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The Effects of Brand Loyalty on the Overall Brand Equity in Public Universities in Malaysia

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Abstract

This study examines the overall brand equity of public higher education institutions (PHEIs) in Malaysia and its spill-over effects in affecting students' choices of public universities for their educational pursuits. Accordingly, a sample of 351 students representing six (6) Malaysian PHEIs in Klang Valley namely, UM, UKM, UPM, UIAM, UiTM and UPM had participated in the study using non-systematic sampling method. The Statistical Package for Social Sciences (SPSS) Version 20 was also applied to test the relationships between the constructs. It is evident from the findings that the university's overall brand equity plays a significant role in gauging student's decision in meeting expectation on the quality that could be offered as far as branding is concerned. The findings have shown that the overall brand equity of the respective university is very much influenced by the brand loyalty. On the whole, the recommendations and suggestions made in this study, have contributed substantially in the field of business management. In addition, it lays down important principles and guidelines for potential stakeholders and investors in investment, policy makers in crafting and designing policies relating to PHEIs, and potential students from abroad in particular, to make right options for PHEIs before pursuing studies in Malaysia.

Keywords: brand loyalty; overall brand equity; public higher education institutions (PHEIs)

1. Introduction

Global tertiary enrolment for students has become a new phenomenon as far as education is concerned (Mok, 2012). Akinyemi and Gbenu, (2020) also agreed that trends in education have impacted the increased numbers in students' enrolment over the world. It is a lucrative, competitive and worth a trillion-dollar education industry as far as worldwide students' enrolment is concerned (Goi, 2013; Varghese, 2013). In response, the government of Malaysia has embarked a plan to brand Malaysia as the world's Centre of Educational Excellence and to designate Malaysia as regional 'Education Hub' (Ministry of Education [MOE], 2015).

Currently, there have been tremendous changes in the institutions of higher education around the world; it is considered HEI and national prosperity (Rahman & Islam, 2016). The operators have felt the competitiveness of

HEI market, and this led to the deployment of varieties strategies to achieve higher student enrolment (Tremblay, Lalancette & Roseveare, 2012; MOE, 2015). Such marketing strategies as efforts via brand, for instance, are essential in strengthening the reputation of the institution and at the same time, generating additional revenues for the institution through the sale of branded and well-established services (Mourad, Maha, Ennew, Christine, Kortam & Wael, 2011; Karadag, 2016). With the increasing competition between companies in higher education sectors to attract new customers, educational institutions and universities are concentrating on meeting the expectations and needs of their clients, which are students (Thomas, 2011).

Overall, brand equity is posited to be affected by several elements of marketing efforts such as marketing mix, university reputation and country of origin (Murjan, 2012; Yusuff, 2015; Yusuff 2017). Assuming other things remain consistent; the dimensions of marketing effort element can create not only a favourable brand image for higher education but also can become key determinant to achieve desirable of overall brand equity.

The higher education industry needs to reform its strategies in building brand image and to further study on how university reputation ables to influence consumer choice through brand equity (Njuguna, Makau & Kerre, 2014). Hence, comprehensive study to managing brands and building brand equity in HEIs play a pivotal role to assist Malaysia to become one of the top leading educational hubs in the World and to becoming among the world preferred study destination because of its branding image (British Council, 2015).

Around the world, HEI applying marketing and branding to gain a competitive advantage as the marketing mix of services can be applied to HEI (Abbas, 2014). In Malaysia HEI environment, Zain, Jan and Ibrahim, (2013) found that students' selection of a university was mainly determined by types of academic programmes available, quality of education, administration standards, faculty qualification, and convenient and accessible location. Murjan (2012) and Yusoff (2015) suggested to include moderating factors that may have a significant influence on consumers' perception.

2. Literature Review

2.1 Brand Loyalty

Brand loyalty defined as the attachment that a customer has to a brand (Aaker, 1991), or it is referred to as the tendency to be loyal to a focal brand. In consumers favourable attitude towards a particular brand that leads to the consistent purchase of that brand. This indicates that the repurchase decision very much depends on trust and quality performance of the product or service (Chaudhuri & Holbrook, 2001) while Chen (2016) indicates that brand loyalty is the capability of a university brand to attract and keep a customer. Brand loyalty has been proclaimed to be the ultimate goal of marketing (Reichheld & Sasser, 1990; Ghelichkhan & Saeednia, 2015). Mourad et al. (2011) and Farjam and Hongyi (2015) suggested that understanding the brand is fundamental because it will assist in knowing and explaining brand equity as depicted by brand loyalty. Khan and Mahmood (2012) and Buil, Martinez and de Chernatony (2013), report about the existence of an essential positive relationship between brand loyalty and brand equity, noting that brand loyalty is the key to construct and to a specific explanation of brand equity. Besides, Tong and Hawley (2009) did a study on the Chinese market for sports. The results confirmed that the combination of brand association and brand loyalty is an impressive dimension of brand equity

2.2 Overall Brand Equity

According to Yoo, Donthu & Lee (2001), Overall Brand Equity been defined as the overall accumulated impact of interest in the brand through any marketing action (Severi & Ling, 2013). Brand equity is a multidimensional concept and a complex phenomenon. There are many classifications and dimensions proposed in the analysis of brand equity.

From a customers' point of view, brand equity is the value of the brand based on the consumers (Yoo & Donthu, 2001; Pinar, Trapp, Girard & Boyt, 2014). Among many models of brand equity in the literature, this study, used brand equity models built by Yoo and Donthu (2001), who tested the model to measure the component of ten (four-three and one dimensional) and validated for the three-dimensional model of brand awareness/brand associations,

perceived quality and brand loyalty. It uses this conceptual definition used by Yoo, Donthu & Lee (2001) and Erisher, Obert and Frank (2014) on the scale in the search for brand equity research in the service sector.

2.3 Brand Loyalty and Overall Brand Equity

Brand loyalty is one of the measurements of brand equity (Cravens, Percy & Prentice, 2000). Baldauf, Cravens and Binder (2003) propose that each of these three measures of brand equity is an excellent performance prediction. In a global environment, researchers report an effect of the influence of the dimensions of brand equity (Pappu, Quester & Cooksey, 2005, 2007; Yasin, Noor & Mohamad, 2007; Baldauf et al., 2009).

Chen and Tseng (2010), Khan and Mahmood (2012) and Buil et al. (2013), as well as Murtiasih, Sucherly and Siringoringo (2014) report about the existence of an essential positive relationship between brand loyalty and brand equity, noting that brand loyalty is the key to construct and to a specific explanation of brand equity. Also, Tong and Hawley (2009) did a study on the Chinese market for sports. The results confirmed that the combination of brand association and brand loyalty is an impressive dimension of brand equity.

According to Yoo et al., (2001), Severi and Ling (2013) and Nik Mat (2018) brand loyalty has the power to impact on customer decision to purchase the same service or product or brand and decline to change to other competitive brands. According to Saveri and Ling (2013), brand loyalty is a thought that institutions emphasize, while it may create or sustain a customers' benefaction over the long-term, thereby increases brand equity. Thus, brand loyalty is located in the heart of brand equity. Based on the literature review, the theoretical interrelationship among brand loyalty, and brand equity were proved, but there is a lack of study to evaluate the mediating relationship among these two constructs (Mourad et al., 2011; Yusuff, 2015). Therefore, the following hypothesis is proposed:

H1: There is a significant impact on brand loyalty and overall brand equity.

**INDEPENDENT
VARIABLE (IV)**

**BRAND
LOYALTY
(BL)**

H1

**DEPENDENT
VARIABLE (DV)**

**OVERALL BRAND
EQUITY
(OBE)**

Figure 1: Research Framework

3. Methodology

The target populations of this study are the registered students of public HEIs in Malaysia. These sources of data represent the accurate representation of public students in HEIs as an actual and real sample (Murjan, 2012; Yusuff, 2017; Nik Mat, 2018). The population of students of public HEIs in Malaysia as of 2020 that meets the criteria of MOE was 584,576 (as of Dec 31, 2020). However, for sampling in this study, the population is limited to students of public HEIs registered at the main campus in Kuala Lumpur and Selangor which are 202,837 students which are deemed to be sufficient for validity and generalization (Yusuff, 2017; Nik Mat 2018).

The study had distributed 1,920 questionnaires to six public universities within the Klang Valley (Kuala Lumpur and Selangor) via postal mail and was given three months to complete and return the questionnaire to the researcher. From 1,920 sets of questionnaires distributed, 444 samples (23.1%) were received, 416 (21.67%) samples proceed for outliers treatment after deleting of missing data (28) and only 351 (18.28%) sets can be used for further analysis (deleted 65 outliers). The response rate has in line with the traditional mail survey with an average response rate

among Malaysian respondents that is between 15 to 25 per cent (Yusuff, 2015, 2017; Nik Mat, 2018). The respondents were among public university students in Klang Valley (Kuala Lumpur and Selangor) registered in semester 2, 2019/2020 session.

Table 1: Population, Proportionate and Disproportionate Stratified Random Sampling, and Analysis of data treatment (Deduction of missing data and outliers)

Public University	Population	Number of Questionnaires distributed Proportionate Sampling	Sample Received (Disproportionate Sampling)	After Omitting of Missing Data	After Assessment of outliers
UM	35,885	340	66	61	59
UPM	28,587	271	76	71	62
IUM	29,254	277	96	91	65
UKM	30,844	292	58	53	49
UiTM	73,295	694	135	130	106
UPNM	4,972	47	13	10	10
	202,837	1,920	444	416	351

In summary of Table 1, stratified random sampling involves stratifying the elements into meaningful levels, and taking disproportionate samples from strata. This sampling size is more efficient than the sample random sampling design because, for the same sample size, each vital segment of the population is better represented, and more valuable and differentiated information is obtained for each group (Cavana, Delahaye & Sekaran, 2001). Missing data were deleted as there was a non-random pattern of the missing data in view (Tabachnick & Fidell, 2013; Yusuff, 2017; Nik Mat, 2018). There were sufficient samples for further analysis, even after the decision to drop the cases of the missing data. To ensure that the data was clean, frequency distribution and missing value analysis for each variable under study were conducted, and there were no missing data reported. The remaining 351 questionnaires were selected for the study and proceeded for further analysis.

The research measurements of the several variables in the present study were adapted from several published studies that had been validated to be reliable. Modifications were made in the wording of the items of questionnaires to meet the consistency among variables. The Brand Loyalty with 5 items and Overall Brand Equity with 4 items adapted from Yoo, Donthu and Lee (2001) of 1 to 5 Likert scales, where 1 - strongly disagree, 2 - disagree, 3- uncertain, 4- agree and 5- strongly agree. This research seeks to understand the relationship between brand loyalty and overall brand equity. Table 2 below depicts the research measurements used in this study.

Table 2: Description of Questionnaires

Variables	No of Items	Cronbach Alpha Value	Sources
Brand Loyalty	5	0.923	Yoo et al. (2001)
Overall Brand Equity	4	0.837	Yoo et al. (2001)

4. Results and Discussion

Multiple regression analysis was used to analyze the relationship between the study variables and to test the proposed hypotheses. To verify the adequacy of the model, the authors examined the regression assumptions by conducting the test of linearity, normality, homoscedasticity, and error independence. Besides, the data revealed that there is no issue with the multicollinearity. Table 3 presents a breakdown of the mean, standard deviation, and the correlations among the variables in the study.

Table 3: Descriptive statistics, correlations

	Mean	Standard Deviation	BL	OBE
Brand Loyalty (BL)	3.91	0.605	1	

Overall Brand Equity (OBE)	3.94	0.543	.662**	1
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** Correlation is significant at the 0.01 level (2-tailed)

Next, the authors tested the hypotheses to address the research objective. For hypotheses 1, researchers used multiple regression analysis. Before the hypotheses was tested, the overall test results shown in Table 4:

Table 4: Model Summary^b

R	R Square	Adjusted R Squared	Standard Error of Estimate
0.662 ^a	0.439	0.437	0.407

Predictor: Brand Loyalty

Dependent Variable: Overall Brand Equity

From the model summary, as described in table 4 above, the independent variable of brand loyalty shows that collectively, the model affects 44 percent of the variation (R square/(R2). This result indicates that the brand loyalty predicted 44 percent overall brand equity model as a set of predictor and the balance of 56 percent might be contributed by other factors that not incorporated in this study. The overall model, overall brand equity verifies that brand loyalty variable affects 44 percent of overall brand equity. The result of multiple regression for hypotheses 1 is as follows:

Table 5: Multiple Regression Analysis between Brand Loyalty and Overall Brand Equity

Variable	Beta Coefficient	T	Sig
Brand Loyalty	0.595	16.514	0.000

4.1 Independent Variable: Overall Brand Equity

The multiple regression analysis results as presented in Table 5, illustrate that the brand loyalty has a significant relationship with overall brand equity, with the P value is equal to 0.000. The beta coefficient (β) for this relationship is 0.595, and t value is 16.514. Therefore, H1 is accepted. Hence, the brand loyalty is a variable that influences the overall brand equity.

Table 6: Synchronization of research

Issue (Variables)	Problem (Objectives)	Hypotheses	Result	Conclusion/ Suggestion
Brand Loyalty & Overall Brand equity	To determine whether brand loyalty has an impact on overall brand equity	There is a significant impact that exists between brand loyalty and overall brand equity	Supported (p=0.00<0.05)	Impact (44%)

5. Conclusion

This study has stressed on a gap of theory and to fill up the concept of brand equity moderating by environment turbulence. Overall, brand equity (OBE) play an essential role in decision making as a risk reliever and giving consumers greater confidence, especially in choosing HEIs (Mourad et al., 2011; Vukasovič, 2015). Hashim et al. (2015) suggested that HEIs need to find all possible source of overall brand equity to ensure sustainability in its operation. However, Dennis, Papagiannidis, Alamanos and Bourlakis (2016) argued that HEIs in Malaysia took for granted on an understanding of OBE. This study provides additional support for this argument by demonstrating that not only marketing mix, university reputation and country of origin as a source of marketing effort that could affect the overall brand equity, but also that dimensions of brand equity mediate this effect and moderated by

environment turbulence.

Building brand equity through brand loyalty by offering students to gain preference, trust and loyalty to gain HEI distinctive competitive advantages. The result has shown that brand loyalty has a robust significant impact on overall brand equity. This explained, brand loyalty is an excellent predictor to the overall brand equity. In other word, students' perception towards HEIs to pursue their study is firmly based on brand loyalty. A study by Amegbe, Hanu & Atunwey (2016) supports the finding that brand loyalty represents consumers' perceptions and feelings about a product (service) and its performance and the real value of a strong brand is its ability to capture customer loyalty.

The implication of this study in terms of theoretical and managerial, from the theoretical perspective, the findings of this study provide some empirical support to the research framework. Through this study, the relationship between brand loyalty and overall brand equity was established. The findings of this study also strengthen and support Yoo et al. (2001) argument that brand loyalty has a positive relationship with brand equity and would lead to an improvement in overall brand equity.

For HEIs owner, the findings highlights the importance of brand loyalty and overall brand equity for university management in HEIs. This is because; HEIs owners task is to maximize university students' enrolment. This study is one of the few studies that investigate the effect of marketing efforts and overall brand equity, and therefore particularly relevant for HEIs context. It is high time that HEIs realize the importance of concentrating marketing effort to strengthening brand loyalty that could build overall brand equity. By building overall brand equity, HEIs can achieve a sustainable competitive advantage that leads to a higher enrolment of students. The policymakers can help to educate the owner of the HEIs by informing them about the importance of marketing efforts on building brand loyalty and brand equity in generating higher enrolment. Furthermore, the policymakers should develop instruments of overall brand equity by fostering marketing efforts in formulating favourable policies for HEIs for long-term growth.

As in most research, some issues have to be taken into account when considering the reliability, significance, and generalizability of the results obtained. There are several limitations to this study: firstly; this research utilized a cross-sectional sample of HEIs. Consequently, it may be that there is a lagged effect in some of the relationships. Unknown factors may confound time-dependent constructs such as public HEIs enrolment and the relationships between variables. Secondly, focusing on the sample of public HEIs also limits the generalizability of the findings in similar conditions. Therefore, the owner of the university needs to understand holistic services provided and offering academic quality in the students' enrolment of HEIs. Additional research is needed to provide new insight into other potential mediator or moderator that has a relationship with students' enrolment. Thirdly, future research should examine the impact of other efforts that can build long term brand equity and ultimately impact on HEIs students' enrolment. Finally, considering that the data gathered in this empirical effort were based on the subjective assessments that were based on respondents' perception of only public university in Klang Valley-critical informant, there is a likelihood that some of the responses are susceptible to various cognitive biases (e.g. position bias) and, thus, subsequent studies could utilize data gathering techniques involving multiple respondents in individual private HEIs.

In conclusion, the results of this study provided evidence of a healthy and positive relationship between brand loyalty and overall brand equity. The findings strengthened that the management of higher education institutions should focus on marketing and branding efforts to maintain its competitiveness and its relevancy. This study provides empirical evidence that serves as guidelines to encourage the HEIs industry on efforts to build equity acceptance through branding.

References

- Aaker, D.A (1991). *Building Strong Brands*, The Free Press, New York, NY
- Abbas, A. (2014). *Brand management of higher education institutions*.
- Amegbe, H., Hanu, C., & Atunwey, R. (2016). Customer-based Brand Equity and the Competitive Performance of Private Universities in Ghana. *Ekonomika a Management*, (3).
- Akinyemi, I. A., & Gbenu, J. B. (2020). Student enrolment, global utilisation rate and academic performance in public tertiary institutions in Lagos State, Nigeria. *UNIZIK Journal of Educational Management and Policy*, 4(1), 80-90.
- Baldauf, A., Cravens, K. S., & Binder, G. (2003). Performance consequences of brand equity management: Evidence from organizations in the value chain. *The Journal of Product and Brand Management*, 12(4/5), 220-236.
- Baldauf, A., Cravens, K.S., Diamantopoulos, A. & Zeugner-Roth, K. P. (2009). The impact of product-country image and marketing efforts on

- retailer-perceived brand equity: An empirical analysis. *Journal of Retailing*, 85(4), 437-452.
- Buil, I., Martínez, E., & de Chernatony, L. (2013). The influence of brand equity on consumer responses. *Journal of consumer marketing*, 30(1), 62-74.
- Cavana, R.Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied Business Research, Qualitative and Quantitative Methods*. Milton, Australia: Wiley.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of Marketing*, 65(2), 81-93.
- Chen, C. T. (2016). The Investigation on Brand Image of University Education and Students' Word-Of-Mouth Behavior. *Higher Education Studies*, 6(4), 23.
- Chen, C., & Tseng, W. S. (2010). Exploring customer-based airline brand equity: Evidence from Taiwan. *Transportation Journal*, 49(1), 24-34.
- Council, B. (2015). The shape of things to come: higher education global trends and emerging opportunities to 2020: global edition.
- Cravens, D. W., & Piercy, N. F. (2013). *Strategic marketing*. New York: McGraw-Hill.
- Dennis, C., Papagiannidis, S., Alamanos, E., & Bourlakis, M. (2016). The role of brand attachment strength in higher education. *Journal of Business Research*, 69(8), 3049-3057.
- Erisher, W., Obert, H. H., & Frank, G. (2014). Brand reputation management within the higher education sector: A review of the literature on higher education brand reputation management. *International Research Journal of Marketing*, 2(1), 1-27.
- Farjam, S., & Hongyi, X. (2015). Reviewing the concept of brand equity and evaluating consumer-based brand equity (CBBE) models. *International Journal of Management Science and Business Administration*, 1(8), 14-29.
- Foo, C. C., Ismail, R., & Lim, H. E. (2016). Retaining international students for advanced degree in Malaysia: Quality matters. *Jurnal Ekonomi Malaysia*, 50(1), 133-144.
- Ghelichkhan, A., & Saeednia, H. (2015). The impact of marketing mix on brand equity and its relationship with the customer response and provide an appropriate model.
- Goi, M. T. (2013). Brand Identity, Brand Equity and Performance. Proceedings of 3rd Asia-pacific business research conference 25-26 February 2013, KL
- Hashim, N. A. B., Abdullateef, A. O., & Sarkindaji, B. D. (2015). The Moderating Influence of Trust on the Relationship between Institutional Image/Reputation, Perceived Value on Student Loyalty in Higher Education Institution. *International Review of Management and Marketing*, 5(3), 122-128.
- Karadag, N. (2016). Examining the Branding of Turkish Universities in the Context of Socioeconomic Development of Their Cities. *International Journal of Higher Education*, 5(4), 173.
- Khan, M. A., & Mahmood, Z. (2012). Impact of brand loyalty factors on brand equity. *International Journal of Academic Research*, 4(1), 33-37
- Ministry of Education (MOE) (2015). *Malaysia Education Blueprint 2015-2025* (Higher Education)
- Mok, K. H. (2012). The rise of transnational higher education in Asia: Student mobility and studying experiences in Singapore and Malaysia. *Higher Education Policy*, 25(2), 225-241.
- Mourad, Maha, Ennew, Christine, Kortam & Wael, (2011). "Brand Equity in Higher Education", *Marketing Intelligence and Planning*, 29(4), 403-420.
- Murjan, A. (2012). *The influence of Market Orientation, Innovation and Brand Equity on SME Performance*. Unpublished Doctoral (DBA) dissertation. Universiti Utara Malaysia Universiti Utara Malaysia
- Murtiasih, S., Sucherly, S., & Siringoringo, H. (2014). Impact of country of origin and word of mouth on brand equity. *Marketing Intelligence & Planning*.
- Nik Mat, N. H. (2018). *Brand Equity Dimensions and Moderating Effects On The Overall Brand Equity Of Public Universities In Malaysia*. Unpublished PhD Thesis. Universiti Kuala Lumpur (UniKL) Malaysia, 2018.
- juguna, R. K., Makau, M. S., & Kerre, F. P. (2014). The Moderating Effect of Industrial Context on The Relationship Between Brand Equity and Consumer Choice In Branded Bottled Water Nairobi, Kenya. *European Scientific Journal*, 10(4).
- Pappu, R., Quester, G. P., & Cooksey, W.R. (2005). Consumer-based brand equity: improving the measurement-empirical evidence, *The Journal of Product and Brand Management*. 14(2/3), 143-154.
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. (2014). Utilizing the brand ecosystem framework in designing brand strategies for higher education. *International Journal of Education Management*, 25(7), 724-734
- Rahman, M., & Islam, R. (2016). Selection of Institution of Higher Learning for Study Abroad: A Malaysian Case Study.
- Reichheld, F., & Sasser, W. E. Jr. (1990). "Zero Defections: Quality Comes to Services," *Harvard Business Review*, 68 (September/October). 105-11.
- Severi, E. and Ling, K.C. (2013). The Mediating Effects of Brand Association, Brand Loyalty, Brand Image and Perceived Quality on Brand Equity. *Asian Social Science*, 9, 3, 125-136
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6th Edn.). USA: Pearson Education.
- Thomas, S. (2011). What drives student loyalty in universities: An empirical model from India. *International Business Research*, 4(2), 183.
- Tong, X., & Hawley, J. M. (2009). Creating brand equity in the Chinese clothing market. *Journal of Fashion Marketing and Management*, 13(4), 566-58.
- Tremblay, K., Lalancette, D., & Roseveare, D. (2012). Assessment of higher education learning outcomes, AHELO. Feasibility Study report, Design and implementation, 1
- Varghese, N. V. (2013). Globalization and higher education: Changing trends in cross border education. *Analytical Reports in International Education*, 5(1), 7-20.
- Vukasović, T. (2015). Managing Consumer-Based Brand Equity in Higher Education. *International Research Journal*, 13(1), 75-90.
- Yasin, N. M., Noor, M. N., & Mohamad, O. (2007). Does the image of country-of-origin matter to brand equity? *Journal of Product & Brand Management*, 16(1), 38-48. <http://dx.doi.org/10.1108/10610420710731142>
- Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2(1), 31-46.
- Yoo, B., Donthu, N., & Lee, S. (2001). "An Examination of Selected Marketing Mix Elements and Brand Equity," *Journal of the Academy of Marketing Science*, 28(2): 195-212.
- Yusuff, A. S. (2017). *The influence of Country of origin and Marketing mix, on Overall halal brand equity*. Unpublished DBA theses from

Universiti Utara Malaysia.

Yusuff, A. S. (2015). *Mediating role of Brand Equity on the relationship between Marketing mix, Innovation and SME performance*. Unpublished PhD theses from Unkl Business School, Kuala Lumpur.

Zain, O. M., Jan, M. T., & Ibrahim, A. B. (2013). Factors influencing students' decisions in choosing private institutions of higher education in Malaysia: a structural equation modelling approach. *Asian Academy of Management Journal*, 18(1), 75-90.