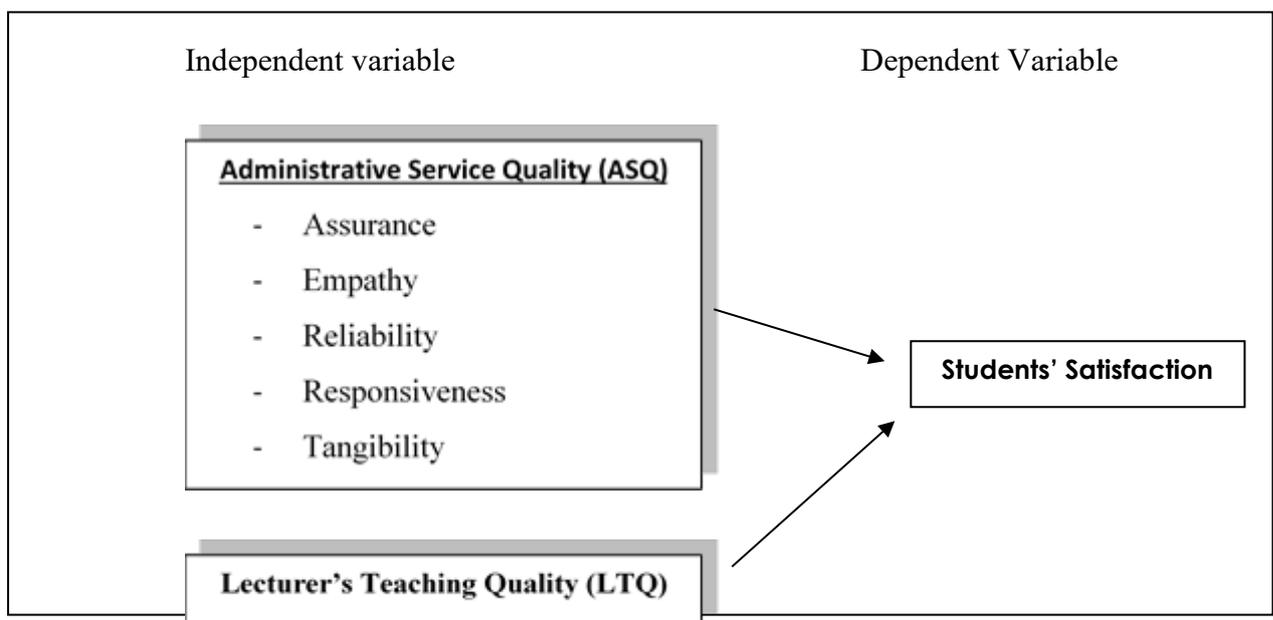
Hypotheses Development

The hypotheses developments in this study are based on previous research that has proven its validity. Al-Alak & Alsaser (2012) have proven that there is a significant relationship between service quality and students' satisfaction. In this study, administrative service quality is similar with what those other researchers claim as service quality, but the context in this study is only focusing on the administrative or non-academician staffs only. Therefore, for the purpose to meet with the objective in this study, the administrative service quality has been hypothesized as per the following:

H1: There is a significant effect between Administrative service quality and students' satisfaction

Specifically, the dimensions of administrative service quality will become the proxy variables. Ahmed et al (2012) and Al-Alak & Alsaser (2012) in their studies have proven that some of the five dimensions in service quality are significant with students' satisfaction. There is only one variable out of five dimensions in Al-Alak & Alnaser (2012) that has no significant results on students' satisfaction, which is responsiveness. The same goes to Ahmed et al (2012) who in their studies found one variable out of five service quality dimensions as insignificant with students' satisfaction, and that variable is assurance. Therefore, in this study, the five dimensions of administrative service quality as proxy variables have been hypothesized as per the following and to prove that all the dimensions are significantly affect student's satisfaction:

H1a: There is a significant effect between Assurance and students' satisfaction
H1b: There is a significant effect between Empathy and students' satisfaction
H1c: There is a significant effect between Reliability and students' satisfaction
H1d: There is a significant effect between Responsiveness and students' satisfaction
H1e: There is a significant effect between Tangibility and students' satisfaction

Based on the previous study by Shimou & Dahl (2012), it hypothesised that there is a positive relationship between lecturers' teaching quality and students' satisfaction. Hence, in this study the hypothesis is developed as per following:

H2: There is a significant effect between lecturer's teaching quality and student's satisfaction

Data Collection and Analysis

Structured questionnaire has been developed and the questionnaire is a self-administered with minimal level of interference. For the purpose of this study, since the research design is by survey, a one-shot study (cross-sectional) are best suits to collect the data. The questionnaire design has been adapted by several previous research papers, since the validity of the instrument used by the previous researchers has been proven and validate.

There are four sections in the questionnaire which include demographic background as section A and the construct questionnaire is contained in section B, C, and D. Section A, which is the demographic, consists of the name of university or college that the student studies at, their gender and age, faculty of registration, current semesters, and Cumulative Grade Point Average (CGPA). Whereas, in sections B, C and D ofthe questionnaire the construct items will be used to measure the independent and dependent variables. Section B questions are mainly intended to measure the students' feelings or their extent of agreement or disagreement towards the statement under administrative service quality. Section C measures lecturers' teaching quality and the last section, section D, measures the students' satisfaction towards the overall administrative service quality and lecturers' teaching quality. To measure the items in section B, C and D, the respondents will evaluate the items by using a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5).

The population of this research consists of all students in higher learning institutions in Kota Kinabalu, Sabah. Both public and private higher learning institutions will be included as the research population and will be categorized based on type of institutions (public or private). Stratified random samplings are used in this study to develop the population frame.

SPSS (IBM version 20) has been used to analyze the data collected. The first steps in analyzing the data are to test the goodness of the data. Frequency distribution has been performed to describe the demographic of the respondents and the construct measurements. Once the goodness of the data has been performed, the next step is to test the reliability analysis to assure the internal consistency of the construct items in the questionnaire. Cronbach's coefficient Alpha is the most popular test of reliability and the closer the reliability to 1, the internal consistency reliability is better (Sekaran & Bougie, 2011). Once reliability test has been performed and the internal consistency is in the range of acceptable, of greater than 0.6, that next analysis performed is data transformation on the construct items for further analysis such as simple regression and multiple regression.

Multiple regressions analysis has been performed to analyze the administrative service quality (ASQ) and student's satisfaction. The multiple regression analysis will show the result of which of the proxy variables under the administrative service quality has significant effect on student's satisfaction. Therefore, based on the analysis, this study may be able to identify which of the proxy variables under administrative service quality provide significant effect towards students' satisfaction and specific areas that need to improve. Once the results have been obtained from multiple regression analysis, next step is to analyze the lecturer's teaching quality on student's satisfaction. Simple linear regression was performed to identify whether there is a significant effect between independent and dependent variables especially between lecturers' teaching quality and student's satisfaction.

Analysis
Demographic Analysis

The respondents' profiles have been analysed based on their gender and age, faculty of registration, semesters, and their current cumulative grade point average (CGPA). Based on the frequency distribution analysis, 74.2% out of 384 respondents are female and 25.8% are male respondents. As for the respondent's age, most of the respondents fall under the age of 21 – 23 years old which consists of 224 respondents (or 58.3%). 91 respondents (or 23.7%) are below 20 years and below, 63 respondents (or 16.4%) are in between 24 – 26 years old, and only 6 respondents (or 1.6%) are those who are 27 years old and above. As for faculty of registration, majority of the respondents are in the faculty of business and economics with a total of 250 respondents (or 65.1%). The rest of the respondents are registered in the faculty of education with 53 respondents (or 13.8%), followed by engineering with 38 respondents (or 9.9%), science and technology with 32 respondents (or 8.3%), and social science with 11 respondents (or 2.9%).

Reliability Analysis

Table 1 shows the results of the reliability test for the variables that has been used in the study. Table 4.2 indicates the Cronbach's Alpha for measurement of its reliability coefficients for the primary and proxy variables in this study. The Cronbach's Alpha values for all of the measured variables are reliable (β range = 0.65 to 0.933) and therefore the all of the items are qualified for further analysis.

Table 1: Reliability Test

Variables	Number of Items	Cronbach's Alpha
Administrative Service Quality (ASQ)	15	0.923
Assurance	2	0.651
Empathy	3	0.706
Reliability	3	0.831
Responsiveness	4	0.851
Tangibility	3	0.759
Lecturer's Teaching Quality (LTQ)	10	0.933
Students' Satisfaction	7	0.894

Hypothesis Analysis

There are two main hypotheses that need to be examined which include the administrative service quality and lecturers' teaching quality as independent variables towards student's satisfaction as dependent variable in the study. The first hypotheses that need to be tested are as per followings:

H_1: There is a significant effect between Administrative service quality and students' satisfaction

Table 2: Model Summary for Independent variable (ASQ) as predictor to satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721[a]	.519	.513	.45798

a. Predictors: (Constant), Tangibility, Assurance, Reliability, Empathy, Responsiveness

Based on table 2, the model summary for multiple regression analysis shows that the correlation between administrative service quality on students' satisfaction is at R= 0.721. This indicates that the strength between the independent variable and dependent variable is strong. The variation of the independent variable can be explained about 51.9% (R square = 0.519) of the variation towards the dependent variable (student's satisfaction).

Table 3: ANOVA for Independent variable (ASQ) as predictor to satisfaction

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.651	5	17.130	81.674	.000[b]
	Residual	79.282	378	.210		
	Total	164.934	383			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Tangibility, Assurance, Reliability, Empathy, Responsiveness

Table 3 is the ANOVA table for independent variable of administrative service quality as predictor on student's satisfaction. Based on the results, the multiple regression model with all five predictors under administrative service quality (ASQ) produced $F(5, 378) = 81.674$, p-value (0.000) is less than alpha (α) at 0.001. Therefore, the first hypotheses on the effect between administrative service quality and student's satisfaction are accepted.

Further analysis was conducted to justify all of the proxy variables under administrative service quality.

H_{1a}: *There is a significant effect between Assurance and students' satisfaction.*
H_{1b}: *There is a significant effect between Empathy and students' satisfaction.*
H_{1c}: *There is a significant effect between Reliability and students' satisfaction.*
H_{1d}: *There is a significant effect between Responsiveness and students' satisfaction.*
H_{1e}: *There is a significant effect between Tangibility and students' satisfaction.*

Table 4: Coefficients for the proxy variables under the dimension of ASQ as predictor to satisfaction

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.204	.130		9.231	.000
	Assurance	.226	.038	.276***	6.027	.000
	Empathy	-.071	.051	-.077	-1.385	.167
	Reliability	.086	.050	.102	1.709	.088
	Responsiveness	.166	.052	.180**	3.189	.002
	Tangibility	.302	.042	.365***	7.136	.000

a. Dependent Variable: Satisfaction
Note: *$p < .05$ ** $p < .01$ *** $p < .001$

Based on the result in coefficient table 4 above, assurance and tangibility are significant at 0.001, whereas responsiveness is significant at 0.01. There are two proxy variables are insignificant, that is empathy and reliability. Therefore, only three hypotheses that are accepted which include assurance, responsiveness, and tangibility that have significant effect on students' satisfaction, whereas empathy and reliability shows insignificant effect on student's satisfaction.

Next is to analyze the hypothesis between lecturers' teaching quality (LTQ) and students' satisfaction. The analysis between lecturers' teaching quality on students' satisfaction has been performed by using simple linear regression analysis below are the results from the findings.

H_2: *There is a significant effect between lecturer's teaching quality and student's satisfaction*

Table 5: Model summary for Lecturers' Teaching Quality (LTQ) as predictor towards Student's Satisfaction

Model	R	R Square	Adjusted R Square	F	Sig
1	0.708	0.501	0.499	382.988	.000

Based on table 5, there is a positive relationship between independent variable and student's satisfaction since the p-value at 0.000 is less than the alpha at 0.01. The strength of the relationship between the variables are considered as strong correlated (R = 0.708). The independent variable of lecturers' teaching quality can be explained about 50.1% (R square = 0.501) of the total variation towards the dependent variable of student's satisfaction.

Therefore, in this study, it can be explained that the improvement in lecturers' teaching quality will increase the students' satisfaction while studying in their respective university or college.

Table 6: Coefficients for Lecturers' teaching quality (LTQ) as predictor of Satisfaction

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.845	.144		5.870	.000
	LTQ	.716	.037	.708	19.570	.000

a. Dependent Variable: Satisfaction

By referring table 6, since the significant value is at 0.000 (p-value) is less than the alpha (α) at 0.01 levels with t-value at 19.570, the hypothesis are accepted and therefore, there is a significant effect between lecturers' teaching quality and student's satisfaction is a reasonable statement.

Conclusion

This study has been pursued to identify the effect between administrative service quality and lecturers' teaching quality on student's satisfaction in higher learning institutions in Kota Kinabalu, Sabah. Generally, the findings indicate that there is a significant effect between administrative service quality and lecturers' teaching quality on student's satisfaction. This study also examined the contributing factors on student's satisfaction based on the dimensions of service quality. Three variables (assurance, responsiveness, and tangibility) under the dimension of service quality have significant effect on student's satisfaction and the other two variables (empathy and reliability) show insignificant effect on student's satisfaction.

Previous studies by Ahmed et al. (2012) shows that only assurance showed an insignificant result in their dimensions of service quality research, whereas Al-Alak & Alnaser (2012) found that responsiveness showed insignificant results. Although these findings do not show the same

magnitude as in the previous research, there is evidenve that service quality in higher learning institutions has significant effect on students' satisfaction. Therefore, based on the outcome from this study, since assurance, responsiveness and tangibility show asignificant effect on student's satisfaction, these are the dimensions of service quality that any higher learning institutions should focus on for improvements. Even though empathy and responsiveness had no effect on student's satisfaction, the higher learning institutions shouldn't neglect the importance of these dimensions of service quality. Continuous improvements are the basis to retain the total quality of the higher learning institutions.

Lecturers' teaching quality revealed a significant effect on students' satisfaction, and this supports the previous findings by Shimou & Dahl (2012). Therefore, there is evidence that lecturer's teaching quality will affect the student's satisfaction. The quality of the lecturer's teaching is based on their delivery method, flexibility (Chen, 2013) and in-depth study (Chang & Chao, 2012) and must go beyond the understanding of change (Arshad & Rahmani, 2013). Hence, when the students are satisfied with the service quality and teaching quality in their respective institutions they are more likely to perform well and will be equipped with the skills and knowledge needed in the stiff competition of the contemporary global job market.

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