

*The Effect of College Service Quality on the Learners' Satisfaction  
at English Department of Higher Education*

Sabarun, IAIN Palangka Raya, Indonesia  
Hamdanah, IAIN Palangka Raya, Indonesia

The Asian Conference on Education 2020  
Official Conference Proceedings

**Abstract**

The research was to measure the effect of college service quality on the learners' satisfaction of English Department at IAIN Palangka Raya. Quantitative method was used to survey 173 L2 learners using 35-items of self-developed questionnaire to determine the most influential factor of the college service quality. The validity and reliability were ensured. Assumption tests, such as normality, linearity, multicollinearity, heteroskedasticity, autocorrelation, were also counted before analyzing data. The data were analysed using multiple linear regression, t test, F test and correlation. The finding revealed that: (a) the variables of tangible, reliability, responsiveness, assurance, empathy, gave effect simultaneously to the learners' satisfaction ( $F= 27.880$ ,  $p= 0.000$ ). (b) Partially, each variable gave contribution to the learners' satisfaction as follows: tangible (x1), 02.23% reliability (x2) 16.86%, responsiveness (x3) 12.88%, assurance (x4), 05.40% empathy (x5), 09.20%. (c) The most influential contributed to the satisfaction was reliability, followed by responsiveness, empathy, assurance and tangible. The total effective contribution of those variables to the learners' satisfaction was 40.50%. The rest (59.50%) was affected by other variables out of investigation. The result suggested that the college increase service quality in terms of learning facilities, teaching laboratory, language laboratory, dormitory, cleanliness, safety, giving appropriate treatment and having more empathy and understanding the learners' needs. Similar studies at higher education with broader scope and sample size was recommended.

Keywords: Learners' Satisfaction, Quality Service, Higher Education

**iafor**

The International Academic Forum  
[www.iafor.org](http://www.iafor.org)

## Introduction

Service quality is a vital part of promoting higher education. It is the highest influential instruments for university development. Improving quality service to the learners' satisfaction is vital for today's universities. They recognize the importance of service quality in serving of learning process, accreditation level, college facilities, visiting lecturers, laboratory, dormitory, research collaboration, double degree program, student exchange and other services. This is caused by the improving numbers of learners enrolling universities (Shago, 2005). Service quality is considered as of key strategic value by every organization, uncluding educational institutions (Rashid and Jusoff, 2009). Although there has been an increasing number of researches investigating quality service and learners' satisfaction in university level all over the world (Agyapong 2011; Lee & Hwan 2005; Kuo *et al.* 2009; Greiner, 2000; Knight, 2002; Mai, 2005; Deshields et al, 2005; Rashidi & Moghadam, 2014), there was still limited number of research examining quality service and the learners' satisfaction on L2 classes in Kalimantan context. Therefore, this study attempts to fill those gaps.

In case of higher education, quality of service is a vital thing motivating colleges to competition and learners are directed to assess on services provided by university (Golder, Mitra, & Mooman, 2012, p.1). Service quality is a clients' attitude and perceived of a service (Parasuraman et al., 2005). Eshghi, Roy, & Ganguli (2008, p. 121) define it as a service assessment performed by clients. Service quality is a vital thing considered by institution management. Nalini et al., (2011, p. 52) state service quality has an vital position in every business, including educational institution. Arambewela and Hall (2009) confirm the core idea of quality is the match between expectation and perception of customers. To increase quality service, the institutions should analyze the factor contributing to service quality. Parasuraman et al. (2005) argued five factors of quality service. (a) *Tangibles*. This is in accordance with the physical environment. It includes physical material, technology equipment, person and information materials. It represents the service physically. It deals with performance of physical facilities, tools, and staff performance. (b) *Reliability*. It deals with customer perceptions. It is the capability to provide to the offered service accurately. (c) *Responsiveness*, being willing to help. It deals with client perceived on the willingness of service. It is a desire of employees to assist clients and to give service. (d) *Assurance*, inspiring trust and confidence. It deals with customer perceptions. (e) *Empathy*, treating customers as individuals. It is in line with client perceived on service provider to care and give attention.

Referring to those factors, a scale named Service quality (Serqual) was initiated by (Parasuraman et al., 2005). This idea focuses on the philosophical framework that clients assess quality of service by making comparison between perception and expectation of service. In other words, quality service can be fomulated as Q (quality) equals to P (perceived) minus E (expectation) (Bennett and Barkensjo, 2005). Generally, many studies revealed that service quality is the customers' perception on quality (Parasuraman, 2000). Kilbourne et al. (2004, p.529) argued that service quality becomes potential as a reliable measurement instrument. In the present study, service quality is all services given by the institute to fullfil the learners' satisfaction. The construct of service quality is as follows:

**Table 1. The construct and indicator of questionnaire on of service quality.**

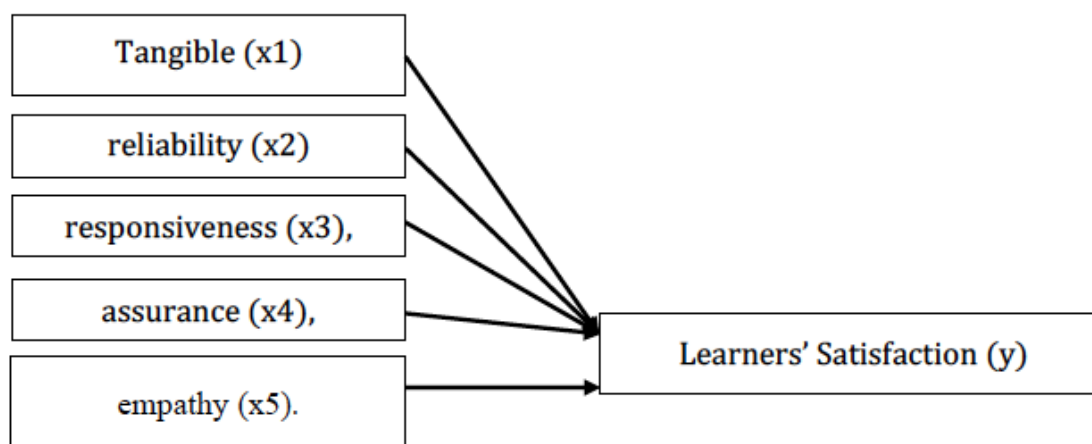
<b>Tangible (x1)</b>	<b>Assurance (x4)</b>
a. The class rooms are clean and tidy.	a. The administration staffs are polite and kindly to the learners when giving services.
b. The classes are comfort and convenient.	b. The academic supervisors handle the learners' problems.
c. The learning equipment are available in the class.	c. The counseling guidance lecturers help learners when needed.
d. The toilets are available and clean.	d. All assignments given are returned to the learners
e. There is a Mushalla near the class.	e. The lecturers spend the time effectively and efficiently in class.
f. There are many reference book in the faculty library.	f. The sanctions are given to every learners who obey the college regulation.
g. Parking area are available in college.	
h. ATMs are available in the college.	
i. Sports area are available in the college.	
j. Internet connections are available in the college.	
<b>Reliability (x2)</b>	<b>Empathy (x5)</b>
a. The lecturers explain the material clearly.	a. The faculty is concerned with the learners' needs.
b. The lecurers give a question-answer session during the class	b. The tuiton fee is communicated with the learners' parents.
c. The learning materials are given to the learners.	c. The faculty monitor the learners' learning progress through the academic advisors.
d. The lecturers give feedback to the assignment given.	d. The lecturers are willingly to help the learners when having academic problems.
e. The lecturers come on time.	e. The lecturers are open and cooperative to the learners
f. The lecturers teach the material based on their competence.	f. The faculty attempts to understand the learners' interest and talent.
g. The lecturers distribute the lesson plan and make a contract agreement with the learners at the beginning of semester program.	g. The faculty attempts to understand the learners' need.
<b>Responsiveness (x3)</b>	<b>Learners' Satisfaction</b>
a. The faculty provides couseing guidance to the learners.	a. Satisfaction on facilities and instra structure
b. The faculty offers scholarship the poor learners.	b. Satisfaction on academic and non-academic services
c. The faculty gives academic aid to learners when having academic problems	c. Satisfaction to get information.
d. The dean and staffs gives opportunity for learners' parents to consult.	d. Satisfaction on service assurance.
e. The faculty gives assurance aid to the learners who get an accident.	e. Satisfaction to get attention specifcly.

There are many researchers interesting to investigate the service quality and learners' satisfaction. For example, Yusoff et al, (2015) classified 12 variables that influence learners' satisfaction. Then, Douglas (2006) found that physical facilities of university do not give significant effect to learners' satisfaction but it plays as key factor of learners' choice. Then, Kanan & Baker (2006) revealed that academic programs make significant effect on learners' satisfaction. Palacio, et al., (2002) revealed that college image makes an important effect on learners' satisfaction. Hassan et al (2008) found that service quality measurement had a high correlation with learners' satisfaction. Nasser et al (2008) also revealed that learners having high knowledge on university rules and regulation, tend to obtain higher satisfaction. Asaduzzaman et al (2013) found that there was a high relationship among all dimensions with learners' satisfaction. In addition, Sultan and Wong (2010) revealed that the dimensions of dependability, assurance, unusual management and syllabus gave facilitative effect on learners' satisfaction. Annamderula and Bellamkonda (2012) indicated a high effect of teaching and course content, on the students perception of service quality. Similarly, Tuan (2012) found that service quality on administrative has high correlation with student's satisfaction. Then, Andrea and Benjamin (2013) found that that students perceive accommodation as most urgent factors of college area.

The present study differs from the above studies. This study has a self-developed construct composed of five variables. In addition, this research concentrates on the influence of college's service quality to the learners' satisfaction in the context of EFL classes in Central Kalimantan province. The data analysis also differs. The data were analysed using multiple linear regression, t test, F test and correlation. This study applied a survey research design using documentation and questionnaire as research instruments. It was an investigation of a sample to investigate the incidence and distribution of variables (Ary, Lucy, Chris, and Asghar, 2010, p.651). The documentation was used to gather the data about the learners' characteristics; and questionnaire was used to examine the learners' satisfaction toward the quality service provided by the college. The objective was to explore the influence of quality service on learners' satisfaction in university level in L2 Kalimantan learners. In the present study, the SERVQUAL model was used. Finally, the study determined, which service quality dimensions were most important to the students. The research question can be stated as follows: Do the variables of tangible (x1), reliability (x2), responsiveness (x3), assurance (x4), empathy (x5), gave effect simultaneously to the learners' satisfaction. Of the five variables, which one has the highest influence on the learners' satisfaction?

### ***Research Framework***

This study applied Parasuraman's service quality. The dimensions included in this variable are tangible (x1), reliability (x2), responsiveness (x3), assurance (x4), empathy (x5), learners' satisfaction (y). The framework of thinking as follows:



**Figure 1. Framework of thinking**

### ***Participants***

The samples were the L2 learners at IAIN Palangka Raya. A total number of 173 questionnaires were distributed. This number represented the population about 325 learners.

### ***Data Collection***

The self-developed questionnaire consisted of some aspects to calculate the learners' satisfaction on service quality provided by the college. This questionnaire covered 35 items represented five dimensions. To measure the learners' satisfaction, a five-point Likert scale was used. The collected data were analysed using multiple linear regression, t test, F test and correlation with the help of SPSS program. The result of Cronbach alpha was 0.84, on scale reliability indicating good internal consistency for the 35-item.

### ***Conclusion***

Before testing the hypotheses, the assumption test for multiple linear regression analysis, namely normality, linearity, multicollinearity, autocorrelation, and heteroskedasticity, was ensured. The output of Kolmogorov Smirnov indicated that the value of Asymp. Sig. (2-tailed) was 0.684. Since it was greater than 0.05, the data were in normal distribution. The output indicated that the value of Deviation from Linearity on satisfaction and (a) tangible was ( $0.000 < 0.05$ ;  $F 16.486$ ); (b) reliability was  $0.000 < 0.05$ ;  $F 20.808$ ). It was said that there were no linearity among variables. Then, the output of tolerance and VIF multicollinearity test indicated that the tolerance value of variables: tangible ( $0.954 > 0.10$ ;  $VIF 1.048 < 10.00$ ), reliability ( $0.890 > 0.10$ ;  $VIF 1.124 < 10.00$ ), responsiveness ( $0.870 > 0.10$ ;  $VIF 1.150 < 10.00$ ), assurance ( $0.983 > 0.10$ ;  $VIF 1.017 < 10.00$ ), empathy ( $0.958 > 0.10$ ;  $VIF 1.044 < 10.00$ ). It was said that multicollinearity was not violated. Next, the output of heteroskedasticity test using Glejser test indicated that the significant value of tangible ( $0.001 < 0.05$ ; t value 3.338), reliability ( $0.000 < 0.05$ ; t value 6.205), responsiveness ( $0.000 < 0.05$ ; t value 5.765), assurance ( $0.001 < 0.05$ ; t value -3.8523.338), ( $0.983 > 0.10$ ;  $VIF 1.017 < 10.00$ ), empathy ( $0.046 < 0.05$ ; t value 2.007). Then, the output indicated that the value of Durbin Watson was  $1.894 (5; 173) > du 1.8114$ . It was said that autocorrelation was not violated.

### Testing hypothesis

To respond the sixth research questions, the multiple linier regression analysis was applied. The study measured whether the five independent variables in this study gave facilitative effect simultaneously to the learners' satisfaction, as shown in Table 2.

**Table 2. Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.675 <sup>a</sup>	.455	.439	2.99077

The table showed that the *R* value of 0.675 and an *R*-square value of 0.455. The *R*-square value showed how well a model fitted the data. It showed that the five variables gave 45.50 % of college satisfaction. It meant that the relationship of both variables was statistically significant, which was also explained in Table 3 ( $F=27.880$ , the *p* value was 0.00), as shown below.

**Table 3. Result of Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1246.913	5	249.383	27.880	.000 <sup>a</sup>
	Residual	1493.769	167	8.945		
	Total	2740.682	172			

Partially, The significant effect of each variable on the learners' satisfaction was explained below:

- a. The tangible variable gives facilitative effect on the learners' satisfaction.

The output indicated that the *t* value of Tangible was higher than *t* table (3.338 > 1.973) and *p*-value < 0.05 (0.001 < 0.05). It meant that *h*<sub>0</sub> stating that there was no significant effect of tangible variable on the learners' satisfaction was rejected; and *h*<sub>a</sub> stating that there was a significant effect of tangible variable on the learners' satisfaction was accepted. It meant that at the significant level of 0.5%, the tangible variable gave facilitative effect to the learners' satisfaction (see Table 4 for more detail).

**Table 4. Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	27.792	9.481		2.931	.004
Tangible (X1)	.177	.053	.195	3.338	.001
Reliability (X2)	.330	.053	.376	6.205	.000
Responsiveness (X3)	.277	.048	.353	5.765	.000
Assurance (X4)	-.191	.050	-.222	-3.852	.000
Empathy (X5)	.093	.046	.117	2.007	.046

- b. The reliability variable gives facilitative effect on the learners' satisfaction.

The output indicated that the t value of Reliability was higher than t table ( $6.205 > 1.973$ ) and  $p\text{-value} < 0.05$  ( $0.000 < 0.05$ ). It meant that  $H_0$  stating that there was no significant effect of Reliability variable on the learners' satisfaction was rejected; and  $H_a$  stating that there was a significant effect of Reliability variable on the learners' satisfaction was accepted. It meant that at the significant level of 0.5%, reliability variable gave facilitative effect to the learners' satisfaction as shown in Table 4.

- c. The Responsiveness variable gives facilitative effect on the learners' satisfaction.

The output indicated that the t value of Responsiveness was higher than t table ( $5.765 > 1.973$ ) and  $p\text{-value} < 0.05$  ( $0.000 < 0.05$ ). It meant that  $H_0$  stating that there was no significant effect of Responsiveness variable on the learners' satisfaction was rejected; and  $H_a$  stating that there was a significant effect of Responsiveness variable on the learners' satisfaction was accepted. It meant that at the significant level of 0.5%, responsiveness variable gave facilitative effect to the learners' satisfaction (see Table 4 for more detail).

- d. The Assurance variable gives facilitative effect on the learners' satisfaction.

The output indicated that the t value of Assurance was higher than t table ( $3.852 > 1.973$ ) and  $p\text{-value} < 0.05$  ( $0.000 < 0.05$ ). It meant that  $H_0$  stating that there was no significant effect of Assurance variable on the learners' satisfaction was rejected; and  $H_a$  stating that there was a significant effect of Assurance variable on the learners' satisfaction was accepted. It meant that at the significant level of 0.5%, Assurance variable gave facilitative effect to the learners' satisfaction (see Table 4 for more detail).

- e. The Empathy variable gives facilitative effect on the learners' satisfaction.

The output indicated that the t value of Empathy was higher than t table ( $2.007 > 1.973$ ) and  $p\text{-value} < 0.05$  ( $0.046 < 0.050$ ). It meant that  $H_0$  stating that there was no significant effect of Empathy variable on the learners' satisfaction was rejected; and  $H_a$  stating that there was a significant effect of Empathy variable on the learners' satisfaction was accepted. It meant that at the significant level of 0.5%, Empathy variable gave facilitative effect to the learners' satisfaction (see Table 4 for more detail).

- f. There is no interaction effect among variables of Tangible (X1), Reliability (X2), Responsiveness (X3), Assurance (X4), and Empathy (X5) on the learners' satisfaction.

The output of Anova Table indicated that the F value was higher than F table ( $27.880 > 2.27$ ) and  $p\text{-value} < 0.05$  ( $0.000 < 0.050$ ). It meant that  $H_0$  stating that there was no interaction effect among variables on the learners' satisfaction was rejected; and  $H_a$  stating that there was an interaction effect among variables on the learners' satisfaction was accepted (see Table 2 for more detail). The table showed the value of determinant coefficient or the influence of Empathy (X5), Assurance (X4), Tangible (X1), Responsiveness (X3), Reliability (X2) correlated simultaneously to the learners'

satisfaction (See Table 9 for detail). The R square was 0.455 or 45.50%. It meant that Empathy (X5), Assurance (X4), Tangible (X1), Responsiveness (X3), Reliability (X2) gave effect simultaneously to the learners' satisfaction as 45.50%. The rest (50.50%) was influenced by other variables out of the study. To see the contribution of each variable, it was explained in Table 5.

**Table 5. Table summary**

<b>Variable</b>	<b>Regression coefficient</b>	<b>Coefficient correlation</b>	<b>R square</b>	<b>Contribution of each variable</b>
Constant	27.792			
Tangible (x1)	0.177	0.126	0.455	02.23%
Reliability (x2)	0.330	0.511		16.86%
Responsiveness (x3)	0.277	0.465		12.88%
Assurance (x4)	-0.191	-0,283		05.40%
Empathy (x5)	0.093	0.99		09.20%
				46.57%

A regression analyses was performed to measure the effect of the five SERVQUAL dimensions to the learners' satisfaction. The summary table (Table 10) showed that reliability and responsiveness were the most predictors of learners' satisfaction. The output showed that the effective contribution of each variable was Tangible (x1) 02.23%, Reliability (x2) 16.86%, Responsiveness (x3) 12.88%, Assurance (x4) 05.40%, and Empathy (x5) 09.20% on the learners' satisfaction. Therefore, it was said that reliability was the highest variable to give effect on the learners' satisfaction about 16.86%. The total effective contribution was 45.50%. It was concluded that overall service quality gave facilitative effect to the learners' satisfaction. The regression coefficient was 0.675 and overall service quality gave 45.50% of learners' satisfaction. In addition, F- value for the relationship between service quality and learners' satisfaction was ( $p < 0.000$ ).

### **Discussion**

The findings confirmed that: (a) the variables of tangible, reliability, assurance, responsiveness, and empathy gave effect simultaneously to the learners' satisfaction ( $F= 27.880$ ,  $p= 0.000$ ) at the 5% significant level. (b) Partially, each variable gave contribution to the learners' satisfaction as follows: tangible (x1), 02.23% reliability (x2) 16.86%. responsiveness (x3) 12.88%, assurance (x4), 05.40% empathy (x5), 09.20%. (c) The most influential contributed to the satisfaction was reliability, followed by responsiveness, empathy, assurance and tangible. The finding was in accordance with Mai (2015), Douglas et al. (2006), and Gibson (2005). The finding was in accordance with that by Mariani et al. (2015) Hanssen and Solvoll (2015), Nasser et al. (2008), and Kusumandari (2006). The finding was also in accordance with Hassan et al (2008), Sabarun (2020), Asaduzzaman et al (2013), and Sultan and Wong (2010). In contrast, the finding was not in accordance with Zeithaml *et al.* (2012).



### ***Recommendation***

The study measured the learners' satisfaction on quality service provided by IAIN Palangka Raya. The dimensions of the learners' satisfaction were tangible, assurance, responsiveness, reliability, and empathy. The finding confirmed that the learners were satisfied by the college services. This finding could be a consideration to identify areas of strength and weakness of quality service provided by the college. The finding related to the learners' satisfaction could also help college leaders in providing service to the learners. Despite the fact that the findings contributed to knowledge, the study had some restrictions. There were four limitations to this study. First, the sample was small and limited to only 173 L2 learners majoring English Education Study Program. This limitation must be considered when generalizing the finding. Therefore, the future researcher was recommended to have more sample size. Second, the questionnaire of the study (SERVQUAL) includes only perception scale not involving expectation one. The future researchers should consider the expectation and perception sections. Other researchers were advisable to conduct the similar studies in other colleges to validate this findings. The further researches with wider samples would be useful to validate this findings. Third, the study focused only on service quality. For future researchers, there might be other factors influencing learners' satisfaction such as gender, cultural difference among learners, and other research model to have depth insights. Fourth, as this study only used the service quality model, there were other variables such as, learning atmosphere, curriculum design, accreditation, international cooperation and so forth that were not included in the study.

### **Acknowledgments**

The researchers expresses great thanks to the rector of IAIN Palangka Raya for publishing this manuscript in international reputed journal. The appreciation is also addressed to the academicians contributing valuable works to complete this manuscript.

## References

- Andrea, I. & Benjamin, S., (2013). University students' needs and satisfaction with their host city. *Journal of Place Management and Development*, 6(3), pp. 178-191.
- Annamdevila, S. & Bellamkonda, R. S. (2012). Development of service quality in Indian Higher Education Sector. *International Journal of Innovation, Management and Technology*, 3(4), 412 – 416.
- Arambewela, R. and Hall, J. (2009) "An empirical model of international student satisfaction", *Asian Pacific Journal of Marketing and Logistics*, Vol/21 No.4, pp.555-569
- Agyapong, G.K.Q. (2011). 'The effect of service quality on customer satisfaction in the utility industry: A case of Vodafone (Ghana)', *International Journal of Business and Management* 6 (5), 203–210. <http://dx.doi.org/10.5539/ijbm.v6n5p203>
- Ary, Donald, Lucy, C.J. Chris, S, and Asghar R (2010). *Introduction to Research in Education* (Eighth edition). United States: Wadsworth Cengage Learning.
- Asaduzzaman, Moyazzem, H. & Mahabubur, R. (2013). Service Quality and student satisfaction. *International journal of economics, finance and management sciences*. 1(3), 128 – 135.
- Bennett, R. and Barkensjo, A. (2005), "Relationship quality, relationship marketing, and client perceptions of the levels of service quality of charitable 123 organisations", *International Journal of Service Industry Management*, Vol. 16 No.1, pp.81-106.
- Billups, F.D., "Measuring college student satisfaction: a multiyear study of the factors leading to persistence," in *Proceedings of Northeast Educational Research Association Annual Conference*, Rocky Hill, CT, USA, October 2008.
- Carey, K., Cambiano, R. & De Vore, J., 2002. Student to faculty satisfaction at a Midwestern university in the USA. pp. 93-97.
- Coetzee, J., Van Zyl, H. & Tait, M., 2013, 'Perceptions of service quality by clients and contact-personnel in the South African retail banking sector', *Southern African Business Review* 17(1), 1–22.
- Desai, V. V. (2011). Patient Satisfaction and Service Quality Dimensions. *Advances in Management*, 4(5), 40-45.
- Douglas, J., Douglas, A. & Barnes, B., (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, pp. 251-267.
- De Jagger, J. & Du Plooy, T., 2007, 'Measuring tangibility and assurance as determinants of service quality for public health care in South Africa', *Acta Commercii* 2007, 96–111.

- Eshghi, A., Roy, S. K., & Ganguli, S. (2008). Service quality and customer satisfaction: an empirical investigation in Indian mobile telecommunications services. [Article]. *Marketing Management Journal*, 18(2), 119-144.
- Farahmandian, S., Minavand, H. & Afshard, M., (2013). Perceived service quality and student satisfaction in higher education. *Journal of Business and Management*, pp. Volume 12, Issue 4, PP 65-74.
- Gibson, H., 2005, "Towards an understanding of „why sport tourists do what they do”, *Sport in Society Special Issue: Sport Tourism: Concepts and Theories*, 8 (2), 198–217.
- Golder, P. N., Mitra, D., & Moorman, C. (2012). What Is Quality? An Integrative Framework of Processes and States. [Article]. *Journal of Marketing*, 76(4), 1-23.
- Grebennikov and M. Shah. (2013) "Monitoring trends in student satisfaction," *Tertiary Education and Management*, vol. 19, no. 4, pp. 301–322.
- Han, S., & Baek, S. (2004). Antecedents and consequences of service quality in online banking: An application of the SERVQUAL instrument. *Advances in Consumer Research*, 31, 208–214  
<http://www.acrwebsite.org/volumes/8887/volumes/v31/NA-31>.
- Hanssen, T.-E. S. & Solvoll, G., (2015). The importance of university facilities for student satisfaction at a Norwegian University. *Facilities*, pp. 744-759.
- Hassan, H.F.A, Ilias, A., Rahman, R.A. & Razak, M.Z.A. (2008). Service Quality and Student satisfaction: A case study of private Higher education Institutions. *International Business Research*. 1(3), 163 – 175
- Helgesen, O. & Nettet, E. (2007). What accounts for students' loyalty? Some field study evidence. *International Journal of Educational Management*, 21 (2), 126 – 143.
- Heikkilä, A. & Lonka, K. (2006). Studying in higher education: Students' approaches to learning, self-regulation, and cognitive strategies. *Studies in Higher Education*, 31(1), 99-117. <http://dx.doi.org/10.1080/03075070500392433>
- Idrus, N., 2001. "A model for assuring quality of higher education institutions. Paper presented at Kucing Sarawak." In *the SEAAIR Conference, Oct. 2001*.
- J., J. D. and Gbolahan, G. (2013). Predicting student's satisfaction through service quality in higher education. *The international Journal of Management Education*, 11(3): 107-18.
- Jun, M., & Cai, S. (2001). The key determinants of internet banking service quality: A content analysis. *The International Journal of Banking Marketing*, 19(7), 276–291.
- Kanan, H. M. & Baker, A. M., 2006. *Student satisfaction with an educational administration preparation program*. *Journal of Educational Administration*, 44(2), pp. 159-169.

Khan, M. M., Ahmed, I. & Nawaz, M. M., 2011. *Student's Perspective of Service Quality in Higher Learning Institutions; An evidence Based Approach. International Journal of Business and Social Science*, 2(11), pp. 159-164.

Kotler, P. & Keller, K., 2012. *Marketing Management. NJ: Prentice Hall*.

Kilburn, B., Kilburn, A., & Davis, D. (2016). Building collegiate e-loyalty: The role of perceived value. *Contemporary issues in Education Research*, 9(3), 95–102  
<https://eric.ed.gov/?id=EJ1106895>

Kotler, P.; Armstrong, G.; Saunders, J. and Wong, V. (2001), *Principle of Marketing*, Third European Edition, Prentice Hall. Kotler, P., Armstrong, G., Wong, V. & Saunders, J., 2008, *Principles of marketing*, 5th edn., Pearson Education Limited, Essex.

Kuo, Y-F., Wu, C-M. & Deng, W-J., 2009, 'The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention, *Computers in Human Behavior* 25(2009), 887–896. [http:// dx.doi.org/10.1016/j.chb.2009.03.003](http://dx.doi.org/10.1016/j.chb.2009.03.003)

Kusumandari, R (2006). Faktor – faktor yang Mempengaruhi Kepuasan Mahasiswa Pascasarjana Universitas Muhammadiyah Surakarta. Tesis. Magister Manajemen Program Pascasarjana Universitas Muhammadiyah Surakarta.

Knight, P.T. (2002). Summative assessment in higher education: Practices in disarray. *Studies in Higher Education*, 27(3), 275–286.

Lee, Y. H. and Chen, T. L. (2006). A kano two-dimensional quality model in Taiwan's hot spring hotels service quality evaluation. *Journal of American Academy of Business: Cambridge, Hollywood*.

Lee, M.C. & Hwan, I.S., 2005, 'Relationships among service quality, customer satisfaction and profitability in the Taiwanese banking industry', *International Journal of Management* 22(4), 635–648.

Mai, L. (2005), "A Comparative Study between UK and US: The Student Satisfaction in Higher Education and its Influential Factors, *Journal of Marketing Management*, 21, 859-878

Mariani, E. Rancati, and N. Gordini. (2015) "Student satisfaction in higher education: empirical evidence from university of Milano-Bicocca," in *Proceedings of Toulon-Verona Conference Excellence in Services*, Palermo, Italy.

Mathew, J., Mehenna, Y., & George, S. (2005). An Educational Institution's Quest for service Quality: customers' Perspective. *Quality Assurance in Education*, 13(1), 66-82.

Nalini, M., Hema, Samuel, S. (2011). Importance-Performance Analysis to determine Service Quality of a Restaurant Service - An Empirical Study, 4, 52-57.

Navarro, M. M., Iglesias, P. M. and Torres, R. P. (2005), "A New Management Element for Universities: Satisfaction with the offered courses", *International Journal of Educational Management*, 19(6), 505-526.

Navarro M. M., Iglesias M. P. & Torres P. R. (2005b), Measuring customer satisfaction in summer courses. *Quality Assurance in Education*, 13(1), pp. 53-65

Nasser, R., Khoury, B. & Abouchedid, K., 2008. University students' knowledge of services and programs in relation to satisfaction. *Quality Assurance in Education*, 16(1), pp. 80-97.

Palacio, A. B., Menesses, G. D., and Perez Perez, P. J. (2002), "The configuration of the university image and its relationship with the satisfaction of students", *Journal of Educational Administration*, 40(5), 486-505.

Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-Qual: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–233. <https://doi.org/10.1177/1094670504271156>

Pansiri, J., & Mmereki, R. N. (2010). Using the Servqual Model to Evaluate the Impact of Public Service Reforms in the Provision of Primary Health Care in Botswana. [Article]. *Journal of African Business*, 11(2), 219-234

Poturak, M. (2014). Private Universities Service Quality and Student's Satisfaction. *Global Business and Economics Research Journal*, 3 (2), 33 – 49

Rashid, W. and Jusoff, H. (2009) "Service quality in health care setting" *International Journal of Health Care Quality Assurance*. Vol.22 No.5. PP 471-482.

Rashidi, N. & Moghadam, M. (2014). The effect of teachers' beliefs and sense of self-efficacy on Iranian EFL learners' satisfaction and academic achievement. *The Electronic Journal for English as a Second Language*, 18(2), 1-23. [http://www.tesl-ej.org/wordpress/issues/volume18/ej70/ej\\_70a3](http://www.tesl-ej.org/wordpress/issues/volume18/ej70/ej_70a3).

Sabarun (2020). The Effectiveness of Direct and Indirect Feedback on Learners' Writing Performance across Different Gender and Cultural Background at higher education. *Journal of Critical Reviews*, E-ISSN-2394-5125, Volume 7, Issue 5, page. 116- 124, DOI: <http://dx.doi.org/10.31838/jcr.07.05.19>

Schaal, S. (2010). Enriching traditional biology lectures digital concept maps and their influence on cognition and motivation. *World Journal on Educational Technology*, 2(1), 42-54. [http://www.world-education-center.org/index.php/wjet/article/view/162/pdf\\_9](http://www.world-education-center.org/index.php/wjet/article/view/162/pdf_9)

Sultan, P. & Wong, H. (2010). Performance Based Service Quality Model: An empirical study on Japanese universities. *Quality Assistance in Education* 18(2), 1266 – 143.

Strickland, J. S. and Butler, J. (2005). Establishing guidelines for determining appropriate courses for online delivery. *Journal of Interactive Online Learning*, 4(2).

Wade, M. A. (2000). Improving student performance and faculty evaluation: A transactional relationship strategy. Presented at the 2000 annual meeting of American Agricultural Economics Association (AAEA), Tampa, FL, July 30 – August 2, 2000

Waldrup, B. & Fisher, D. (2003). Identifying exemplary science teachers through their classroom interactions with students. *Learning Environments Research*, 6(2), 157-174. <http://dx.doi.org/10.1023/A:1024991019271>

Wiers-Jenssen, J., Stensaker, B., Grogard, J.B. (2002). Student Satisfaction: towards an empirical deconstruction of the concept. *Quality in Higher Education* vol. 8, 183-195

Thomas, E. H., Galambos, N., (2004). What satisfies students? Mining Student-Opinion Data with Regression and Decision Tree Analysis. *Research in Higher Education* vol. 45, 251-269.

Tuan, N. (2012). Effects of service quality and price fairness on student satisfaction. *International Journal of Business and Social Science*, 3(19), 132 – 150.

Zeithaml, V.; Bitner, M. (2002), *Services Marketing*, 3rd Edition (New York, McGraw Hill).

Yang, Z., Jun, M., & Peterson, R. T. (2004). Measuring customer perceived online service quality: Scale development and managerial implications. *International Journal of Operations & Production Management*, 24(11), 1149–1174. <https://doi.org/10.1108/01443570410563278>.

Yusoff, M., McLeay, F. & Woodruffe-Burto, H., 2015. Dimensions driving business student satisfaction in higher education. *Quality Assurance in Education*, pp. 86-104.

**Contact email:** [sabarunwhs@gmail.com](mailto:sabarunwhs@gmail.com)