

Documents

Amzat, I.H., Mohd Ali, H., Ibrahim, M.B., Othman, A., Bin Salleh, M.J., Alade Najimdeen, A.H.

Internationalization of Higher Education, University Quality Service, and International Students' Loyalty in Malaysia (2023) *SAGE Open*, 13 (4), .

DOI: 10.1177/21582440231210498

Kulliyyah of Education International Islamic University Malaysia, Selangor, Malaysia

Abstract

This quantitative study examines the effects of internationalization practices on university quality service and students' loyalty as perceived by international students in Malaysian public universities. A total of 1,575 international students from 10 different public universities in Malaysia and from different home countries participated in this study. Stratified sampling was used to select the international students by dividing the population into continents. Data were collected using questionnaires and analyzed using SmartPLS Structural Equation Model (PLS-SEM). The findings of PLS-SEM confirmed the effect of internationalization of higher education practice and university quality service on international student loyalty in Malaysia. It was also found the effect of internationalization of higher education practice on university quality service. The research reported here adds to the growing body of knowledge on foreign student satisfaction and perceptions of quality, internationalization of education, and student mobility. It also helps provide some insights for the education industry in Malaysia and beyond in their effort to gain global recognition in the field of academic teaching, research, and professional development. © The Author(s) 2023.

Author Keywords

customer Satisfaction; international education; internationalization policy; quality service; servQual; student loyalty; student mobility

Funding details

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research is Fundamental Research Grant Scheme (FRGS) funded by MOHE Malaysia. Therefore, we thank MOHE Malaysia for the research grant and all the international students that participated in this study.

References

- Ab Hamid, M.R., Sami, W., Mohmad Sidek, M.H.
(2017) *Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion*, 890 (1).
Journal of Physics Conference Series
- Akinbode, A.I., Al Shuhumia, S.R.A., Muhammed-Lawal, A.A.
(2017) *Internationalization of higher education: The pros and cons*, pp. 791-795.
Social Sciences Postgraduate International Seminar (SSPIS) 2017, School of Social Sciences, USM, Pulau Pinang, Malaysia, (., -,), /
- Ali, F., Zhou, Y., Hussain, K., Nair, P.K., Ragavan, N.A.
Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities
(2016) *Quality Assurance in Education*, 24 (1), pp. 70-94.
- Aljohani, O.
A comprehensive review of the major studies and theoretical models of student retention in higher education
(2016) *Higher Education Studies*, 6 (2), pp. 1-18.
- Altbach, P.G.
(1998) *Comparative higher education: Knowledge, the university, and development*, Ablex Publishing
- Altbach, P.G.
Higher education crosses borders
(2004) *Change*, 36 (2), pp. 18-24.

- Amzat, I.H., Najimdeen, A.H.A., Walters, L.M., Yusuf, B., Padilla-Valdez, N.
Determining Service Quality Indicators to recruit and retain international students in Malaysia Higher Education Institutions: Global Issues and local challenges
(2023) *Sustainability*, 15 (8), p. 6643.
- Aritonang, R.L.
Student loyalty modeling
(2014) *Market-Tržište*, 26 (1), pp. 77-91.
- (2018) *Recent development of international higher education in Malaysia: Regional reports*,
(APAIE
- (1993) *Guide to establishing international academic links*,
AUCC
- Awang, Z.
(2012) *A handbook on SEM: Structural equation modeling*,
2nd ed., Center of Graduate Studies, Kuala Lumpur, (Ed
- Azam, A.
Service quality dimensions and students' satisfaction: A study of Saudi Arabian private higher education institutions
(2018) *European Online Journal of Natural and Social Sciences*, 7 (2), pp. 275-284.
- Barclay, D., Higgings, C., Thompson, R.
The partial least squares (PLS) approach to casual modeling: Personal computer adoption and use as an illustration
(1995) *Technology Studies*, 2 (2), pp. 285-309.
- Cahyono, Y., Purwanto, A., Azizah, F.N., Wijoyo, H.
Impact of service quality, university image and students satisfaction towards student loyalty: Evidence from Indonesian private universities
(2020) *Journal of critical reviews*, 7 (19), pp. 3916-3924.
- Chandra, T., Hafni, L., Chandra, S., Purwati, A.A., Chandra, J.
The influence of service quality, university image on student satisfaction and student loyalty
(2019) *Benchmarking An International Journal*, 26 (5), pp. 1533-1549.
- Chen, W., Zhao, Q., Duan, H.
(2017) *Research on the key concepts and problems of service quality*, pp. 651-654.
2nd International Conference on Mechatronics Engineering and Information Technology, Atlantis Press, [Conference session]., (., –
- Chin, C.L., Yao, G.
Convergentvalidity
(2014) *Encyclopedia of quality of life and wellbeing research*,
Michalos A.C., (ed), Springer, (Ed
- Chong, P.U.
Internationalization of higher education: A literature review on competency approach
(2014) *International Journal of Asian Social Science*, 4 (2), pp. 258-273.
- Chuah, J.S.C., Singh, M.K.M.
International students' perspectives on the importance of obtaining social support from host national students
(2016) *International Education Studies*, 9 (4), pp. 132-140.

- de Wit, H.
(2002) *Internationalization of higher education in the United States of America and Europe: A historical, comparative, and conceptual analysis*,
Greenwood Press
- (2015) *The EAIE (European Association for International Education) Barometer*,
- Edrak, B., Nor, M.Z., Maamon, M.N.M.
Internationalization of higher education: Key factors attracting international students to study in private higher education institution in Malaysia
(2015) *Journal of Education and Social Policy*, 2 (4), pp. 183-190.
- Egron-Polak, E., Hudson, R.
(2014) *Internationalization of higher education: Growing expectations, fundamental values*,
IAU 4th Global Survey, IAU
- Farooq, M., Khalil-Ur-Rehman, F., Abdurrahman, D.T., Younas, W., Sajjad, S., Zreen, A.
Service quality analysis of private universities libraries in Malaysia in the era of transformative marketing
(2019) *International Journal for Quality Research*, 13 (2), pp. 269-284.
- Fornell, C., Larcker, D.F.
Evaluating structural equation models with unobservable variables and measurement error
(1981) *Journal of Marketing Research*, 18 (1), pp. 39-50.
- Gay, L.R., Diehl, P.L.
Research methods for business and management
(1992) *What sample size is 'enough' in internet survey research"? Interpersonal computing and technology: An electronic journal for the 21st century*,
Hill R., (ed), (Ed
- Giner, G.R., Peralt Rillo, A.
Structural equation modeling of co-creation and its influence on the student's satisfaction and loyalty towards university
(2016) *Journal of Computational and Applied Mathematics*, 291 (1), pp. 257-263.
- Götz, O., Liehr-Gobbers, K., Kraft, K.
Evaluation of structural equation models using the partial least squares (PLS) approach
(2010) *Handbook of partial least squares: Concepts, methods, and applications*, pp. 691-712.
Vinci V.E., Chin W.W., Henseler J., Want & W., (eds), Springer, (Eds.), (., –
- Govender, J., Veerasamy, D., Noel, D.
The service quality experience of international students: The case of a selected higher education institution in South Africa
(2014) *Mediterranean Journal of Social Sciences*, 5 (8), pp. 465-473.
- Grönroos, C.
A service quality model and its marketing implications
(1984) *European Journal of Marketing*, 18 (4), pp. 36-44.
- Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M.
When to use and how to report the results of PLS-SEM
(2019) *European Business Review*, 31 (1), pp. 2-24.
- Hashim, Y.A.
Determining sufficiency of sample size in Management Survey Research Activities

- (2010) *International Journal of Organisational Management and Entrepreneurship Development*, 6 (1), pp. 119-130.
- Heffernan, T., Wilkins, S., Butt, M.M.
Transnational higher education: The importance of institutional reputation, trust and student-university identification in international partnerships
(2018) *The International Journal of Educational Management*, 32 (2), pp. 227-240.
 - (2011) *Internationalisation Policy for Higher Education Malaysia*,
 - Hill, R.
What Sample Size is 'Enough' in Internet Survey Research"?
(1998) *Interpersonal Computing and Technology: An electronic Journal for the 21st Century*,
 - Hossain, M.J., Islam, M.A.
Understanding perceived service quality and satisfaction: A study of Dhaka University Library, Bangladesh
(2012) *Performance Measurement and Metrics*, 13 (3), pp. 169-182.
 - Hou, M.
Motivation factors of international students studying under the Trump administration
(2020) *Journal of Comparative and International Higher Education*, 11, pp. 118-120.
 - Huang, S.Z., He, X., Li, T., Chen, K.K.
A study of interactive style on students loyalty in science technology education: Moderating of management level
(2017) *EURASIA Journal of Mathematics Science and Technology Education*, 13 (8), pp. 4689-4700.
 - Husin, N.K.M., Romle, A.B., Udin, M.M., Shahuri, N.S.S., Yusof, M.S.M.
An examination of service quality in Malaysian public university
(2016) *World Applied Sciences Journal*, 34 (4), pp. 423-430.
 - Jibeen, T., Khan, M.A.
Internationalization of higher education: Potential benefits and costs
(2015) *International Journal of Evaluation and Research in Education (IJERE)*, 4 (4), pp. 196-199.
 - Joseph, A.A., Eleojo, A.P.
Applicability of sampling techniques in social sciences
(2019) *The Journal of Social Sciences*, 7 (4), pp. 101-108.
 - Khadka, K., Maharjan, S.
(2017) *Customer satisfaction and customer loyalty*,
Centria University of Allied Sciences Pietarsaari
 - Kiran, K., Diljit, S.
Antecedents of customer loyalty: Does service quality suffice?
(2017) *Malaysian Journal of Library & Information Science*, 16 (2), pp. 95-113.
 - Knight, J.
(2003) *Updated definition of internationalization*,
International higher education, n
 - Knight, J.
(2006) *Internationalization of higher education: New directions, new challenges. 2005 IAU global survey report*,
International Association of Universities (IAU)

- Levent, F.
The economic impacts of international student mobility in the globalization process
(2016) *Journal of Human Sciences*, 13 (3), pp. 3853-3870.
- (2019) *Education Ministry: Revenue from international students expected to grow to RM15.6b*,
- Mazzarol, T., Soutar, G.N.
Push-pull” factors influencing international student destination choice
(2002) *The International Journal of Educational Management*, 16 (2), pp. 82-90.
- (2011) *Internationalisation policy for higher education in Malaysia (2011)*,
- Moslehpour, M., Chau, K.Y., Zheng, J., Hanjani, A.N., Hoang, M.
The mediating role of international student satisfaction in the influence of higher education service quality on institutional reputation in Taiwan
(2020) *International Journal of Engineering Business Management*, 12, pp. 1-6.
- Munusamy, M.M., Hashim, A.
Internationalization of higher education in Malaysia: Insights from higher education administrators
(2021) *AEI Insights: An International Journal of Asia-Europe Relations*, 7 (1), pp. 19-35.
- Najimdeen, A.H.A., Amzat, I.H., Ali, H.B.M.
The impact of service quality dimensions on students’ satisfaction: A study of international students in Malaysian public universities
(2021) *The Journal of Educational Studies*, 9 (2), pp. 89-108.
- Najimdeen, A.H.A., Amzat, I.H., Badrasawi, K.J.
The effect of satisfaction on trust, social identification and loyalty amongst international students in Malaysian public universities
(2021) *Al Hikmah: International Journal of Islamic Studies and Human Sciences*, 4 (3), pp. 227-247.
- Nwana, O.C.
(1981) *Introduction of education research*,
Heinemann Educational Books Ltd
- (2015) *Education at glance 2015: OECD indicators*,
OECD Publishing
- Padlee, S.F., Yaakob, A.Y.
Service quality of Malaysian higher educational institutions: A conceptual framework
(2013) *International Journal of Business, Economics and Law*, 2 (1), pp. 60-69.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L.
A conceptual model of service quality and its implications for future research
(1985) *Journal of Marketing*, 49 (4), pp. 41-50.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L.
SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality
(1988) *Journal of Retailing*, 64, pp. 12-40.
- Qin, L., Zhang, J., Liang, X., Pan, Q.
R-squared of a latent interaction in structural equation model: A tutorial of using R
(2021) *International Journal of Statistics and Probability*, 10 (3), p. 69.
- Sajna, K.P., Mohamed Haneefa, K.
Service quality of libraries of Indian council of agricultural research institutes of

- Kerala, India**
(2018) *DESIDOC Journal of Library & Information Technology*, 38 (3), pp. 156-161.
- Sanderson, G.
A Foundation for the Internationalization of the Academic Self
(2008) *Journal of Studies in International Education*, 12 (3), pp. 276-307.
 - Sanders, J.S.
Comprehensive internationalization in the pursuit of 'World-Class' status: A cross-case analysis of Singapore's two flagship universities
(2020) *Higher Education Policy*, 33 (4), pp. 753-775.
 - Shekarchizadeh, A., Rasli, A., Hon-Tat, H.
SERVQUAL in Malaysian universities: Perspectives of international students
(2011) *Business Process Management Journal*, 17 (1), pp. 67-81.
 - Shepherd, S.J., Björk, A.
(2019) *Internationalization and customer satisfaction-A case study of a luxury knowledge-intensive soft service firm*,
Mälardalens University, [Master's thesis,]
 - Sirdeshmukh, D., Singh, J., Sabol, B.
Consumer trust, value, and loyalty in relational exchanges
(2002) *Journal of Marketing*, 66 (1), pp. 15-37.
 - Subrahmanyam, A.
Relationship between service quality, satisfaction, motivation and loyalty: A multi-dimensional perspective
(2017) *Quality Assurance in Education*, 25 (2), pp. 171-188.
 - Sultana, S., Momen, A.
International student satisfaction and loyalty: A comparative study of Malaysian and Australian higher learning institutions
(2017) *Journal of Intercultural Management*, 9 (1), pp. 101-142.
 - Sunarsih, E.S.
The role of service quality and institutional image in establishing relational commitment between private universities and the student
(2018) *Journal of Entrepreneurship Education*, 21 (3), pp. 1-13.
 - Taber, K.S.
The use of Cronbach's alpha when developing and reporting research instruments in science education
(2018) *Research in Science Education*, 48 (6), pp. 1273-1296.
 - Tinto, V.
Dropout from higher education: A theoretical synthesis of recent research
(1975) *Review of Educational Research*, 45 (1), pp. 89-125.
 - Tinto, V.
(1993) *Leaving college: Rethinking the causes and cures of student attrition*,
2nd ed., University of Chicago Press, (Ed
 - Wadhwa, R.
International student mobility: Theoretical context and empirical evidence from literature
(2018) *International student mobility and opportunities for growth in the global marketplace*, pp. 15-30.
Bista K., (ed), IGI Global, (Ed.), (., –

- Wan, C.D., Abdullah, D.
Internationalisation of Malaysian higher education: Policies, practices and the SDGs
(2021) *International Journal of Comparative Education and Development*, 23 (3), pp. 212-226.
- Wen, W., Hu, D.
The emergence of a regional education hub: Rationales of international students' choice of China as the study destination
(2019) *Journal of Studies in International Education*, 23 (3), pp. 303-325.
- Wu, H., Zha, Q.
A new typology for analyzing the direction of movement in higher education internationalization
(2018) *Journal of Studies in International Education*, 22 (3), pp. 259-277.
- Wulandari, D.A., Suryani, T.
Service quality and the impact on student's satisfaction loyalty to Master of Management program in Surabaya
(2017) *Jurnal Riset Ekonomi dan manajemen*, 17 (1), pp. 7-20.
- Yousapronpaiboon, K.
SERVQUAL: Measuring higher education service quality in Thailand
(2014) *Procedia - Social and Behavioral Sciences*, 116 (1), pp. 1088-1095.
- Zhai, K., Gao, X., Wang, G.
Factors for Chinese students choosing Australian higher education and motivation for returning: A systematic review
(2019) *Sage Open*, 9 (2).

Correspondence Address

Amzat I.H.; Kulliyah of Education International Islamic University MalaysiaMalaysia; email: ihussein@iiium.edu.my

Publisher: SAGE Publications Inc.

ISSN: 21582440

Language of Original Document: English

Abbreviated Source Title: SAGE Open

2-s2.0-85178237847

Document Type: Article

Publication Stage: Final

Source: Scopus

ELSEVIER

Copyright © 2023 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 RELX Group™