

CASE STUDY ON FACTORS INFLUENCING STUDENTS' SATISFACTION WITH SERVICE QUALITY IN A MALAYSIAN PRIVATE UNIVERSITY

GANESH. R*

Senior Lecturer, Department of Marketing, Faculty of Business and Communications, INTI International University, Nilai, Malaysia.

Corresponding author Email: ganeshalr@gmail.com, ganesh.ramasamy@newinti.edu.my

KUAN BEE LING

UCSI International School, No7 Jalan Springhill 3/1 Park Residence, Bandar Springhill, 71010, Lukut, Negeri Sembilan, Malaysia. Email: beelynkuang@gmail.com

Abstract

In the concentration of satisfaction, developing a positive perception of the service quality offered is essential, which builds stronger relationships with students. This study attempts to investigate the possible factors that influence students' satisfaction in a private university in Kuala Lumpur, Malaysia. This study employed the performance variable of tangible, reliability, responsiveness, assurance, and empathy toward students' satisfaction. With the quantitative research approach, this study managed to collect students' perception information from 451 respondents who enrolled in a private university. The survey was managed with a 5-point Likert Scale questionnaire, and the data collected were analyzed with Statistical Package for Social Science (SPSS) version 21. The Pearson correlation coefficient was used to determine the relationship between the variables. The finding reveals that all five variables (tangibles, responsiveness, reliability, assurance, and empathy) have significant positive relationships with students' satisfaction. Arguably this study contributes to management decision-making in the aspect of having a better understanding of service quality will influence students' satisfaction. With these contexts, it is essential for private universities to improve on the required perceived service quality delivery for students' satisfaction and marketing return on investment.

Keywords: Service quality; tangibles; responsiveness; reliability; assurance; empathy; satisfaction

1. INTRODUCTION

Today's students are concerned with the university they have chosen providing a good standard of service (Shaari, 2014). The combination of an outstanding learning environment and student satisfaction with the services provided accounts for the majority of students' perceptions and enrollment decisions (Afshan, 2018; Wuhib, 2016).

Various studies have demonstrated that poor academic standards, improper facilities, and an unfixable campus environment are major factors that cause students to abandon a certain university (Loren & Nathan., 2014; Waly et al., 2017). In addition, investigation also have shown that a focused approach is needed to determine the satisfaction and dissatisfaction of students, particularly with regard to tangible facilities, teaching quality, academic support, and other related technical helpdesk issues like course selection issues and problems with online learning platforms. With that, service quality in the institution requires further analysis.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Service quality and student satisfaction

Higher education institutions must demonstrate their ability to draw in, keep, and develop positive relationships with their students (Latif et al., 2016). A strategy tool for measuring an organization's performance on quality and more accurately gauging customer satisfaction is essential (Santos, 2003). In this context service quality attributes can be viewed as externally based on customer experience. (Parasuraman, 2002). It is a judgement developed by the customers on the organization connecting to the overall service performance received. (Khodayari & Khodayari, 2011; Ganesh et al., 2016).

This has made the development of a brand image both on and off campus, service quality can and will influence satisfaction and student retention (Kayabasi & Celik, 2013; Hall et al., 2016). It allows for improved perceived service quality delivery and management to target, monitor, control, and enhance it for better organisation performance (Lee & Ryu, 2013). With these finding it is necessary to emphasize constructive student behavioural goals in order to provide competitive advantage facilities.

2.2 Tangible

Tangible factors reveals essential qualities (Parasuraman, 2002, Santos, 2003). Tangible factors involve, support service, the appropriate physical facilities, classroom, library and equipment. In addition other visible resources are also aligned with tangible items such as sports facilities and accommodation (Carter & Yeo, 2016).

Students will be influenced by a desirable learning environment and the physical resources provided when deciding to enroll and continue in a particular institution (Whang & Im, 2017). This shows that tangible components facilitate in gaining students' satisfaction and further reveals that by providing appropriate classrooms, a well-stocked library, and good campus maintenance will result in students satisfaction. Similar arguments are made to support the idea that when students' contentment is matched to the appearance of physical facilities, they may make a better decision (Bomrez & Rahman, 2018; Mwiya et al., 2017). Thus, the following hypothesis is formulated:

H₁: There is a significant relationship between tangible and students' satisfaction in the private university.

2.3 Reliability

Proper monitoring and committing the promised service for continual service development are vital in satisfying customer needs. Parasuraman et al. (1988) argued that the ability to provide the promised service dependably and properly as the conceived reliability. Similarly, Pollack (2008) connects result quality with reliability. Reliability can be considered as the guarantee for successful service. Creating students' satisfaction with reliability variable will provide a positive value for organization's reputation (Dong & Jeong (2007). Service promised with accuracy will equal to reliability influences satisfaction. When the students are satisfied with the provided reliable services consistently and precisely the revenues of the firm will have

favourable effect. Hence, reliability of operation performance during the service delivery process will affect customer satisfaction (Jain et al., 2011). This implies offering error-free and timely quality services becomes a crucial component in the education institution. Consequently, the following hypothesis is constructed to study the relationship between reliability and students satisfaction.

H₂: There is a significant relationship between reliability and students' satisfaction in the private university.

2.4 Responsiveness

Responsiveness is defined as a "willingness to help customers and provide prompt service". (Parasuraman et al., 1988). It manifests as prompt customer service in the form of feedback and timely contact, and it leads to a number of responsiveness effects for boosting sustainability and competitiveness (Rehman, 2012). If an educational institution fails to satisfy customer needs, its level of responsiveness will be rated as low (Negricea & Sharabi, 2013). To show quality in responsiveness and fulfilling customers' expectations swift and speedy services component are crucial (Veysel et al., 2018). Apart from that, better management skills and quick responses will increase student satisfaction (Abdullah, 2006). This leads to the development of the following hypothesis:

H₃: There is a significant relationship between responsiveness and students' satisfaction in the private university.

2.5 Assurance

Assurance is referred as build-in product knowledge and willingness of courtesy related to the ability to inspire confidence and trust (Parasuraman, 2002). It has been demonstrated that customer satisfaction is the foundation for building confidence and trust (Spreng et al, 1996). Assurance evaluates the precision of the service rendered and the kind of treatment received (Pollack, 2008), connects interaction quality on service excellence for business reputation. Basically, students receive quality assurance from the staff through projecting their service expertise and integrity (Nadiri et al., 2009). To improve students' perceptions of their experiences while studying at the educational institution, management needs to foster confidence and trust among the students and staff. With that, the relationship between satisfaction and assurance will flourish and marketing return on investment will occur (Hamann et al., 2017). Using these understanding, the following hypothesis is formed:

H₄: There is a significant relationship between assurance and students' satisfaction in the private university.

2.6 Empathy

Salinda & Fernando, (2017) argued that a deeper comprehension of customers' perceptions of service quality with particular focus on providing benefits to customers based on empathy is required for education institution. Empathy is a behaviour that includes providing appropriate advice, guidance, emotion, individual attention, and courtesy, and being aware of students' needs and feelings (Salinda & Fernando, 2017). Through empathy projection students are more

likely to have a pleasant educational experience and attain academic achievement. These will lead to satisfaction. Empathy can be implemented into educational institution service quality by active listening, understanding and acknowledging student concerns, creating a supportive environment, flexibility, and communication (Duque, 2014; Salinda & Fernando, 2017). Based on these finding empathy can improve students' educational experiences and increase satisfaction and retention. With that, the following hypothesis is developed:

H₅: There is a significant relationship between empathy and students' satisfaction in the private university.

3. RESEARCH METHOD

3.1 Sampling, data collection and instrument

According to the sample size suggested by Sekaran et al., (2016), this study uses the report based on the students' registration information of the university. There were approximately 10,000 registered students. Thus, the suggested minimum sample size was 370 respondents but, the study manages to collect data from 451 respondents.

This research was involved with volunteer self-selection sampling technique. First, the questionnaire link was posted to the university learning management system and also through 'we-chat' and WhatsApp application since it is the most common social networking tool used by the university students. The survey was exercised with google form. Base on the study hypotheses the instrument used was survey questionnaire with five-point Likert scale measurement: 1) Strongly Disagree; 2) Disagree; 3) Neutral; 4) Agree; 5) Strongly Agree. Prior validated scales from previous studies were utilized to construct the research instrument. The items of measurement; Tangible, Reliability, Responsiveness, Assurance, Empathy are adopted from Wilkins et al., 2012; Hasan et al., 2009; Teo et al., 2016. The data analysis was managed with fully completed 396 samples.

3.2 Pilot study

The pilot study for this research was conducted with a total of 50 selected respondents from the university. Using one of the most utilised indicators of internal consistency, which is Cronbach's alpha coefficient, the pilot study produced a score that was well above the minimum required alpha coefficient value of 0.70 for items used in the scale. Table 1 summarises the outcome of the pilot study.

Table 1: Cronbach's Alpha Coefficient for Pilot Study

Measure	No of Items	α
Tangible	10	0.912
Reliability	10	0.950
Responsiveness	10	0.937
Empathy	10	0.934
Assurance	10	0.931

The above finding shows that Cronbach's Alpha Coefficient higher than 0.900 (Zikmund,

2003) suggested that Cronbach's alpha which are greater than a score of 0.7 and less than 1.0 is acceptable. In addition, the corrected item-total correlation values were above 0.5, which indicates that each item had a high degree of correlation with the total score. This indicates that each item is measuring the same thing as the scale as a whole.

4. FINDINGS

In identifying the relationship of the variables and to show the essential relevance towards the research objective and hypotheses put forward, this empirical study was analysed with Pearson correlation. This study reveals the following information accordingly.

Table 2: Correlations

		Students Satisfaction
Tangible	Pearson Correlation	.770**
	Sig. (2-tailed)	.000
	N	451
Reliability	Pearson Correlation	.756**
	Sig. (2-tailed)	.000
	N	451
Responsiveness	Pearson Correlation	.797**
	Sig. (2-tailed)	.000
	N	451
Assurance	Pearson Correlation	.796**
	Sig. (2-tailed)	.000
	N	451
Empathy	Pearson Correlation	.813**
	Sig. (2-tailed)	.000
	N	451
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

The relationship between tangible and students' satisfaction (Table 2) reveals the correlations score on the relationship of the variables. Preliminary analyses were conducted to ensure there is no violation of the assumptions of normality, linearity and homoscedasticity. There is a positive correlation between tangible and students' satisfaction, $r = .770$, $n = 451$, $p < 0.01$. This relates to the high level of tangible factors associated with high level of students satisfaction.

The result implies that the better and higher the tangible factors utilized in the institution, the

higher the students' satisfaction expectations rate. As for the variance shared between the two variables, the coefficient of determination ($r^2 = 59.29$) indicates that tangible factors help to explain nearly 59% of the variance in students' satisfaction. This is a rather reasonable amount of variance. As such, this finding lends support to hypothesis 1. There is indeed a significant positive and linear relationship between tangible factors and students' satisfaction. The results suggest that the more tangible factors employed in the education institutions the possible and better students' satisfaction outcome will be achieved and vice versa.

The second variable, i.e., reliability was focused with hypothesis 2 and Table 2 highlights on the positive correlation between reliability and students' satisfaction, $r = .756$, $n = 451$, $p < 0.01$. This relates to the high level of reliability factors associated with high level of students satisfaction.

The result implies that the better and higher the reliability offered to the students in the education institution, the higher the students satisfaction rate. As for the variance shared between the two variables, the coefficient of determination ($r^2 = 57.15$) indicates that reliability helps to explain nearly 57% of the variance in students' satisfaction expectations. This is a reasonable amount of variance and reliability plays an essential role in students' motivation to stay in the institution. As such, this finding lends support to hypothesis 2. There is indeed a significant positive and linear relationship between reliability and students' satisfaction.

As for hypothesis 3, the responsiveness variable (Table 2) were analyzed and the finding reveals a strong, positive correlation between responsiveness and students' satisfaction, $r = .797$, $n = 451$, $p < 0.01$. This relates to the high level of responsiveness factors associated with the high level of students' satisfaction.

In the context of this study, the finding implies that the better and higher responsiveness factors utilized in the education institution, the higher the outcome of students' satisfaction rate. As for the variance shared between the two variables, the coefficient of determination ($r^2 = 63.52$) indicates that responsiveness factors help to explain 63% of the variance in students' satisfaction. This is a reasonable amount of variance. As such, this finding lends support to hypothesis 3. There is indeed a significant positive and linear relationship between responsiveness and students' satisfaction. The results suggest that in students satisfaction, with more responsiveness factors are exercised and the relationship created among students will be higher and the education institution students' satisfaction will be in favorable position which will lead to higher word of mouth and it will be an effective marketing point.

The forth hypothesis were investigated and Table 2 reveals a strong, positive correlation between assurance and students' satisfaction, $r = .796$, $n = 451$, $p < 0.01$. This relates to, with high level of assurance associated with the high level of students' satisfaction expectations.

The result finding for assurance and students' satisfaction implies that the higher perceived willingness of courtesy, confidence and trust can be shown, the higher the students satisfaction expectations rate. As for the variance shared between the two variables, the coefficient of determination ($r^2 = 63.36$) indicates that assurance helps to explain nearly 63% of the variance in students' satisfaction. This is a respectable amount of variance. As such, this finding lends

support to hypothesis 4. There is indeed a significant positive and linear relationship between assurance and students' satisfaction. The results suggest that in the cognitive behavior of students' satisfaction with more assurance are realized and put forward higher the satisfaction outcome will be achieved and vice versa.

As for hypothesis 5, Table 2 indicates the presence of students' satisfaction among the education institutions. There is a strong, positive correlation between empathy and students' satisfaction, $r = .813$, $n = 451$, $p < 0.01$. This relates to, with high level of empathy associated with the high level of students' satisfaction.

As for the variance shared between the two variables, the coefficient of determination ($r^2 = 66.10$) indicates that empathy helps to explain 66% of the variance in education institution students' satisfaction. This is a reasonable amount of variance. As such, this finding lends support to hypothesis 5. The results suggest that empathy will have an important implication in the student's satisfaction. Senior management should realize and pay attention to students' expectations in terms of empathy factors for higher level of students' satisfaction and this will eventually will increase the student's retention level.

5. DISCUSSION AND CONCLUSION

The focus of this study is to explore the certainty of students' satisfaction with the university. With the objectives and hypotheses presented, it shows that factors of tangible, reliability, assurance, responsiveness and empathy relates to students satisfaction.

Hypothesis H_1 to H_5 which reflects tangible, reliability, assurance, responsiveness, and empathy has a reasonable significant positive correlation with students' satisfaction. With that all the hypotheses are supported. This is consistent with the results found by Latif (2016) and Betty et al., (2017), in which the peripheral aspects and facilities would direct and indirect influence on students' satisfaction.

In addition, this reveals in total that most of the students are concerned with the immediate response of the service provided. If management is aware of students' expectations, they may be able to respond to students with a more realistic level and fulfilling students expectations. This indicates that the factors in tangible, reliability, assurance, responsiveness, and empathy can raise problems at any time in the institution and it is important to take corrective measures as soon as possible to avoid negative word of mouth. Apart from that, studies have shown that providing special attention will increase satisfaction significantly. This is in line with the previous findings such as Yavas et al.,1997; Anantha et al.,2012; and Rehman,2012.

The finding has shown the dynamic and relative importance on the need of quality-of-service delivery dimensions in the form of value proposition for the university performance. This information would be essential for the management to continuously provide and improve their physical resources. This shows that facilities of the university such as interactive learning space, lecture theatres, recital halls, commercial areas, classrooms, hostels, sports facilities, and multi-level parking facilities are the essential need for students. Overall, the result of these findings demonstrates that a better quality of service provided will lead

to a better level of students' satisfaction and it will provide avenue for developing marketing strategy plan.

Apart from the positive finding produced, there are some caveats regarding this research finding. First, this research variables were concentrated on students satisfaction and it is a case study. Research finding can also reveal actual behavior of students which was not put forward in the research framework and in addition there could be other variables influencing a student behavior for example economic and other psychological or socio-psychological factors. This leads to the factors that the assurance of all relevant contextual variables in equation can be incomplete. In addition, this research is managed with cross-sectional data. Longitudinal study with qualitative approach would be extremely useful for clear judgement on student perception based on the university performance because time comparison can reveal behavior modification and other uncertainty.

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Conflict of interest

The authors report no conflict of interest.

References

1. Abdullah, F. (2006). Measuring service quality in higher education: HEdPERF versus SERVPERF. *Marketing Intelligence & Planning*, 24(1), 31-47. <https://doi.org/10.1108/02634500610641543>.
2. Afshan, A (2018). Service Quality Dimensions and Students' Satisfaction: A study of Saudi Arabian Private Higher Education Institutions. *European Online Journal of Natural and Social Science*. Vol 7. No 2. pp. 275-284.
3. Anantha, R. A.A., & Abdul Ghani, A (2012). Service quality and students' satisfaction at higher learning institutions: A case study of Malaysia university competitiveness. *International Journal of Management and Strategy*, 03, 1-16.
4. Kayabasi, A. & Celik, B (2013). The Analysis of The Relationship Among Perceived Electronic Service Quality, Total Service Quality, and Total Satisfaction in Banking Sector. <https://www.researchgate.net/publication/259893940>.
5. Betty Ruth, Ngozi Iruloh, Chinelo Joy Ugwu (2017). Key Dimensions of Education Experience Associated with Overall Undergraduate Students' Satisfaction In Rivers State, Nigeria. *American Journal of Education Research*. Vol.5. No 1, 97-102.
6. Bomrez, H.A., & Rahman, N.R. (2018). Factors influencing the service quality on student satisfaction at management science university. *International Journal of Business Society*. 2 (8), 1-11 <https://doi.org/10.30566/ijo-bs/2018.281>.
7. Dong K. Y., & Jeong A. P. (2007). Perceived service quality: Analyzing relationships among employees, customers, and financial performance. *International Journal of Quality & Reliability Management*, 24(9), 908 – 926.
8. Duque, L. C. (2014). A framework for analyzing higher education performance: Students' satisfaction,

- perceived learning outcomes, and dropout intentions. *Total Quality Management & Business Excellence*, 25(1-2), 1-21. <https://doi.org/10.1080/14783363.2013.807677>.
9. Ganesh, R., Haslinda, A., & Santhi Raghavan (2016) Customer Satisfaction: An Interpretation of Theories with Disconfirmation Paradigm. *The International Journal of Business & Management*. Vol 4 Issue 12:269-273.
 10. Ganesh, R., Haslinda, A., & Santhi Raghavan (2018). Satisfaction evaluation of perceived performance service delivery quality dimensions in Malaysian private higher education institutions. *International Review of Management and Business Research*, 7(2), 338-357. [https://doi.org/10.30543/7-2\(2018\)-4](https://doi.org/10.30543/7-2(2018)-4).
 11. Hall, H., & Witek, L. (2016). Conditions, contemporary importance and prospects of higher education marketing on the example of Polish universities. *Procedia Economics and Finance*, 39, 206-211. [https://doi.org/10.1016/s2212-5671\(16\)30314-8](https://doi.org/10.1016/s2212-5671(16)30314-8).
 12. Hamann, K., Maldonado, D., Sánchez, M. d., & Pascual Ezama, D. (2017). Does professor-student trust improve motivation and perceived performance? *EDUCADE – Revista de Educación en Contabilidad, Finanzas y Administración de Empresas*, (8), 21-34. <https://doi.org/10.12795/educade.2017.i08.03>.
 13. Hasan, H. F., Ilias, A., Rahman, R. A., & Razak, M. Z. (2009). Service quality and student satisfaction: A case study at private higher education institutions. *International Business Research*, 1(3). <https://doi.org/10.5539/ibr.v1n3p163>.
 14. Jain, R., Sinha, G., Sahney, S (2011). Conceptualizing service quality in higher education *Asian Journal on Quality*, 12(3), 296-314 <https://doi.org/10.1108/15982681111187128>.
 15. Khodayari, F., & Khodayari, B. (2011) Service Quality in Higher Education, *Interdisciplinary Journal of Research in Business*, 1 (9), 40-43.
 16. Latif, L. A., Bahroom, R., & Khalil, M. A. (2016). Prioritizing services and facilities in a higher education institution. *Asian Association of Open Universities Journal*, 11(1), 64-77. <https://doi.org/10.1108/aaouj-07-2016-0020>.
 17. Lee, Y., & Ryu, S. (2013). A study on the effect of educational information system on internal factors of school organization. *Applied Mathematics & Information Sciences*, 7(6), 2279-2283. <https://doi.org/10.12785/amis/070618>.
 18. Loren, A. and Naltan, L., (2014) Determinant Factors Contributing to Student Choice in Selecting a University. *Journal of Education and Human Development* Vol. 3, No. 2, pp. 391-404. American Research Institute for Policy Development. http://jehdnet.com/journals/jehd/Vol_3_No_2_June_2014/22.pdf.
 19. Mwiya, B., Bwalya, J., Siachinji, B., Sikombe, S., Chanda, H., & Chawala, M. (2017). Higher education quality and student satisfaction nexus: Evidence from Zambia. *Creative Education*, 08(07), 1044-1068. <https://doi.org/10.4236/ce.2017.87076>.
 20. Nadiri, H., Kandampully, J., & Hussain, K. (2009). Students' perceptions of service quality in higher education. *Total Quality Management & Business Excellence*, 20(5), 523-535. <https://doi.org/10.1080/14783360902863713>.
 21. Negricea, C. Moshe Sharabi, (2013) "Managing and improving service quality in higher education", *International Journal of Quality and Service Sciences*, Vol. 5 Issue: 3, pp.309-320, <https://doi.org/10.1108/IJQSS-03-2013-0016>.
 22. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49 No. 3, pp. 41-50.

23. Parasuraman, A. Berry, L.L. & Zeithaml V.A. (1988). 'SEVQUAL: A Multiple – Item Scale for measuring consumer perception of service quality' file:///C:/Users/beely /Downloads/ PZBSERVQU ALJR 88.pdf.
24. Parasuraman, (2002) "Service quality and productivity: a synergistic perspective", *Managing Service Quality: An International Journal*, Vol. 12 Issue: 1, pp.6-9, [https:// doi. Org /10. 11 08 / 09 6 04520210415344](https://doi.org/10.1108/09604520210415344).
25. Pollack, B. (2008). The nature of the service quality and satisfaction relationship. *Managing Service Quality: An International Journal*, 18(6), 537-558. <https://doi.org/10.1108/09604520810920059>.
26. Rehman, A. A. (2012). Customer satisfaction and service quality in Islamic banking: A comparative study in Pakistan, United Arab Emirates, and United Kingdom. *Qualitative Research in Financial Markets*, 4(2/3), 165175.
27. Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, 13(3), 233-246. <https://doi.org/10.1108/09604520310476490>.
28. Salinda Weerasinghe & Fernando (2017). Students' Satisfaction in Higher Education Review. DOI:10.12691/education 5-5-9.
29. Sekaran, Umar, and Bougie, R. (2016). *Research Method for Business*. John Wiley & Sons Ltd. LCCN 2015051045 | ISBN 9781119165552.
30. Spreng, R. A., MacKenzie, S. B., & Olshavsky, R. W. (1996). A examination of the determinants of consumer satisfaction. *Journal of Marketing* 60, 15-32.
31. Stephen, C. & Amy, C.M., Yeo (2016). Students-as-customers' satisfaction, predictive retention with marketing implications: The case of Malaysian higher education business students. *International Journal of Educational Management*, Vol. 30 (5): 635-652. <https://doi.org/10.1108/IJEM-09-2014-0129>.
32. Teo, BC., Mohd Shukur, A. F. A. B., Nurnadirah, A. Z. (2016). Evaluation of Service Quality of Private Higher Education Using Service Improvement Matrix. *Procedia Social and Behavioral Sciences* Volume 224, 15, pp. 132-140.
33. Veysel, Y., Erkan, A., Hüseyin G., (2018) "Investigating the relationship between service quality dimensions, customer satisfaction and loyalty in Turkish banking sector: An application of structural equation model", *International Journal of Bank Marketing*, Vol. 36 Issue: 3, pp.423-440, <https://doi.org/10.1108/IJBM-02-2017-0037>
34. Waly AL-Bayati, A. S., & Jabwry AL-Qmaj, N. I. (2017). The impact of the quality of higher education service on customer satisfaction. *Journal of University of Human Development*, 3(2), pp.652-682. <https://doi.org/10.21928/juhd.v3n2y2017>.
35. Whang, C. H., & Im, H. (2017). Effect of Humanlikeness on satisfaction with the recommender system: Expectancy-disconfirmation model perspective. [https:// doi.Org /10.31274/itaa _proceedings-180814-376](https://doi.org/10.31274/itaa_proceedings-180814-376).
36. Wilkins, S., Stephens Balakrishnan, M., & Huisman, J. (2012). Student satisfaction and student perceptions of quality at international branch campuses in the United Arab Emirates. *Journal of Higher Education Policy and Management*, 34(5), 543-556. [https:// doi.org/10.1080/1360080x.2012.716003](https://doi.org/10.1080/1360080x.2012.716003).
37. Yavas, U., Bilgin, Z., & Shemwel, D. J., (1997). Service quality in the banking sector in an emerging economy: a consumer survey. *International Journal of Bank Marketing*, 15(6), 217 – 223.
38. Zikmund W. G. (2003). *Business Research Methods*. Series 7E ISBN 0030350840, 9780030350849 Busin.