

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**DETERMINANTS OF BRAND LOYALTY IN PUBLIC  
HIGHER EDUCATION INSTITUTIONS IN  
MALAYSIA: THE MEDIATING ROLE OF  
EMOTIONAL BRAND ATTACHMENT**

**MONA FAIRUZ BT RAMLI**



**UUM**  
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY  
UNIVERSITI UTARA MALAYSIA  
MAY 2016**

**DETERMINANTS OF BRAND LOYALTY IN PUBLIC  
HIGHER EDUCATION INSTITUTIONS IN MALAYSIA:  
THE MEDIATING ROLE OF EMOTIONAL BRAND  
ATTACHMENT**

**By**

**MONA FAIRUZ BT RAMLI**



**UUM**  
Universiti Utara Malaysia

**Thesis submitted to**  
School of Business Management,  
Universiti Utara Malaysia  
In Fulfillment of requirement for the Degree of Doctor of  
Philosophy



**Pusat Pengajian Pengurusan Perniagaan**  
(School of Business Management)

**Kolej Perniagaan**  
(College of Business)

**Universiti Utara Malaysia**

**PERAKUAN KERJA TESIS / DISERTASI**  
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa  
(We, the undersigned, certify that)

**MONA FAIRUZ RAMLI**

calon untuk Ijazah

**DOCTOR OF PHILOSOPHY**

(candidate for the degree of)

telah mengemukakan tesis / disertasi yang bertajuk:

(has presented his/her thesis / dissertation of the following title):

**DETERMINANTS OF BRAND LOYALTY IN PUBLIC HIGHER EDUCATION INSTITUTIONS IN MALAYSIA:  
THE MEDIATING ROLE OF EMOTIONAL BRAND ATTACHMENT**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.  
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:

**17 Mei 2016.**

(That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:

**17 May 2016.**

Pengerusi Viva  
(Chairman for Viva)

: **Prof. Madya Dr. Selvan Perumal**

Tandatangan  
(Signature)

Pemeriksa Luar  
(External Examiner)

: **Prof. Dr. Maznah Wan Omar**

Tandatangan  
(Signature)

Pemeriksa Dalam  
(Internal Examiner)

: **Dr. Hasnizam Shaari**

Tandatangan  
(Signature)

Tarikh: **17 Mei 2016**  
(Date)

Nama Nama Pelajar  
(Name of Student) : **Mona Fairuz Ramli**


Tajuk Tesis / Disertasi  
(Title of the Thesis / Dissertation) : **Determinants of Brand Loyalty in Public Higher Education Institutions in Malaysia: The Mediating Role of Emotional Brand Attachment**

Program Pengajian  
(Programme of Study) : **Doctor of Philosophy**

Nama Penyelia/Penyelia-penyelia  
(Name of Supervisor/Supervisors) : **Prof. Madya Dr. Abdul Rahim Othman**

  
Tandatangan

Nama Penyelia/Penyelia-penyelia  
(Name of Supervisor/Supervisors) : **Prof. Madya Dr. Salniza Md. Salleh**

  
Tandatangan



**UUM**  
Universiti Utara Malaysia

## PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a postgraduate degree from University Utara Malaysia (UUM), I agree that the University Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of School Business Management. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to University Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in Whole or in part, should be addressed to:

Dean of School of Business Management  
Universiti Utara Malaysia  
06010 UUM Sintok



## ABSTRACT

Globalization has created countless opportunity and challenges for Malaysia Higher Education's Institutions. In order to be competitive, these institutions need to adopt innovative ways of branding their institutions. One such strategy is by understanding and recognizing the new affective determinants of brand loyalty among international students along with other variables. Hence, the main objective of this study was to examine the relationship between university image, perceived teaching quality, acculturation, self-efficacy, emotional brand attachment and brand loyalty. This study also aimed to discover mediating effect of emotional brand attachment on the relationship between university images, perceived teaching quality, acculturation, self-efficacy, and brand loyalty. This study was developed based on Stimulus-Organism-Response (S-O-R) theory. The proportionate random sampling technique was applied to identify the number of respondents. 565 questionnaires were sent out through a survey method to the respondents which consist of three categories of public higher education in Malaysia. A total of 405 useable questionnaires was returned for further analysis using the Structural Equation Modeling (SEM). The results of this study indicated that perceived teaching quality and emotional brand attachment have a direct effect on brand loyalty. Whereas, University image, self-efficacy and acculturation have an insignificant direct effect on brand loyalty. Furthermore, the findings revealed that emotional brand attachment was found to significantly mediate the relationship between university image, perceived teaching quality, acculturation, self-efficacy and brand loyalty. In general, the findings of this study provided support on the importance of the affective component as a formation of the student brand loyalty. Finally, this study proposes several recommendations for future research.

**Keywords:** university image, perceived teaching quality, emotional brand attachment, brand loyalty

## ABSTRAK

Globalisasi telah mencipta banyak peluang dan ruang serta cabaran yang tidak terkira kepada Institusi Pengajian Tinggi (IPT) di Malaysia. Dalam usaha untuk menjadi kompetitif, institusi ini perlu mengamalkan cara penjenamaan yang berinovatif di institusi mereka. Antara strategi itu adalah dengan memahami dan mengiktiraf penentu baharu yang afektif sebagai penentu kesetiaan jenama yang berkesan dalam kalangan pelajar antarabangsa di samping pembolehubah lain. Objektif kajian adalah untuk mengkaji hubungan antara imej universiti, tanggapan kualiti pengajaran, pembudayaan, keberkesanan diri, pautan emosi jenama dan kesetiaan jenama. Kajian ini juga bertujuan untuk mencari kesan penyederhana pautan emosi jenama kepada hubungan antara imej universiti, tanggapan kualiti pengajaran, pembudayaan, keberkesanan diri, dan kesetiaan jenama. Kajian ini dibina berdasarkan teori Rangsangan-Organisma-Respons (S-O-R). Teknik persampelan rawak berkadar telah digunakan untuk mengenalpasti bilangan responden. Sebanyak 565 borang soal selidik telah dihantar kepada responden melalui kaedah tinjauan yang terdiri daripada tiga kategori institusi pengajian tinggi awam di Malaysia. Sebanyak 405 borang soal selidik telah dikembalikan serta diterima pakai untuk analisis selanjutnya menggunakan *Structural Equation Modeling* (SEM). Dapatan kajian ini menunjukkan bahawa tanggapan kualiti pengajaran dan pautan emosi jenama mempunyai kesan langsung ke atas kesetiaan jenama. Manakala, imej universiti, keberkesanan diri dan pembudayaan tidak mempunyai kesan langsung ke atas kesetiaan jenama. Hasil kajian menunjukkan pautan emosi jenama mempunyai kesan penyederhana antara imej universiti, tanggapan kualiti pengajaran, pembudayaan, keberkesanan diri dan kesetiaan jenama. Secara amnya, hasil kajian ini menyokong kepentingan komponen afektif sebagai pembentukan kepada kesetiaan jenama pelajar. Akhir sekali, kajian ini mengemukakan beberapa cadangan untuk kajian yang akan datang.

**Kata kunci:** imej universiti, tanggapan kualiti pengajaran, pautan emosi jenama, kesetiaan jenama.



## ACKNOWLEDGEMENT

Bismillahir Rahmanir Rahim.

‘In the Name of Allah, Most Gracious, Most Merciful’.

All the praise and gratitude belong to Allah and peace and Salam be upon His Messenger, Prophet Muhammad (pbuh).

All praise and sincere thanks to Allah SWT, for granting me the strength, wisdom, encourage and knowledge to complete this difficulty but wonderful journey. Without Allah’s love nothing is possible.

I would like to extend my gratitude and thanks to many individuals who have contributed significantly in this PhD endeavor.

I would like to express my deepest thanks to my two wonderful supervisors’, Associate Professor Dr. Rahim Othman and Associate Professor. Dr. Salniza Md Salleh, thank you for being great mentors to me. Your encouragement has been invaluable for me to grow as a capable researcher and I have had an ideal experience working with both of you. Thank you for your advice on career related issues as well.

To conclude, special thanks go to my family, especially, to my lovely mother and father, Romlah Hanafi and, Ramli Hussain for all of the sacrifices that you’ve made for me. All your prayer was what sustained me thus far. To my beloved son Ashraf Ali, thank you for always cheering me up when I needed and to my husband Jaafar Ali, thanks for all your love and being there for me every day. Last but not least, many thanks to friends and colleagues of University Utara Malaysia for their kind support and concern.

## TABLE OF CONTENT

	PAGE
TITLE PAGE	
CERTIFICATION OF THESIS	
PERMISSION TO USE	i
ABSTRAK	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	xi
LIST OF FIGURES	xiii
LIST OF APPENDICES	xiv
LIST OF ABBREVIATIONS	xiv

### CHAPTER ONE INTRODUCTION

1.0	Background of Study	1
1.1	Overview of Higher Education in Malaysia	3
1.2	Problem Statement	8
1.3	Research Question	17
1.4	Research Objective	18
1.5	Scope of Study	19
1.6	Significance of Study	19
1.7	Conceptual, Definitions	21
1.8	Organisation of Study	23

### CHAPTER TWO LITERATURE REVIEW

2.1	Introduction	24
2.1.1	Branding in Higher Education Institutions (HEIs)	24
2.2	Brand Loyalty	27
2.2.1	Operationalization of Loyalty	31
2.2.1.1	Behavioral Loyalty	32
2.2.1.2	Attitudinal Loyalty	33
2.2.1.3	Composite Loyalty	34
2.2.2	Brand loyalty in Higher Education	35
2.2.3	Antecedents of Loyalty	37
2.3	Underpinning Theory	40
2.3.1	S-O-R Theory	40
2.4	University Image	41
2.4.1	Conceptual of University Image	43
2.5	Perceived Quality	50
2.5.1	Definition and Conceptualization of Perceived Quality	55
2.5.2	Perceived Teaching Quality in Malaysia HEIs	61
2.6	Acculturation	63
2.7	Self-efficacy	71
2.8	Emotional Brand Attachment	74
2.8.1	Conceptualization of Emotional Brand Attachment	75

2.8.2	Emotional Brand Attachment as a Mediator	80
2.9	Propose Research Model	82
2.10	Hypothesis Development	83
2.10.1	University Image and Brand Loyalty	83
2.10.2	Perceived Teaching Quality and Brand Loyalty	84
2.10.3	Acculturation and Brand Loyalty	85
2.10.4	Self-Efficacy and Brand Loyalty	85
2.10.5	University Image and Emotional Brand Attachment	86
2.10.6	Perceived Teaching Quality and Emotional Brand Attachment	87
2.10.7	Acculturation and Emotional Brand Attachment	88
2.10.8	Self-Efficacy and Emotional Brand Attachment	89
2.10.9	Emotional Brand Attachment and Brand Loyalty	90
2.10.10	The Mediating Effect of emotional Brand Attachment	91
2.11	Chapter Summary	92
<b>CHAPTER THREE METHODOLOGY</b>		
3.1	Introduction	93
3.2	Research Methodology	93
3.2.1	Research Philosophy	94
3.3	Research Design	95
3.3.1	Research Method	97
3.4	Sampling	98
3.4.1	Population	99
3.4.2	Sample Size	103
3.4.3	Unit of Analysis	105
3.5	Data Collection Procedure	105
3.6	Questionnaire Design	107
3.6.1	Measures	109
3.6.1.1	Brand Loyalty	111
3.6.1.2	Emotional Brand Attachment	112
3.6.1.3	University Image	113
3.6.1.4	Perceived Teaching Quality	115
3.6.1.5	Acculturation	117
3.6.1.6	Self-efficacy	119
3.7	Pilot Study	120
3.8	Data Analysis	123
3.8.1	Data Screening	123
3.8.1.1	Missing Data	124
3.8.1.2	Outlier	125
3.8.1.3	Assessing Normality	126
3.8.1.4	Assessing Non-Response Bias	126
3.8.2	Assessing Common Method Bias	127

3.9	Scale Assessment	128
3.9.1	Validity	128
3.9.1.1	Content and Face Validity	128
3.9.1.2	Construct Validity	130
3.9.2	Reliability	132
3.10	Hypothesis Testing Procedures	132
3.11	Testing a Mediating Effect	133
3.12	PLS-SEM Model Evaluation	137
3.13	Summary of the Chapter	137
<b>CHAPTER FOUR DATA ANALYSIS AND FINDINGS</b>		
4.1	Introduction	138
4.2	Response Rate	138
4.3	Data Screening	139
4.3.1	Preliminary Checks	140
4.4	Normality Test	143
4.4.1	Detecting of outliers	144
4.5	Assessment of Non-Response Bias	145
4.6	Assessment of Common Method bias	146
4.7	Descriptive Statistics	147
4.8	Data Analysis and Result	151
4.9	Measurement Models	152
4.9.1	Exogenous Variable	152
4.9.1.1	Exogenous Variable Reflective Measurement Model	152
4.9.1.2	Exogenous Variable Formative Measurement Model	161
4.9.2	Endogenous Variable	168
4.10	Structural Model	173
4.10.1	Testing of Hypothesis University Image and Brand Loyalty	174
4.10.2	Testing of Hypothesis Perceived Teaching Quality and Brand Loyalty	175
4.10.3	Testing of Hypothesis Acculturation and Brand loyalty	176
4.10.4	Testing of Hypothesis Self-Efficacy and Brand Loyalty	177
4.10.5	Testing of Hypothesis University Image and Emotional Brand Attachment	177
4.10.6	Testing of Hypothesis Perceived Teaching Quality and Emotional Brand Attachment	179
4.10.7	Testing of Hypothesis Acculturation and Emotional Brand Attachment	180
4.10.8	Testing of Hypothesis Self-Efficacy and Emotional Brand Attachment	181
4.10.9	Testing of Hypothesis Emotional Brand Attachment and Brand loyalty	182
4.10.10	Tests for Mediator	183
4.10.11	Assessment of Coefficient of Determination ( $R^2$ Value)	192
4.10.12	Effect Size	194

4.10.13 Predictive Relevance of Model ( $Q^2$ )	195
4.11 Summary of the Findings	197
4.12 Chapter Summary	198
<b>CHAPTER FIVE DISCUSSION AND CONCLUSION</b>	
5.1 Introduction	199
5.2 Recapitulation of the Study's Findings	199
5.3 Discussion	200
5.3.1 University Image, Perceived Teaching Quality, Acculturation, Self-Efficacy and Brand Loyalty	200
5.3.1.1 Relationship between University Image and Brand Loyalty	200
5.3.1.2 Relationship between Perceived Teaching Quality and Brand Loyalty	202
5.3.1.3 Relationship between Acculturation and Brand Loyalty	204
5.3.1.4 Relationship between Self-Efficacy and Brand Loyalty	206
5.3.2 University Image, Perceived Teaching Quality, Acculturation, Self-Efficacy and Emotional Brand Attachment	208
5.3.2.1 Relationship between University Image and Emotional Brand Attachment	208
5.3.2.2 Relationship between Perceived Teaching Quality and Emotional Brand Attachment	211
5.3.2.3 Relationship between Acculturation and Emotional Brand Attachment	213
5.3.2.4 Relationship between Self-Efficacy and Emotional Brand Attachment	216
5.3.3 Emotional Brand Attachment and Brand Loyalty	218
5.3.3.1 Relationship between Emotional Brand Attachment and Brand Loyalty	218
5.3.4 The Mediating Effect of Emotional Brand Attachment on University Image, Perceived Teaching Quality, Acculturation, Self-Efficacy and Brand Loyalty	220
5.3.4.1 Emotional Brand Attachment Mediate the Relationship between University Image and Brand Loyalty	220
5.3.4.2 Emotional Brand Attachment Mediate the Relationship between Perceived Teaching Quality and Brand Loyalty	222
5.3.4.3 Emotional Brand Attachment Mediate the Relationship between Acculturation and Brand Loyalty	223
5.3.4.4 Emotional Brand Attachment Mediate the Relationship between Self-Efficacy and Brand Loyalty	226

5.4	Theoretical Contributions	227
5.5	Practical and Managerial Implication	230
5.6	Limitations and Future Research	233
5.7	Conclusion	234
	References	235
	Appendix	
	Table	
	Figure	



## LIST OF TABLES

Table		Page
Table 1.1	Enrollment of International Students in Public HEIs by Programs (2010-2015)	5
Table 1.2	Enrollment of International Student in Malaysia (2006-2015)	6
Table 2.1	Stages of Loyalty and Their Vulnerabilities	31
Table 2.2	Antecedents of Loyalty	38
Table 2.3	List of University Image Definition by Various Scholars	43
Table 2.4	Studies on University Image	46
Table 2.5	Summary of Studies on Perceived Quality	52
Table 2.6	Summary Tables of Services Quality Instrument	58
Table 2.7	Categories of Migrants	65
Table 2.8	Comparison Between Berry and Menzoda's Acculturation Studies	67
Table 3.1	Summary of International Student in Malaysia PubHEIs	101
Table 3.2	Distribution proportionate stratified random of International student in Malaysia PubHEIs	104
Table 3.3	The Measurement Scale Development	110
Table 3.4	Items on Brand Loyalty	112
Table 3.5	Items on Emotional Brand Attachment	113
Table 3.6	Items on University Image	114
Table 3.7	Items on Perceived Teaching Quality	116
Table 3.8	Items on Acculturation	117
Table 3.9	Items on Self-efficacy	119
Table 3.10	Demographic Profile of Participants	121
Table 3.11	Value of Cronbach's Alpha of Variables in the Pilot Test	122
Table 3.12	Comments of Group of Experts on Questionnaire Items	129
Table 3.13	Criteria and Acceptable Level of Convergent and Discriminant Validity	131
Table 4.1	Response Rate of the Questionnaire	139
Table 4.2	Reverse Coded Items	142
Table 4.3	Descriptive Statistics Assessing Outlier	145
Table 4.4	T- test of Non –Response Bias	146
Table 4.5	Profile of International Students	148
Table 4.6	Reliability of Reflective Constructs –First Order Constructs (Exogenous)	156
Table 4.7	Reliability of Reflective Constructs –Second Order Constructs (Exogenous)	158
Table 4.8	Second Order Reflective Indicators(Fornell-Lacker Criterion)	159
Table 4.9	Formative-First Order Outer Weight Significant Testing Result	167

## LIST OF TABLES

Table		Page
Table 4.10	Formative- Second Order Outer Weight Significant Testing Result	168
Table 4.11	Reliability of Reflective Constructs –First Order Constructs (Endogenous)	171
Table 4.12	Reliability of Reflective Constructs –Second Order Constructs (Endogenous)	172
Table 4.13	Collinearity Statistics	174
Table 4.14	Summary of the Result (Hypothesis 1) University Image and Brand loyalty	175
Table 4.15	Summary of the Results (Hypothesis 2) Perceived Teaching Quality and Brand loyalty	176
Table 4.16	Summary of the Results (Hypothesis 3) Acculturation and Brand loyalty	176
Table 4.17	Summary of the Result (hypothesis 4) Self-efficacy and Brand loyalty	177
Table 4.18	Summary of the Result (Hypothesis 5) University image and Emotional brand attachment	178
Table 4.19	Summary of the Result( Hypothesis 6) Perceived Teaching Quality and Emotional Brand Attachment)	179
Table 4.20	Summary of the Result (Hypothesis 7) Acculturation and Emotional brand attachment	180
Table 4.21	Summary of the Result (Hypothesis 8) Self-Efficacy and Emotional Brand Attachment	181
Table 4.22	Summary of the Result (hypothesis 9) Emotional Brand Attachment and Brand Loyalty	182
Table 4.23	Summary of the Result (hypothesis 10) Mediating Effects of Emotional Brand Attachment on The Relationship Between University Image and Brand Loyalty	186
Table 4.24	Summary of the Result (hypothesis 11) Mediating Effects of Emotional Brand Attachment on the Relationship Between Perceived Teaching Quality and Brand Loyalty	188
Table 4.25	Summary of the Result (hypothesis 12) Mediating Effects of Emotional Brand Attachment on the Relationship Between Acculturation and Brand Loyalty.	190
Table 4.26	Summary of the Result (hypothesis 13) Mediating Effects of Emotional Brand Attachment on the Relationship Between Self-Efficacy and Brand Loyalty.	192
Table 4.27	Endogenous Variable Coefficients of Determination	193
Table 4.28	Effect Size Calculation on Latent Variable Cohen’s (1988) Recommendation for the Model	194



Table 4.29	Predictive Relevance for Dependent Variable Relationship Q Square	195
Table 4.30	Construct Cross-Validated Redundancy	196
Table 4.31	Summary of the Hypothesis Testing	197



## LIST OF FIGURES

Figure		Page
Figure 2.1	Element of Two-Dimension Definition of Brand Loyalty	29
Figure 2.2	A Tri-Dimensional Approach to Brand Loyalty	30
Figure 2.3	Acculturation Dimensions and Acculturation Attitudes	67
Figure 2.4	Research Model of the Present Study	82
Figure 3.1	A Survey Process	97
Figure 3.2	Steps in Questionnaire Design	108
Figure 3.3	The Total Effect of X on Y (A) and a Simple Mediation Model (B)	134
Figure 3.4	Direct Effects of Independent Variables on a Dependent Variable	135
Figure 3.5	The Indirect Effect of the Independent Variable on the Dependent Variable with the Inclusion of Mediating Variable	135
Figure 4.1	Result of Normal Curve from Histogram Brand Loyalty	144
Figure 4.2	Measurement Models of Exogenous Variable	154
Figure 4.3	The Result of Measurement Model of UI,PTQ,ACC and SE	155
Figure 4.4	Formative Measurement Models	162
Figure 4.5	Convergent Validity Assessment of (covenant) –Formative Measurements Models	163
Figure 4.6	Convergent validity Assessment of (symbolic and external representation)–Formative Measurements Models	164
Figure 4.7	Convergent validity Assessment of (quiddity)–Formative Measurements Model	165
Figure 4.8	Measurement Model of Endogenous Variable	169
Figure 4.9	The result of Measurement model of Emotional Brand Attachment and Brand Loyalty	170
Figure 4.10	Mediating effects of Emotional Brand Attachment on University Image and Brand Loyalty.	185
Figure 4.11	Mediating Effects of Emotional Brand Attachment on Perceived Teaching Quality and Brand Loyalty.	187
Figure 4.12	Mediating Effects of Emotional Brand Attachment on the Relationship Between Acculturation and Brand Loyalty.	189
Figure 4.13	Mediating Effects of Emotional Brand Attachment on the Relationship between Self- Efficacy and Brand Loyalty	191

## LIST OF APPENDICES

Appendix I	General assessment of the questionnaire format
Appendix II	Survey cover letter
Appendix III	Support letter
Appendix IV	Questionnaire
Appendix V	Total variance explained
Appendix VI	Cross-loading

## LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CBSEM	Covariance-based Structural Equation Model
CEQ	Course Experience Questionnaire
CFA	Confirmatory Factor Analysis
CI	Confidence Interval
CR	Composite reliability
EFA	Exploratory Factor Analysis
HEIs	Higher Education Institutions
LV	Latent Variable
MOHE	Ministry of Higher Education
MVs	Manifest Variable
NHESP	National Higher Education Strategic Plan
NSS	National Student Survey
PLS	Partial Least Square
PubHEIs	Public Higher Education Institution
SEM	Structural Equation Model
VIF	Variance Indicator Factors

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Background of Study**

The higher education sector throughout the world is facing major changes caused by globalization, which leads to increased institutional competition (Grapragasem, Krishnan, & Mansor, 2014; Maringe & Gibbs, 2009; Mourad, Ennew, & Kortam, 2011). To survive, the higher education institutions have to adopt a new marketing strategy that focuses on branding (Chapleo, 2015). According to some scholars, branding becomes an important marketing activity because of the increased competition among universities nationally and globally (Belanger, Syed, & Mount, 2007; Sia, 2013; Vincent & Periyayya, 2013). In addition to that, branding also allows universities to add value to their academic and non-academic offerings, thus helping them develop a competitive advantage (Blanco Ramírez, 2016; Lowrie, 2007). This is consistent with the view that a branding strategy that adds value is increasingly important for universities, so they can position themselves well and compete globally (Drori, Delmestri, & Oberg, 2013; Jack, 2014; Watkins & Gonzenbach, 2013).

In the attempt to brand and differentiate themselves from competitors, universities focus on various aspects of product innovation, such as the learning environment, the instructors' quality, the offered program, and branding strategies (Aula, Tienari, & Wæraas, 2015; Belanger, Syed, & Mount, 2007; Gregory, 2012). Against the dynamic of the education landscape, Malaysia has been implementing many changes in the HE (Higher education) sector, as highlighted in the 2007 National Higher Education Strategic Plan (NHESP) (MOHE, 2007a). In the second stage of the NHESP (2011–2015), internationalisation has been earmarked as one of the seven strategic thrusts to boost the higher education sector so that the country's Higher Education Institutions (HEIs) will be globally become renowned by 2020 (Ismail, Aziz, & Abdullah, 2014; Siti Falindah Padlee & Azizul Yadi Yaacop, 2013; Tham, Mahmud, & Alavi, 2013).

Consistent with the NHESP, the Ministry of Higher Education (MOHE,2007a) implemented the New Education Plan Strategy (Jack, 2014; Tham et al., 2013). As part of the National Economic Plan (NEP), the strategy encourages any collaboration between the local HEIs and foreign university and college by offering twinning and mobility programs to attract international students to further their studies in Malaysia (Baharun, Awang, & Padlee, 2011; Jack, 2014; Tham, 2011; Tham et al., 2013).

Traditionally, the market for international students in higher education sector is dominated by the US, UK, Europe, and Australia (Goi, Goi, & Wong, 2014). Being a newcomer to the industry, Malaysia only captures about 2 percent of the world market

(Mosbah & Saleh, 2014; Sheila, 2014) . However, Malaysia has the advantage of being an Islamic country, and when paired with a low cost of education, it can be effective in attracting international students, thus possibly making it the educational hub in the region (Chen & Ling, 2012; Shahijan, Rezaei, & Preece, 2016). To realize such an aspiration, branding of local universities and uplifting the quality of the programs offered become crucial. It is argued that university branding is essential as it provides assurance to students regarding the services offered (Chapleo, 2015; Chapleo, Molesworth, R., & Nixon, 2010; Mourad et al., 2011). Furthermore, branding becomes more crucial with the emergence of private universities. Hence, marketing managers in Higher Education Institutions need to be cognizant of the important role branding plays in boosting the image of HEIs.



### **1.1 Overview of HEIs in Malaysia**

Currently, Malaysia has 20 public universities, 53 private universities, 21 university colleges, 403 colleges, and 6 foreign universities (Khairani & Razak, 2013). In Malaysia, there are three different types of public universities. Out of 20 public universities, five universities are accorded as research-based universities, four comprehensive universities, and the other eleven are focused universities (MOHE, 2015). Over the last two decades, Malaysia's international higher education sector has been experiencing consistent growth. The gross enrollment ratio in the higher education sector grew from 2 percent in 1965 to 32 percent in 2005 and to 38 percent in 2009 (Jamshidi, Arasteh, NavehEbrahim, Zeinabadi, & Rasmussen, 2012; Tham, 2010). However, recently the international

student enrollment has been fluctuating (MOHE, 2015). The figures in Table 1.1, reflect the inconsistent international student enrollment volume in Malaysia public higher education sector.

According to Global UNESCO Education (2010), Malaysia was the first choice destination for education by students from Middle east and South Africa in 2009. On average, about 70 percent of foreign students pursue their studies in private HEIs and the remaining 30 percent in public HEIs in the country (Tan & Goh, 2014). In 2011, there were more than 93,000 international students in Malaysia and they came from 150 countries around the world. It is estimated that by the end of 2015 and 2020, the figure would have risen to 150,000 and 200,000 students, respectively. However the actual number of the international students enrolled in 2015 was below expectation at 115,987. Table 1.1 shows the statistics of international student enrollment in public HEIs by program from 2010 to 2015 (MOHE, 2015). In 2011, the average growth was 6.3 percent, in 2012 it dropped to 1.43 percent and in 2013 jumped to 8.68 percent. 2014 saw a dip to -3.39 percent and in 2015 it increased to 4.08 percent. The overall picture is not encouraging and shows that international student enrollment in Malaysia's public higher education sector seems unstable. Thus, showing that Malaysia's higher education sector may still not be able to attract international students as expected.

Table 1.1  
*Enrollment of International Students in Public HEIs by Program (2010-2015)*

Year	Undergraduate	Masters	PhD/DBA	Others	Annual Total	Annual Growth (%)
2010	7,170	8,138	7,548	1,358	24,214	-
2011	7,159	8,076	9,420	1,200	25,855	6.3
2012	6,455	8,058	10,202	1,517	26,232	1.43
2013	7,208	8,247	11,372	1,999	28,826	8.68
2014	7,309	7,701	11,546	1,291	27,847	-3.39
2015	7,761	7,411	11,545	2,268	28,985	4.08

Source: Report from Ministry of Higher Education (2010-2015)

It is worth noting that there also seems to be a fluctuation in annual average growth of international student enrollment in public and private universities in the country. For example, Table 1.2 shows in 2011, the total average annual growth declined to -18.24 percent, while in the year 2012 it was 17.50 percent, and in 2013 it dropped to -0.89 percent. Following the same trend, in 2014 it increased to 24.21 percent and 2015, declined to 12.78 percent. This trend caused various speculations among the researchers and policy makers, and needs further investigation. Moreover, the Malaysia government expects to hit 200,000 international students enrolled by 2020, but the actual figure may be below expectation if this trend continues. It will be hard to retain and achieve that number of international students in such a short time. Considering the world's economic condition and current political situation, Malaysia needs to tackle this issue properly.



Table 1.2  
*International student enrollment in Malaysia (2006-2015)*

<b>Year</b>	<b>Public higher education</b>	<b>Private higher education</b>	<b>Annual Total</b>	<b>Average growth of international students (%)</b>
<b>2006</b>	7,941 (16.8% )	39,449 (83.2%)	47,390	-
<b>2007</b>	14,324(30.0%)	33,604 (70.0%)	47,928	1.13
<b>2008</b>	18,495(26.73%)	50,679(73.27%)	69,174	44.32
<b>2009</b>	22,456(27.80%)	58,294 (72.20%)	80,750	16.73
<b>2010</b>	24,214 (27.84%)	62,750 (72.16%)	86,964	7.70
<b>2011</b>	25,855 (36.36%)	45,246 (63.64%)	71,101	-18.24
<b>2012</b>	26,232 (31.50%)	57,306(68.50%)	83,538	17.50
<b>2013</b>	28,826 (34.81%)	53,971(65.19%)	82,797	-0.89
<b>2014</b>	27,847(27.07%)	74,996(72.92%)	102,843	24.21
<b>2015</b>	28,985(24.98%)	87,002(75.00%)	115,987	12.78

Sources: Ministry of Higher Education (MOHE, 2015)

The constant fluctuation seems to indicate that local higher education institutions are no longer able to attract international students and retaining international students appears to be problematic as well (Knight & Morshidi, 2011; Siti Falindah Padlee, Abdul Razak Kamaruddin, & Rohaizat Baharun, 2010). According to (Ali, Zhou, Hussain, Kumar, & Ragavan, 2016; de Macedo Bergamo, Giuliani, Zambaldi, & Ponchio, 2012; Mohamad & Awang, 2009; Paswan & Ganesh, 2009), the decline in number of new students currently enrolled will affect future student enrollment, and signals the issue of students' retention and loyalty.

Realizing the need to address the declining situation in the retaining number of international student loyalty, the Malaysian government allocates a bigger budget for the higher education sector every year in order to increase the number of international students' retention and loyalty. Notably from 2003 to 2014, there was an increase in total

expenditure by 13 percent per annum from MYR 4.3 billion to MYR 15.1 billion (MOHE, 2015), for development purposes. Nevertheless, in 2016, impact from the world economy has seen the Malaysia government reducing its budget for public higher education universities by 15.2 percent, or MYR 2.6 billion, from MYR 15.78 billion to 13.38 billion (Lim & Williams, 2016). The reducing of the government's budget forces public universities to survive with their own sources of finance. In other words, public universities have to be self-sustaining to maintain the day-to-day university operations. Examples of these financial sources are from students' tuition fees, income generating activities among academic staff such as research and development, copyright patents and consultancy are sources of funding for a university other than government funding (Ahmad, Soon, & Ting, 2015). Equally important, loyal students will help university's secured their financial sources.

Therefore, university branding is a crucial strategy to make the universities more competitive in the higher education industry (Chapleo, 2015; Hemsley-Brown & Oplatka, 2006). In Malaysia, interest in university branding has increased substantially in recent years due to its introduction in the NHESP 2010-2015 which emphasises how crucial branding is to HEIs. Besides, with branding the university can convey a meaningful message to the stakeholder (Watkins & Gonzenbach, 2013) about university image, reputation and quality of teaching to ensure student retention and loyalty (Helgesen & Nettet, 2007; Hennig-Thurau, Langer, & Hansen, 2001; Vander Schee, 2010).

Higher education is a major driver to the Malaysian national income. Actually, the register of international students contributed approximately MYR 2.6 billion in 2010 and 2014 MYR 4.2 billion to the Malaysia Gross Domestic Product (GDP) (MOHE, 2015). This trend seems to show that the income from this industry is crucial in order to boost up the stability of Malaysia's economy. Overall, the industry needs to be revamped in order to improve Malaysia GDP in the future. Furthermore, effort to retain existing or loyal students is cheaper than attracting new students (Reichheld, 1996; Reichheld & Teal, 2001).

## **1.2 Problem Statement**

All the issues mentioned above indicate that higher education in Malaysia is suffering, as the picture paints that enrollment is not encouraging and seems unstable. In order to sustain loyalty and retain the number of international students, understanding its drivers is crucial. Unfortunately, empirical studies on the impact factors such emotional brand attachment contributing to the loyalty in public higher education institutions, particularly in the Malaysian context, have been less than encouraging. More empirical work is needed to overcome this shortcoming. Since the effect of emotional brand attachment on brand loyalty receives less attention between antecedent and outcome loyalty, there is a need for further study (Ladhari, Souiden, & Ladhari, 2011; Perin, Sampaio, Simoes, & Polvora de Polvora, 2012; Theng So, Parsons, & Yap, 2013). A possible reason for the inadequacy of these models is that emotional attach to the university has not been

sufficiently considered in the study of a university student's loyalty (Perin et al., 2012), which is the other variable considered as a predictor to student loyalty, and several researchers have recently called for further investigation into this construct (Hongwei He Weichun Zhu, Gouran, & Kolo, 2016; Levy & Hino, 2016; Park, Macinnis, Priester, & Eisingerich, 2010; Vlachos, Theotokis, Pramadari, & Vrechopoulos, 2010). Therefore, it is important to understand the relationship between university image, perceived teaching quality, acculturation, self-efficacy and emotional brand attachment on brand loyalty. This assists to provide better understanding of any pertinent issue relating to international student brand loyalty.

Even though studies on brand loyalty have spanned the last three decades, further empirical work is needed to understand it especially in a higher education setting. This is because brand loyalty is a complex phenomenon that requires scholarly research to further unravel (Bandyopadhyay & Martell, 2007). A number of theoretical gaps still exist, awaiting future research to fill them.

Studies on brand loyalty have been conducted in various industries including tourism and hospitality (Heesup Han, Kim, & Kim, 2011; Prayag & Ryan, 2011), consumer goods (Kim & Zhao, 2014; Patwardhan & Balasubramanian, 2011; Sung & Kim, 2010; Vander Schee, 2010), and banking (Luiz & Matos, 2015; Sayani, 2015), to name a few. Rarely, is brand loyalty investigated within the context of higher education institutions. However, researchers have recently become increasingly interested in brand strategy practices in

HEIs (Idris & Whitfield, 2014; Dholakia & Acciardo, 2014) and integrating brand loyalty in to their research framework (Hennig-Thurau et al., 2001; Vander Schee, 2010).

Pertinent review of previous literature highlighted HEIs trend to develop long lasting relationships with international students, and striving toward student loyalty. For example Shah, (2009) and Schertzer and Schertzer, (2004) advocate the need to adopt relationship marketing coupled with the findings from corporate world to retain students by continuously meeting their satisfaction with services offered. The findings show that HEIs are seeking to improve their services as well as improve student loyalty and revenue. In the research by Vander Schee, (2010), he found that it is factors such as first-semester programming that lead to student satisfaction and increase in brand loyalty. Furthermore, the research conducted by (Ali et al., 2016; Sultan & Yin Wong, 2013), finds that perceived service quality within higher education sector may assist in the attracting and retaining of international students loyalty. As a result, from the previous literature show, in the field of education, notably, influenced by studies originating from other fields, an increase of researchers understanding the antecedent of student brand loyalty is crucial.

Brand loyalty is theorized to have two components: attitudinal and behavioral loyalty (Jacoby. & Chestnut, 1978; Jacoby & Kyner, 1973b). In their attempt to understand what makes an individual loyal to a brand, various factors and antecedents have been pursued. Some researchers have considered brand trust, brand awareness and perceived quality (Loureiro,2014); service brand evaluation, customer engagement and brand trust (So,

King, Sparks, & Wang, 2014); relational bond and brand relationship quality (Huang, Fang, Huang, Shao-Chi, & Fang, 2014); service quality and customer satisfaction (Shi, Prentice, & He, 2014); brand credibility, brand commitment and involvement (Kim, Morris, & Swait, 2008); and satisfaction, trust and commitment (Sahagun & Vasquez-Parraga, 2014), to name a few. Despite the diversity of factors considered, results on what factors influence both components of loyalty (attitudinal and behavioral loyalty) have been mixed (Worthington, 2009). Furthermore, in the context of higher education in Malaysia, very little research has looked into the formation of brand loyalty by considering both attitudinal and behavioral aspects (Chang, Jeng, & Hamid, 2013; Mohamad & Awang, 2009). A number of scholars argue that a meaningful measure of brand loyalty should consider both components (Baloglu, 2002; Chaudhuri & Holbrook, 2001; Jacoby & Kyner, 1973, 1978; Oliver, Rust, & Varki, 1996, 1997).

Several antecedents have been deliberated to foster long-lasting student relationship, in particular to promote student loyalty. The different predictors or antecedents of student brand loyalty components have been examined, a number of predictors have been consistently considered. They are, satisfaction, service quality, trust and commitment (Ali et al., 2016; Carvalho & de Oliveira Mota, 2010; Douglas, Douglas, & Barnes, 2006; Oyvinh Helgesen & Nettet, 2007; Rojas-Mendez, Vasquez-Parraga, Kara, & Cerda-Urrutia, 2009). However, to the best of the knowledge of the researcher, factors such as self-efficacy, university image, perceived teaching quality, acculturation and emotional attachment have not received attention as driver to the student brand loyalty in higher education in the Malaysian context.

In this study, self-efficacy is considered an important variable in the predicting of consumer intention as well as behavior. According to Yusliza, Mohd & Chelliah, (2010), self-efficacy in international students is an important factor as they encounter academic and cultural challenges when they come to study in Malaysia. Even though the number of studies involving international students in Malaysian HEIs continue to increase, there still remains a limited number of published studies examining this topic in Malaysia (Seonjin Seo, 2005; Yusliza, 2010). Unfortunately, however, research linking self-efficacy and branding are still scarce ( Park & John, 2014).

Image is something that is frequently considered in profit organizations, however less attention is paid to image in non-profit organizations like educational institutions. Therefore, this study attempts to fill the gaps by examining the impact university image has on brand loyalty through emotional brand attachment. Thus, Thompson, Rindfleisch, and Arsel, (2006) pointed out that a negative image is a warning sign that emotions can affect the sense of loyalty. However, this association has hardly been tested in the setting of higher education institutions.

Similarly, previous studies on perceived teaching quality and emotional attachment showed that these construct are crucial for student loyalty (de Macedo Bergamo et al., 2012; Giuliani, Zambaldi, & Ponchio, 2012; Hennig-Thurau et al., 2001; Jillapalli & Jillapalli, 2014b; Perin et al., 2012) which have conflicting results. Edvardsson, (2005) and Ladhari et al., (2011) point out that studies of perceived quality have mainly been on the cognitive dimension, however the understanding of consumers' emotions after

consumption have very limited research. Indeed, service experience may result in both cognitive and affective response, thus forming basic of customer delight and loyalty (Frank, Herbas Torrico, Enkawa, & Schvaneveldt, 2014; Pine & Gilmore, 1999). Thus, this study attempts to fill the research gap by investigating the link between perceived teaching quality and brand loyalty through emotional brand attachment.

In the same way, acculturation studies have paid much attention to university students (Yoon, Langrehr, & Ong, 2011), limited research has been conducted in examining the impact of acculturation on multiple ethnic groups in the Malaysia higher education context, with the exceptions of cultural value and practices (Schwartz, Vignoles, Brown, & Zagefka, 2014). Furthermore as indicated by previous researchers, more investigations need to be conducted on international student acculturation, especially in non-western countries (Ali et al., 2016; Mourad et al., 2011; Wan, Md Nordin, & Razali, 2013; Yusliza & Chelliah, 2010). Also, only a handful of studies on acculturation and brand loyalty are available (Podoshen, 2006, 2008; Segev, Ruvio, Shoham, & Velan, 2014; Uslu, Durmus, Tasmemir, Durmuş, & Taşdemir, 2013). This current study tries to fill the gaps by introducing the acculturation construct in examining student loyalty and branding.

Along this line, review of the literature indicates the role of emotions has lately been debated and contended among scholars in the literature of service marketing (Enrique Bigné, Mattila, & Andreu, 2008; Hosany, Prayag, Deesilatham, Cau evic, & Odeh, 2014; Ladhari et al., 2011; Walsh, Shiu, Hassan, Michaelidou, & Beatty, 2011). The pertinent



literature by Edvardsson, (2005) contended that the understanding of what affects customers' emotional reactions, during service encounters, and how this influences behavior, helps service providers to better manage their offerings. However, very little research considers emotional reaction, in their models of service experience evaluation of customer loyalty (Pine & Gilmore, 1999). Similarly, a study by Levy and Hino, (2015) in the banking industry shows that they has invested a lot of money in customer relationship management in order to build a unique sense of value, and generate emotional brand attachment to their customers. Other than, establishing a strong emotional connection with their customer. Hongwei He Weichun Zhu et al., (2016) and Levy and Hino, (2015) acknowledge that the emotional value of connectedness, passion and love could help in developing brand differentiation. Moreover, according to Aznur, Wasiuzzaman, and Musa, (2014, 2015) the influence of university quality on emotional attachment found in private higher education institution settings.

According to Japutra et al., (2014), emotional brand attachment is an important factor in enhancing brand commitment and brand loyalty. However, research evidence on the effect of emotional brand attachment has been mixed. While some found it enhances behavior (Ramkissoon, Graham Smith, & Weiler, 2013; Sui & Baloglu, 2003), others reported a negative effect (Hun et al., 2011). The inconsistent findings justify the need to investigate the antecedents of emotional brand attachment. In addition, the present study is different from previous ones as it is interested in examining the role of emotional attachment in mediating the relationship between its antecedents and outcome, i.e. brand loyalty. By introducing the role of emotions as a predictor to brand loyalty and its

mediating effect between predictor and brand loyalty, this implies the extent of effect that emotions have.

Review of literature indicates that emotional brand attachment received less attention as a mediator between the antecedents and outcomes of brand loyalty. So far, studies have considered satisfaction (Ladhari, 2009; Nettet & Helgesen, 2014; Yu & Dean, 2001; Nam, Ekinci, & Whyatt, 2011; Shi et al., 2014), trust (Ashraf, 2014; N Nguyen, Leclerc, & LeBlanc, 2013; Yieh, Chiao, & Chiu, 2007) and commitment (Sahagun & Vasquez-Parraga, 2014), in different contexts. A theoretical model of the mediating effect of emotional attachment has not been well developed, especially in the context of higher education branding. A mediating effect occurs when one chunk embodies the link of the independent variables to the mediator, and when another chunk embodies the link of the mediator to the independent variable (MacKinnon & Cox, 2012). In this current study, mediating effects emerge as an organism that come from environmental stimuli such as, university image, perceived quality, acculturation and self-efficacy, and predict the individual behavior. Integrating self-efficacy, perceived teaching quality, and acculturation in this model makes it unique and different from the existing models of brand loyalty in the previous studies. Undeniably, it is an achievement for the study to thoroughly examine the relationships between students and HEIs.

From the theoretical perspective, this study contributes in several ways to extending the literature on the formation of emotional brand attachment and its influence on students'

loyalty in higher education branding strengthened by using the theory of Stimulus-Organism-Response (S-O-R) (Mehrabian & Rusell, 1974; Namkung & Jang, 2010).

Given the gaps identified above, the present study wishes to contribute to the growing body of literature by investigating the factors purported to influence brand loyalty of HEIs, especially in the context of Malaysia. This study focuses on factors such as university image, perceived teaching quality, acculturation, self-efficacy, and emotional brand attachment in the context of international students' perception towards Malaysia public university service providers. In particular, the present study focuses on emotional brand attachment as a potential mediator in the relationship between a factor and brand loyalty. By understanding this relationship, the researcher intends to give relevant insight into student brand loyalty and its driver.

Furthermore, given that the Malaysian government has been very aggressive in developing, promoting and advertising local HEIs as potential study destinations, and in its aspiration to become the educational hub in the region this present study is timely. Also, this study can recommend appropriate marketing strategies to policy makers and university marketing managers to increase international student retention and loyalty.

### 1.3 Research Questions

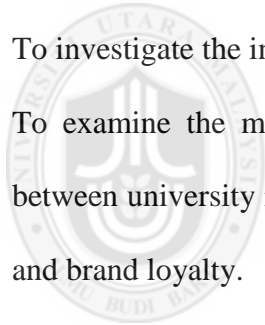
In the context of previous section research background and problem statement, the foremost interest of this research is “What is the impact of university image, perceived teaching quality, acculturation and self-efficacy on brand loyalty and does emotional brand attachment mediate that relationship?” Hence, this study attempts to answer four research questions:

1. Do factors such as university image, perceived teaching quality, acculturation, and self-efficacy influence brand loyalty?
2. Do factors such as university image, perceived teaching quality, acculturation, and self-efficacy influence emotional brand attachment?
3. Does emotional brand attachment affect students’ brand loyalty?
4. Does emotional brand attachment mediate university image, perceived teaching quality, acculturation, self-efficacy, and brand loyalty?

## 1.4 Research Objectives

The primary objective of this study is to examine the relationship between university image, perceived teaching quality, acculturation, self-efficacy, and brand loyalty, through the mediating effect of emotional brand attachment. Specifically, the present study intends to meet the following objectives:

1. To examine the influence of university image, perceived teaching quality, acculturation and self-efficacy on brand loyalty.
2. To examine the influence of university image, perceived teaching quality, acculturation and self-efficacy on emotional attachment.
3. To investigate the influence of emotional brand attachment on brand loyalty.
4. To examine the mediating effect of emotional attachment on the relationship between university image, perceived teaching quality, acculturation, self-efficacy, and brand loyalty.



UUM  
Universiti Utara Malaysia

## **1.5 Scope of Study**

This research is contextualized in a developing country, Malaysia, and focuses on the higher learning sector, which is a major contributor to the nation's economic growth. This research considers international students studying at 20 public higher education institutions in Malaysia. However, only six public universities out of twenty were selected from three categories of universities for this study, which are research (RUs), focus (FUs) and comprehensive university (CUs). The chosen universities are public higher education institutions, and not private higher education institutions because they differ in terms of admission and enrollment policies, facilities, education systems, quality of instructors, and customer service (Sia, 2013; Tham & Kam, 2008; Wagner & Fard, 2009).

## **1.6 Significance of Study**

This study has theoretical and practical significance. Using Stimulus- Organism- Response (S-O-R) by (Jang & Namkung, 2009; Mehrabian & Rusell, 1974) to underpin the research, the present study offers theoretical insight, especially into the role of emotional brand attachment in mediating the effect of university image, perceived teaching quality, acculturation, and self-efficacy on brand loyalty. International students are said to make informed decisions with respect to place of study (Jong, Schnusenber, & Goel, 2009; Mara, Cassill, & Chapell, 2014). However, to what extent the students' perception is determined by their emotional attachment toward the former university and

what factors are responsible in developing their emotional attachment, are theoretical issues that are examined in this study.

So, by using this theory, a researcher will be able to understand the environmental stimuli (objective and social psychology stimuli) and how it will shape the emotional brand attachment in higher education branding and turn it in to students' loyalty to the university brand. The consideration of emotional attachment as a mediator suggests that individuals do not necessarily make decisions rationally, but may be influenced by environmental stimuli. However, this study also aims to put forward the idea that an organism also involves emotive evaluations, which can predict behavioral outcomes. While the present study does not wish to undermine the role of cognition in an organism as a process between stimuli and final action, it wishes to underscore the role of affect and emotions in the process.

The role of emotion in the process has significant implications for educators, decision makers, and policy makers in the higher education context. To appeal to students' emotions and their attachment to the university, the university management should consider relevant ways and measures to enhance the university's image, the quality of teaching, the acculturation process, and the students' self-efficacy. Specific attention should be given to develop appropriate branding and marketing strategies that appeal to the potential students' emotions, hoping that such an effort will translate into student retention and brand loyalty.

## **1.7 Conceptual, Definitions**

This section discusses the operational definitions of key variables used in the study.

### **Brand Loyalty**

Brand loyalty is operationalized and encompasses both attitudinal and behavioral loyalty component. Students' who are loyal and choose to remain in the same course or to be loyal to the same university tend to reflect this in their recommending of the university to others, positive WOM, giving their cooperation to the university, and that they intend to continue their education at the same faculty in the future (Baloglu, 2002).

### **Emotional brand attachment**

Emotional attachment is the indicator of an emotion-laden relationship between consumer and a consumption object, such as a special possession, place, or brand. In short, emotional attachment is operationalized in this current study as emotional attachment between a consumer (student) and brand (i.e. university) (Thomson, MacInnis, & Whan Park, 2005).



### **University image**

This study defined university image as the sum of a student beliefs or impressions that a person has on an object (in this case, university) Kotler & Fox, 1995; Nguyen & LeBlanc, 2001.

### **Perceived quality**

In this study, perceived quality is reflected in the teaching and learning environment. Hence, perceived teaching quality is defined as the students' overall evaluation of teaching and learning effectiveness in Higher Education Institutions (Richardson, Slater, & Wilson, 2007).

### **Acculturation**

Acculturation is defined as a process of cultural change and the consequence of connection between two different cultural groups (Berry, Trimble, & Olmedo, 1986).

### **Self-efficacy**

Self-efficacy is explained by the combination of the perception and belief of an individual of his her ability to perform in different situations (Chen, Gully, & Eden, 2001).

## **1.8 Organisation of Study**

This thesis is divided into five chapters. The first chapter discusses the need to study the effect of university image, perceived quality, acculturation, self-efficacy and emotional attachment on brand loyalty to a university. It also outlines the research questions, research objectives, scope of study, and significance of the study. Definitions of the key concepts follow in the following section. The second chapter discusses the underlying theory that supports the relationship between brand loyalty and its predictors. Review of past literature on the antecedents of brand loyalty in Higher Education Institutions is presented. The third chapter highlights the methodology employed in this study. The chapter also explains the theoretical framework and hypothesis development. Consequently, the fourth chapter presents the findings of the research. The final chapter discusses the findings in relation to past studies and the underpinning theory. It also includes the discussion on the implications of the findings for future research and practice, as well as the limitations of the present study. Some concluding remarks are offered to complete the thesis.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

The previous chapter discussed the importance and the need to examine students' intention and behavior towards loyalty through the application of stimuli-organism-response (S-O-R) theory (Jang & Namkung, 2009; Mehrabian & Russell, 1974). These theories are used to construct a model of brand loyalty and identify important for each variable in HEIs and to provide implication for HEIs. In this chapter, relevant literature in university image, perceived teaching quality, acculturation, self-efficacy, emotional brand attachment, and brand loyalty is discussed.

##### 2.1.1 Branding in Higher Education Institutions (HEIs)

Branding of higher education institutions is becoming an increasingly important issue (Chapleo, Duran, & Castillo Díaz, 2011) because of the increased domestic and global competition. University and colleges throughout the world have to explore the unique features that could make them attractive to students and other stakeholders (Chapleo, 2015; Hemsley-Brown, 2012; Hemsley-Brown & Goonawardana, 2007; Watkins & Gonzenbach, 2013). Accordingly, Temple (2006) pointed out that successful branding reflects the value of the product or services that is instilled in consumers' mind. The issue

of branding has made HEIs around the world realise the linkage between value and image (Wæraas & Solbakk, 2009).

Brand is defined as a symbol or logo, name, color, or more usually some combination of them to shape the identity which distinguishes a particular product and services (Aaker, 1991). Mick (1986) defined branding as a trust mark, warrant, and promise that an organisation is required to deliver to the customer. While a brand is the symbol, branding is a process to create an image, prestige, and reputation (Sataøen, 2015). Branding articulates the organisation's worth and values (Chapleo et al., 2011; Hemsley-Brown & Goonawardana, 2007; Lamboy, 2011). In the context of HEIs, Callister, Blevins, Kier, and Pettway (2015) argued that brand is not only a name, logo, and symbol, but it is also about the quality of teaching as it is important to attract potential students. Joseph, Mullen, and Spake (2012) stressed that public university students in the USA relied on the reputation of the university (i.e. accreditation) when loyal at a place of study as it portrays quality education. Doyle (1989) stated that branding makes the consumers' choice process more effective. For instance, when international students try to find an established university consideration is directed at the image and reputation of the university while considering the quality of the education. While the quality of education is one significant factor in loyal at a place of study, Tas and Ergin (2012) revealed that potential students also choose other criteria in their decision-making process. These include (1) accreditation, (2) brand awareness in home countries, (3) education period, (4) financial assistance, (5) home university professor international recognition, (6)

national survey ranking, (7) PhD program, (8) post-graduation job and career prospect, (9) university location, (10) university tuition fees, and (11) university brand name.

Gromark (2013) agreed that brand is the most sufficient, robust, and powerful element than market orientation in public sector organisations as it provides a holistic and balanced perspective of the institution. Gromark (2013) further argued that a strong brand orientation strengthens the institution's legitimacy and credibility. Sataøen (2015) discovered that HEIs in Norway and Sweden highlighted the value of equality for all people which helped the institutions to excel in the global competition, suggesting that a unique brand creation enhances institutional differentiation (Hemsley-Brown & Goonawardana, 2007; Hemsley-Brown & Oplatka, 2015; Pinar, Trapp, Girard, & Boyt, 2011). In other words, through branding, universities are given the opportunity to communicate their core values and services to the potential and existing customers. However, Aspara, Aula, Tienari, and Tikkane (2014) contended that, despite the advantage of having a strong brand, creating a brand is challenging in the context of HEIs because internal and external stakeholders' perspectives have to be considered.

Brand loyalty in the HEIs has been widely investigated in the West, such as the UK (Bennett & Ali-Choudhury, 2009; Chapleo, 2015; Temple, 2006), USA (Joseph et al., 2012; Spake, Joseph, & Weldy, 2010), Finland (Aspara et al., 2014), Sweden (Opoku, Hultman, & Saheli-Sangari, 2008), Belgium (Mampaey, Huisman, & Seeber, 2015), Norway (Aula et al., 2015; Sataøen, 2015), and Australia (Casidy & WalterWymer, 2015). Even though some studies have been carried out in the developing countries, like

Qatar (Mourad, 2013), Turkey (Tas & Ergin, 2012), and Greek (Priporas & Kamenidou, 2010), very few were carried out in Malaysia. Therefore, the objective of this study is to fill the gap by identifying the factors purported to influence branding loyalty toward HEI.

## **2.2 Brand Loyalty**

Brand loyalty is the main constituent of brand equity. Aaker (1991) clarify brand loyalty as a customer commit to the brand. Meanwhile, Oliver (1999) elucidate brand loyalty differently by referring it to the commitment shown by a customer to repay or repurchase a favorite brand or services continuously in the future. In essence, Oliver's definition stresses the behavioral dimension of brand loyalty, whereas other researchers (Rossiter & Percy, 1987), contended that loyalty is frequently considered by a positive attitude towards the brand and repetitive purchase of the brand.

Jacoby and Kyner, (1973b), acknowledge that brand loyalty is a psychological construct, which is a outcome from both attitude and behavior of consumer. A simple repurchase does not guarantee loyalty to the brand, but a repetitive purchase must be integrate with the trust in the quality of the brand (Douglas, Mills, & Phelan, 2010). On a similar vein, Yoo and Donthu (2001) defined brand loyalty as the act of persuading the customer to be loyal, which is reflected in the intention to purchase the brand as the first choice. Likewise, Chaudhuri and Holbrook (2001) stated that behavior or purchase depends on

loyalty and attitude, where loyalty consists of a repetitive purchase while attitude includes a commitment to a brand.

Jacoby (1978) stated that brand loyalty can be considered as a function of psychological processes. Meanwhile, Jarvis and Wilcox, (1976) and Jain, Pinson, and Malhotra, (1987) terminology, such as cognitive loyalty and intentional loyalty began to be used to reflect the different constituents of the psychological development. Recently, Reichheld, (2003) disputed that only one variable can be measure loyalty, which is a willingness to recommend a purchase of a product. According to Reichheld, (1996), loyal customers are good for service providers because the former is easier to serve than new consumers. New customers are reduce marketing cost, decrease operating cost, increase referral, and increase competitive advantages (Reichheld, 1996; Tepeci, 1999), hence increased profit for the firm.

Despite the numerous studies on brand loyalty, a number of gaps still exist that limit our understanding of the construct. Firstly, inconsistent findings have been observed in previous studies conducted in various research contexts (Pan, Sheng, & Xie, 2012). Secondly, there is no consensus of the loyalty constructs. Thirdly, based on previous literature, reveals that the choice of instrument to measure loyalty subjectively has made it difficult to generalize results.

Many researchers have conceptualized loyalty in terms of behavioral and attitudinal components (Rundle-Thiele, 2005; Russell-Bennett, Härtel, & Worthington, 2013;

Velazquez, Saura, & Molina, 2014). Alok and Srivastava (2013) asserted that because services quality and commitment are the strongest predictors of customer loyalty, a two-dimensional construct of loyalty is useful to understand the formation of loyalty. Figure 2.1, shows a two-dimensional construct of brand loyalty.

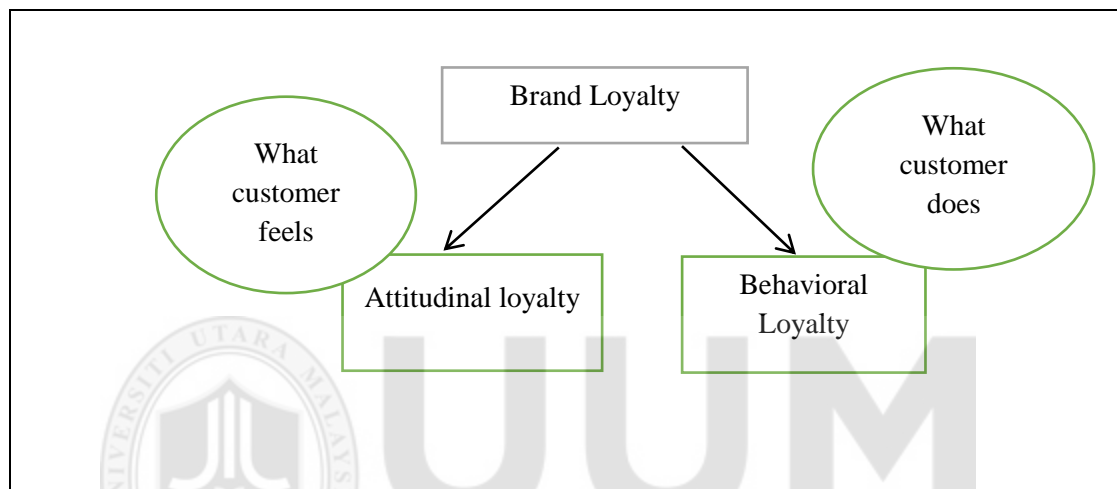


Figure 2.1  
*Element of two-dimension definition of brand loyalty*  
Source: Khan (2009)

However, Worthington et al. (2009) asserted that human behavior is a integrate of cognitive, emotional (affective), and behavioral responses. Nonetheless, a tri-dimensional approach to human responses could provide a better understanding of brand loyalty as depicted in Figure 2.2. The cognitive response signifies ‘I think,’ emotional response ‘I feel’, and behavioral response ‘I do.’



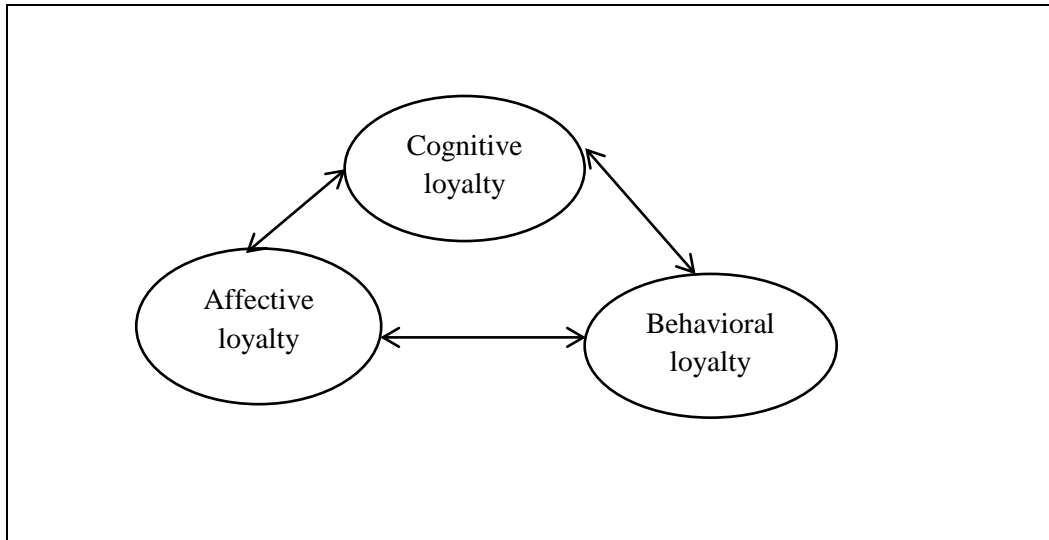


Figure 2.2

*A tri-dimensional approach to brand loyalty*

Source: Worthington (2009)

While the tri-dimensional approach has also been received by Oliver, Rust, and Varki (1997), Dick and Basu (1994) introduced cognitive, affective, and conative antecedents of customer loyalty. Oliver (1999) developed a four-phase model and stated that the formation of customer loyalty is as a result of cognitive loyalty, affective loyalty, conative loyalty, and action (behavioral) loyalty. He further asserted that, in such progressive sequence of consumer behavior, one can observe that attitudinal loyalty will lead to behavioral loyalty. According to Hun et al., (2011), hotel guests become loyal when their initial cognitive and affective experiences lead to conative and subsequent behavioral loyalty. Tables 2.1 summarizes the stages of loyalty based on Oliver, (1999).

Table 2.1  
*Stages of loyalty and their vulnerabilities*

<b>Loyalty Phase</b>	<b>Features</b>	<b>Vulnerabilities</b>
Cognitive ↓	Advantageous qualities and features perceived	Superficial, lower loyalty
Affective ↓	Attachment and attitude toward brand established	Exposed to switching
Conative ↓	Commitment or a plan to purchase	Plans may not lead to action
Action (Behavioral)	High willingness to act	Deteriorating performance

Source: Oliver (1999)

### 2.2.1 Operationalization of Loyalty

Brand loyalty has created a heated debate over the operationalization of the construct. Recently, many scholars such as Dawes, Meyer-Waarden, and Driesener, (2015); Hun and Woods, (2014); Jani and Han, (2014); Martos-Partal and Gonzalez-Benito, (2011) defined brand loyalty only from the behavioral point of view even though earlier researchers had proposed two dimensions of brand loyalty, namely, behavioral and attitudinal. The discussion below will be shed some light on this issue, the chosen the best literature by researcher an undertaking this study.

### **2.2.1.1 Behavioral Loyalty**

Behavioral loyalty can be defined as an actual purchase that has been observed over a period of time (Mellens & Dekimpe, 1996). However, Dick and Basu (1994) stressed that behavioral definitions are not enough to explain how brand loyalty is established and reformed to measure consumer behavior. O'Malley and Lisa (1998) pointed out that behavioral measures of loyalty are a more logic picture of how good the brand performs.

Consumers exhibit behavioral loyalty when repeat patronage of a product and services exists, often to the exclusion of competitors offers (Oliver, 1999). According to Dick and Basu (1994), repeat purchase is important from the financial perspective, but should not be taken at face value as customers may repeat their purchase because of a limited product range, switching barrier, attitude, and it is cheaper to do so. According to Kuusik (2007), behavioral loyalty happens for three reasons: (a) force to be loyal, where customers are forced to consume certain products or services by a certain vendor because the vendor has a monopoly; (b) loyal due to inertia, where customers do not change a vendor because they are comfortable with the vendor and because of easy to access the vendor; and (c) functionally loyal, where customers have an objective or reason to use the brands.

### 2.2.1.2 Attitudinal Loyalty

Brand loyalty reflects an attitudinal component. Chaudhuri and Holbrook (2001) contended that attitudinal loyalty consists of a degree of placement commitment in terms of value associated with the brand. According to Oliver (1999), attitudinal loyalty is related to the psychological component of a customer's commitment to a brand as it incorporates trust toward the products or services. Oliver further stated that attitudinal loyalty can translate into a strong intention to buy from the same brand and eventually repeat purchase behavior. However, Liu-thompkins and Tam, (2013) argued that attitudinal loyalty is not a necessary tendency to repeat purchase but may be caused by other factors, like customer habit, which leads to behavior loyalty.

Yoo and Donthu, (2001) describe brand loyalty as the inclination to be devoted to a focal brand by showing the intention to patronize the brand as the first choice. Guest, (1944) also argued that loyalty is a form of an attitude. Guest used one item to measure an individual's inclination to choose a brand. Correspondingly, several scholars have been conceptualized loyalty as an attitude, preference, or intent to purchase. In other words, the attitudinal indices of brand loyalty are based on the statements of whether or not actual purchase behavior takes place (Johnson, Herrmann, & Huber, 2006; Nettet & Helgesen, 2014; Liu-Thompkins & Tam, 2013). Attitudinal loyalty has been measured as a likelihood to recommend or likelihood to purchase a product and brand (Aurier & Lanauze, 2012; Bandyopadhyay & Martell, 2007; Caruana, 2002; Heesup, Back, & Barrett, 2009; Hoyt & Howell, 2011; Hur, Ahn, & Kim, 2011; Kandampully &

Suhartanto, 2000; Shen, Guo, & Wu, 2014; Yu & Dean, 2001). Although attitudinal loyalty consideration assists researchers to differentiate brand loyalty from frequent purchase, it does not focus on actual purchases; instead, it focuses on consumer testimonies, and that is why it may not be a precise exemplification of reality.

### **2.2.1.3 Composite Loyalty**

The aforementioned review of literature indicates that neither the behavioral nor the attitudinal loyalty approach alone provides the meaning of loyalty. Jacoby and Chestnut (1978) recommended measuring brand loyalty based on two dimensions: behavioral and attitudinal. However, Rundle-Thiele and Mackay (2001) showed that attitudinal and behavioral dimensions are inadequate to measure brand loyalty. Han and Woods (2014) used the four-phase loyalty based on Oliver (1999) and found that both the affective and conative intentions had a mediating role in forming behavioral loyalty.

In order to reduce the loophole in the existing literature, the researcher operationalized loyalty based on the composite approach of loyalty suggests the integration of both attitude and behavior.

### 2.2.2 Brand Loyalty in Higher Education

Brand loyalty in a higher education implies student retention and student loyalty (Ali et al., 2016; Hennig-Thurau et al., 2001; Vander Schee, 2010). Specifically, Hennig-Thurau et al. (2001) contended that student loyalty is synonymous to student retention. Brand loyalty is becoming a major goal of many higher education institutions and, not surprisingly, many are using student loyalty to measure institutional performance. In fact, successful universities are those that can develop student loyalty. For these universities, investing in student retention (now) is better than investing in new student enrollment (later) because student retention can enhance the survival of the institutions (Belanger et al., 2007; Williams Jr, Osei, & Omar, 2012).

As students become aware of different programs and services offered by different universities, competition to attract the qualified and competent students increases. As a result, student retention and loyalty become critical. It is argued that whether or not students retain their studentship with the university depends on their satisfaction with the quality of services offered (Chong & Ahmed, 2014; Petruzzellis & Romanazzi, 2010; Voss, Gruber, & Szmigin, 2007). Student satisfaction is a critical issue to be addressed as it may lead to student motivation, retention, recruitment success, fundraising (de Macedo Bergamo, Giuliani, & Galli, 2011; Schertzer & Schertzer, 2004; Chapleo, 2015), positive word-of-mouth promotion, and re-purchasing behavior (e.g., returning to pursue a higher degree), which subsequently affect student loyalty toward the institution.

Previous studies highlight the need for higher education institutions to focus on developing long lasting relationships, retention of students, and developing student loyalty. Several scholars have subsequently advocated the use of relationship marketing to retain students by continuously seeking their satisfaction with the services offered (de Macedo Bergamo et al., 2012; Oyvinh Helgesen & Nettet, 2007; Rojas-Mendez et al., 2009; Schertzer & Schertzer, 2004). The use of relationship marketing assumes that students are customers in HEIs (Baldwin, 1994; Vander Schee, 2010). According to Carvalho and de Oliveira Mota, (2010), student loyalty in HEIs signifies a stable financial source more so after the graduation of the students. Loyal students will support their institutions by offering job opportunities to new graduates. Furthermore, student loyalty means that satisfied students will recommend the institution to others (Daud & Sapuan, 2012). Literature indicates a number of predictors of customer loyalty (Hennig-Thurau, Langer, & Hansen, 2001; Vander Schee, 2010). In the context of higher education, findings revealed that universities' branding responses appeared to play a positive and significant role in the *purchase behavior* (enroll) of international students (Run & Renganathan, 2013; Vogel, Evanschitzky, & Ramaseshan, 2008).

However, despite the fast growth of educational institutions in Malaysia, studies on university branding and loyalty among international students in this sector remain scarce (Baharun et al., 2011; Saad, Yunus, & Embi, 2013; Tham & Kam, 2008; Vincent & Periyayya, 2013). Understanding the main factors of student brand loyalty will help administrators and policy makers in HEIs develop their strategies to gain competitive advantage. Branding can be used to differentiate the academic services and programs

(Cedwyn & Meraj, 2013) among competitors. Therefore, this present study attempts to investigate the drivers of brand loyalty by using a model of S-O-R in HEIs.

### **2.2.3 Antecedents of Loyalty**

Researchers and practitioners have paid increasing attention to antecedents of customer loyalty in branding (Alok & Srivastava, 2013; Aydin & Ozer, 2005; García de Leaniz & Rodríguez Del Bosque Rodríguez, 2014; Giovanis, Zondiros, & Tomaras, 2014; Pan, Sheng, & Xie, 2012; Perin, Sampaio, Simoes, & Polvora de Polvora, 2012; So, King, Sparks, & Wang, 2014; Stan, 2015; Su, Cheng, & Huang, 2011) and in different contexts. Table 2.2 summarizes the antecedents of loyalty. Hence, based on previous studies of antecedents' loyalty, it can be said that image of university, perceived teaching quality, self-efficacy, emotional brand attachment have a few studies in determining brand loyalty. Therefore, this study attempt to an examine the linkage of university image, perceived teaching quality, self-efficacy and emotional attachment as a predictor to brand loyalty. Table 2.2 summaries of past studies of antecedents of loyalty.



Tables 2.2  
*Antecedents of Loyalty*

<b>Authors</b>	<b>Context</b>	<b>Nature of study</b>	<b>Antecedents</b>	<b>Findings</b>
Alok and Srivastava (2013)	Indian Life insurances	Cross-sectional	Services quality, customer satisfactions, trust, commitment, corporate image, switching costs and communication	Both service quality and commitment are strong predictors on loyalty.
Bianchi, Drennan, and Proud (2014)	Australia Wine industry	Cross-sectional	Consumer knowledge, customer experience, brand satisfaction, and brand trust	Customer with a wine knowledge and experience will affected brand loyalty through wine brand trust and customer wine satisfaction. However, the strongest predictor of wine brand loyalty is customer wine satisfaction.
Bianchi and Pike (2011)	Australia Tourism industry	Cross-sectional	Destination brand salience, destination brand quality, destination brand image, and destination brand value	Brand salience, brand image, and brand value are positively related to brand loyalty
Kim, Morris, and Swait (2008)	US General	Cross-sectional	Brand credibility, affective brand conviction, cognitive brand conviction, attitude strength, and brand commitment	True loyal on branding can be exist when high a degree of affective and cognitive of brand conviction mediated between brand credibility and brand loyalty.

Tables 2.2 (Continued)

<b>Authors</b>	<b>Context</b>	<b>Nature of study</b>	<b>Antecedents</b>	<b>Findings</b>
Dehghan, Dugger, Dobrzykowski, and Balazs (2014)	US Higher education institutions	Cross-sectional	Service quality, commitment, satisfaction, and reputation	University's reputation has a significant positive relationship with loyalty. University reputation as a mediator between student satisfaction and loyalty.
Thompson, Newman, and Liu, (2014)	China General	Cross-sectional	Brand trust, perceived quality, collectivist value, and perceived value	Customers with a high individual level collective value are significantly more loyal to a focal brand, despite the low level of perceived value and quality.
Leckie, Nyadzayo, and Johnson (2016)	Australia Telecommunication industry	Cross-sectional	Involvement, participation, self-expressive brand, cognitive processing, affection, and activation	The three dimensions of customer brand engagement (affective, cognitive and activation) have an influence on the brand loyalty. Affective and activation dimension had a positive effect on brand loyalty, but cognitive processing dimension had a negative effect.
Lee, Moon, Kim, and Yi (2015)	South Korea Telecommunication industry	Cross-sectional	Simplicity, interactivity, satisfaction, usability, and brand trust	Simplicity and interactivity are important antecedents of mobile usability. User usability experience translates well into brand loyalty via satisfaction and brand trust.

## **2.3 Underpinning Theory**

Malhotra (1999) stated that research should be based on theories as they are used to explain the linkage between the variables in the research model. The theory also serves as a guide for researchers to understand the purported relationships between the variables (Saunders, Lewis, & Thornhill, 2009). This research is based on S-O-R theory in explaining the relationships between the variables in the research model.

### **2.3.1 S-O-R Theory**

System theory is best understood by using an input-process-output perspective, where input is referred to a stimulus, process as an organism, and output as a response. In this research model, the stimuli are the environmental cues (i.e university image, perceived teaching quality, acculturation and self-efficacy), emotional attachment as the organism, and loyalty towards the university is the response. The S-O-R model Mehrabian & Russell, (1974) offers a theoretical perspective on consumer behavior. The model emphasizes that when an organism is exposed to environmental stimuli, its internal processes include an emotional state (Jang & Namkung, 2009), which triggers a response. Thus, emotional responses mediate the effect of environmental stimuli on behavior.

According to Arora, (1982) and Slama and Tashchian, (1987), stimuli can be divided into two: objective stimuli and social psychology stimuli. An objective stimulus is related to product characteristics, time, and complexity while social psychology stimuli stem from

the surrounding environment. Bagozzi, (1986) refers to the organism as the internal process that intervenes between the stimuli and the response. This current study fills the gap in the literature by integrating objective and social psychology stimuli as environmental factors that influence the organism, and, subsequently, response. Specifically, university image and perceived teaching quality are considered objective stimuli while acculturation and self-efficacy are social psychology stimuli. These stimuli lead international students to develop emotional brand attachment and subsequent brand loyalty.

#### **2.4 University Image**

Mainardes, Alves, Raposo, and de Souza Domingues (2011) stressed that studies on the effect of university image on the choice of a university are scarce. According to Wang, Chen, and Chen (2012), as universities face heightened competition, they can differentiate themselves by creating a strong brand image. The university image should be recognised by prospective students during the decision-making process because brand perceptions can help determine the choice made.

Image has received increasing attention in the promotion marketing literature as it impacts individual's actions (Alves & Raposo, 2010; Hosseini & Nahad, 2012). But, due to the complex nature of image, various definitions have been proposed. For example, Kotler and Fox (1995) defined the image as the total beliefs, ideas, and impressions that

an individual has an object. Some researchers defined university image as a set of beliefs and impression about a place, destination, or organisation for their study (Chun, 2005; Mercedes Marzo-Navarro, Pedraja-Iglesias, & Rivera-Torres, 2005; Olmedo-Cifuentes, Martinez-Leon, & Davies, 2014; Sevier, 1994). However, other scholars (Barich & Kotler, 1991; Nha Nguyen & LeBlanc, 2001; Sung & Yang, 2008) defined image from the organisational point of view which is the overall impression made by the public about an organisation. Then, the definition of image is interchangeable with reputation (Sung & Yang, 2008). The image of the university is theoretically explained as a concept of organisation image (Kotler & Fox, 1995).

In branding, image has been defined by Keller (2003) as the perception and experiences about a brand, specifically brand associations detain in a consumer's mind. These associations include perceptions of quality and attitudes toward the brand. Similarly, Aaker (1991, 1996) proposed that brand associations are anything detain in memory to a specific brand. Aaker and Keller (1990) suggested that consumer perceptions of brands knowledge are multidimensional. Moreover, brand knowledge comprised of brand image and brand awareness (Keller, 1993). Previous literature shows that image can be developed by different things, such as product, brand, and organization (Cretu & Brodie, 2007; Lemmink, Schuijf, & Streukens, 2003; Nha Nguyen & LeBlanc, 2001). Table 2.3 summarises the existing definitions of a university's image.

Table 2.3

*List of university image definition by various scholars*

<b>Author</b>	<b>Definition of university image</b>
Palacio, Meneses, and Perez (2002)	The mental representation of the actual object that acts in the object place.
Barich and Kotler (1991)	The overall impression made on the customer minds about the organisation.
Chun (2005)	A set of beliefs and impression about a place, destination or organisation.
Kotler and Fox (1995)	The total beliefs, ideas and impressions that an individual has about an object.

#### **2.4.1 Conceptualization of University Image**

The debate about the dimensionality of the image is yet to be resolved. This current study attempts to fill the loophole by conceptualising and measuring university image of HEIs in Malaysia context particularly. This research, image has been conceptualised as a student overall perception towards a university brand. Although, there is a various concept of image has been debate among pertinent scholars all over the field. However, Dichter (2001), has conceptualised image as an entity set in consumer minds. According to Dichter, images also can change and reshape the person's perception towards a product or brand. Kazoleas, Kim, and Moffitt (2001) conceptualised image as a multi-faceted variable, which involves a large number of attributes.

Duarte, Alves, and Raposo (2010) reviewed relevant literature in corporate image and found that several studies use the term corporate image and corporate reputation interchangeably. Barich and Kotler (1991) acknowledged that corporate reputation may be considered a dimension of corporate image. According to Kennedy (1977), image has

two components: a functional-related tangible stimuli that can be easily measured (i.e., products, store layout, and properties) and emotional stimuli associated with a psychological condition that apparently becomes feeling and attitudes (i.e., good or bad taste and feeling towards institutions). Likewise, some scholars (Mazursky & Jacoby, 1986; Park, Jaworski, & MacInnis, 1986) conceptualised brand image into functional, symbolic, and experiential image. A few studies (e.g., Lin, Morais, Kerstetter, & Hou, 2007; Palacio et al., 2002; San Martín & Rodríguez del Bosque, 2008) pointed out the prominence of both components to examine the image. According to Markwick and Fill (1997), image can change rather quickly as a result of an advertising campaign or organisation campaigns, but reputation is difficult to change.

Studies on image were largely conducted in profit-based sector, but few in non-profit organisations (Aghaza, Hashemia, & Atashgaha, 2015; Arpan, Raney, & Zivnuska, 2003; Kazoleas et al., 2001; Landrum, Turrisi, & Harless, 1998), although its importance in the educational context has been highlighted (Alves & Raposo, 2010; Ivy, 2001; Landrum et al., 1998). Table 2.4 summarises the studies in the higher education context.

A university is a place of sharing knowledge, a community of scholars, and a place that provides students with skills and competencies (Ali-Choudhury, Bennett, & Savani, 2009). A university image represents a university brand based on student perception (Ali-Choudhury et al., 2009; Alves & Raposo, 2010). Consequently, university image has a significant impact on student loyalty (Ali et al., 2016; Alves & Raposo, 2010; Belanger, Mount, & Wilson, 2002; Dehghan et al., 2014; Oyvind Helgesen & Nettet, 2007; Nettet,

Nervik, & Helgesen, 2011). However, this relationship has rarely been tested in the context of a study destination. Alves and Raposo (2010) found that a positive image of a college and university can attract new students to choose their place of studies, and hence student loyalty and student retention (Brown & Mazzarol, 2009; Casidy, 2013; So et al., 2013). This relationship implies that the more favorable the university image is, the more likely international students are emotionally attached to the place or destination which will result in their loyalty with a specific university (Veasna, Wu, & Huang, 2013; Wilkins & Huisman, 2013). However, Thompson (2006) pointed out that a disparaging image is a warning sign that emotionally will be affected the losing sense of loyalty.





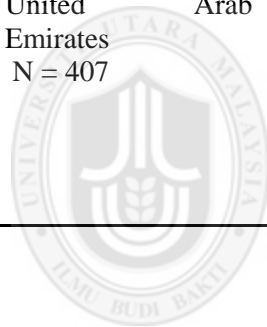
Table 2.4

*Studies on University Image*

<b>Author</b>	<b>Industry</b>	<b>Analysis</b>	<b>Variables</b>	<b>Finding</b>
Alves and Raposo (2010)	HEIs Portugal N = 2687	SEM	Image, expectations, quality, value satisfaction, word of mouth, and loyalty	Perceived image significantly influenced student satisfaction and loyalty. Since university image is important in retaining and attracting new students, there is a need to measure university image from the students' point of view.
Duarte, Alves, and Raposo (2010)	HEI Portugal N = 1024	SEM SmartPLS	Communication, social life, course, and job opportunities	University communication, job opportunities, and academic life are the best predictors of university image.
Landrum, Turrisi, and Harless (2008)	HEI USA N = 849	SEM LISREL	Academic program, familiarity, athletics, value, employment, and outreach	Academic program and athletics are significant components of university image.
Ivy, (2001)	HEI South Africa/UK n= 174	SPSS	27 items on marketing tools that convey the image of the higher institution of South Africa and the UK	In the UK, university image is determined by the quality of teaching, research output, a variety of courses offered, staff reputation, student exchange program, and sports facilities. In South Africa, university image is associated with lecture facilities and part-time tuition fees.
Jiménez-Castillo, Sánchez-Fernández, and Iniesta-Bonillo (2013)	HEI Spain N = 500	SEM PLS	Perceived value, image, and identification	The result indicates perceived value and university image influence on the graduate –university identification

Table 2.4(Continued)

<b>Author</b>	<b>Industry</b>	<b>Analysis</b>	<b>Variables</b>	<b>Findings</b>
Aghaz, Hashemi, and Atashgah (2015)	HEI Iran N = 950	Linear regression analysis	University image (university members, university environment, academic planning, internal and external reputation) and student trust.	A significant impact of university image on student trust.
Wilkins and Huisman (2014)	HEI United Arab Emirates N = 407	SPSS	Interpersonal, university communication, local campus features, local branch features, communication not controlled by the university and home campus heritage and prestige.	Institutional features/ characteristic, informational resources and interpersonal resources, reputation and prestige home campus, have a significant influence on image.



UUM  
Universiti Utara Malaysia

According to Harrison-Walker (2010), reputation is built over a long time compared to image of the institution. Reputation differs from image because it is assessed by all the stakeholders (internal and external), whereas image is only assessed by the external stakeholders only (Harrison-Walker, 2010; Hatch & Schultz, 1999; Nguyen & LeBlanc, 2001).

Marketing researchers use image to refer to the actual judgment of external stakeholders (student, government, and shareholder) of institutions (Brown & Mazzarol, 2009), suggesting the relative significance of an institutional image as a key antecedent of students consumer satisfaction, value and loyalty. A university with a good image, without a doubt, will have a greater competitive advantage than universities without it (Hosseini & Nahad, 2012; Pampaloni, 2010; Wilkins & Huisman, 2013). The success of a university is associated with its ability to create, develop, and manage unique resources and can retain the existing customer such students. This implies that image is an important resource and asset of a university's competitive advantage since it is unique and cannot be bought (Rao, 1994) or copied (Barney, 1991).

The image of a university plays a significant character in developing the attitudes of the stakeholder towards that institution (Landrum et al., 1998; Yavas & Shemwell, 1996). Moreover, Landrum et al. (1998) and Yavas and Shemwell (1996) found that in their study of university image, the institutions necessity to sustain or develop a distinctive image in order to form a competitive advantage in an increasingly competitive market.

The most significant outcome of university image was found to be student willingness to apply for enrollment (Arpan et al., 2003; Chen Wen & Chen, 2014). In contrast, Suomi, Kuoppakangas, Hytti, Hampden-Turner, and Kangaslahti (2014) demonstrated that brand image was not relevant to higher education as the concept of the customer was not applicable to students.

Several researchers had looked into the role of HEI's reputation and image in the development of customer loyalty and found that the degree of loyalty tended to increase when the perception of both institutional image and reputation became favorable (Chen Wen & Chen, 2014; Nha Nguyen & Leblanc, 2001). Therefore, student loyalty becomes an important strategy for public higher education institutions, especially in Malaysia, which could be determined by the university image. Scholars have argued that creating a favorable image of a university through the creation of a brand and a group of unique and desirable attributes is able to attract prospective of existing students to pursue their second degree at current university (Ivy, 2001; Pampaloni, 2010; Sia, 2013; Soutar & Turner, 2002; Wagner & Fard, 2009). Furthermore, an institution's existing image and reputation were found to be more foremost than quality because the perceived image influenced the perceptions by potential students towards university (Alves & Raposo, 2010; Kotler & Fox, 1995). A study by Sung and Yang (2008) was carried out at a private university in South Korea. The study examined the link between perceived organisational personality, reputation, external prestige, and supportive attitudes towards the institutions. They found a positive and significant relationship between organisational personality, reputation, prestige, and supportive attitudes.

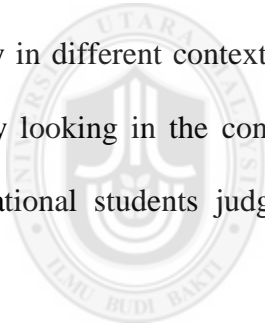
## 2.5 Perceived Quality

Perceived quality is another essential predictor of brand loyalty. Moreover, perceived quality is explain as a consumer's judgment of the overall excellent of brand based various cues (Calvo-Porrall, Lévy-Mangin, & Novo-Corti, 2013; Fujan, Griffin, & Babin, 2009). In line with this research, Aaker, 1992; Boulding, Kalra, Staelin, and Zeithaml, 1993, and Boulding and Kirmani, (1993), agreed that consumer prefers high-quality brands as the convey higher credibility and trustworthiness and portrays to be a luxurious brand (Batra, Ramaswamy, Alden, Steenkamp, & Ramachander, 2000). Batra et al. (2000) contended that the quality of the brand can be utilized as an indication of status and social class where consumers prefer to consume high-quality brands to portray their exclusiveness. Boulding and Kirmani (1993) and Kashif and Ting (2014) concluded that consumer's overall quality perception is the outcome established from the basis of perceived quality, which determines the repurchase intention and switching behavior.

While there have been studies that focused on the direct impact of perceived quality on brand loyalty (Lai, 2014; Loureiro, 2014; Shi, Prentice, & He, 2014), others investigated the indirect association between perceived quality and brand loyalty (Calabuig Moreno, Prado-Gascó, Crespo Hervás, Núñez-Pomar, & Añó Sanz, 2015; Jang & Namkung, 2009; Su, Swanson, & Chen, 2015; Yu, 2001). For instance, Jang and Namkung (2009) found that emotion acted as a mediator between product quality and behavioral intention. Chen and Chen (2010) highlighted the need for researchers to take account the variables of services quality in understanding consumer evaluations of their experience with services firm. Other researchers have also made the same call to consider the role of emotion in

the services setting, such as restaurant (Han & Jeong, 2013; Prayag, Khoo-Lattimore, & Sitruk, 2015), sports (Calabuig Moreno et al., 2015), chain store (Chinomona & Sandada, 2013), tourism (Yong Ki, Lee, Choi, Yoon, & Hart, 2014), casual dining (Girish Prayag, Khoo-Lattimore, et al., 2015), and higher education (Rowe, Fitness, & Wood, 2015). Table 2.5 summarizes the studies on perceived quality and brand loyalty.

Based on previous literatures, it shows that the studies of perceived quality, especially in teaching, is still a few compare to other variable such as service quality, trust, satisfaction and perceived value on brand loyalty. Therefore, in this study, the researcher attempt to investigate the influence of perceived quality in term of teaching approach on brand loyalty in different context and industry. The present study tries to full fill the research gap by looking in the context of Malaysia public higher education institutions among international students judgment and evaluation on the teaching quality in university



UUM  
Universiti Utara Malaysia

Table 2.5  
*Summary of Studies on Perceived Quality*

<b>Authors</b>	<b>Methods</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Gracia, Bakker, and Grau (2011)	AMOS (SEM)	Hotel (Spain) N = 1157	Services quality, affect, and customer loyalty	The positive affective responses partially mediated the relationship between service quality perceptions and customer loyalty in hotel and restaurants.
Han and Kwon (2009)	AMOS (SEM)	Sport (Korea) N = 194	Brand name, country origin, perceived quality, and perceived value.	Perceived quality as a mediator between brand name, country origin, and perceived value.
Das (2015)	AMOS (SEM)	Retailer/fashion (India) N = 374	Self-congruity, brand familiarity, perceived quality, gender, and purchase intention.	Customer perceived quality as a mediator between the self-congruity, brand familiarity, and purchase intention.
Lai (2014)	AMOS (SEM)	Travel Agency (Macau) N = 270	Services quality of a travel package, perceived value of travel package, tourist satisfaction with a travel agency, tourist trust in a travel agency, tourist commitment to a travel agency, and tourist loyalty.	Perceived service quality affects both perceived value and satisfaction.

Tables 2.5(Continues)

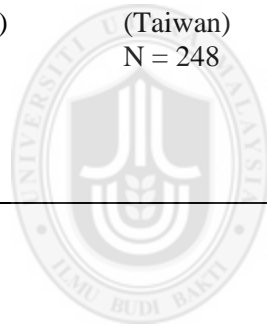
*Summary of Studies on Perceived Quality*

<b>Authors</b>	<b>Method</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Loureiro (2014)	PLS (SEM)	Internet banking Portugal N = 231	Online trust, perceived risks, perceived benefits, brand awareness, brand association, perceived quality, and brand loyalty.	Internet banking brand equity significantly depended on brand loyalty and perceived quality. However, the relationship between internet banking trust, brand loyalty, and brand equity was not significant.
Severi and Ling (2013)	Regression	HEIs Malaysia N = 330	Brand awareness, brand association, brand loyalty, brand image, perceived quality, and brand equity.	The relationship between brand awareness and brand equity was mediated by brand association. Brand loyalty was found as a mediator between brand association and brand equity. Brand image mediated between brand loyalty and brand equity. The relationship between brand image and brand equity was mediated by perceived quality.
Shi, Prentice, and He (2014)	AMOS (SEM)	Casino (China) N = 669	Services quality, satisfaction, and customer loyalty.	Only four dimensions of SERVQUAL (tangibility, reliability, responsiveness and assurance) affected satisfaction. Empathy had a negative influence on satisfaction. Reliability and assurance had a significant influence on loyalty. No significant difference between member and nonmember on loyalty intention.
Markovic, Iglesias, Singh, and Sierra (2015)	PLS (SEM)	General Spain N = 2179	Employee empathy, perceived ethicality, customer affective commitment, customer perceived quality, and customer loyalty	Perceived ethicality had a significant and indirect effect on customer loyalty via the mediators of customer affective commitment and customer perceived quality. Customer loyalty significantly impacted customer positive words of mouth.



Table 2.5(Continued)

<b>Authors</b>	<b>Methods</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Žabkar, Brenčič, and Dmitrović (2010)	AMOS (SEM)	Destination travel (Slovenia) N = 1056	Perceived quality, satisfaction, and brand loyalty.	The destination attribute determined the perceived quality of destination offering. Increased incidence of unpleasant experience led to the negative overall quality evaluation and tourist satisfaction.
Chen and Chang (2013)	AMOS (SEM)	General (Taiwan) N = 248	Green perceived quality, green perceived risk, green satisfaction, and green trust.	Green perceived quality affected satisfaction and green trust.



UUM  
Universiti Utara Malaysia

### **2.5.1 Definition and Conceptualization of Perceived Quality**

Quality can be defined as an ability of a service to satisfy customers' desired superiority of a company and their services (Bitner, 1994; Brandy & Joseph, 2001; Taylor & Baker, 1994). Calvo-Porrall et al., (2013) defined quality as a value added or transformation on the product, brand or services. According to Grönroos (2007), quality can be explained by three dimensions, namely, technical quality, functional quality, and corporate image. On the other hand, Lehtinen and Lehtinen (1991) also suggested a comparable typology i.e. physical quality, interactive quality, and corporate quality. While technical quality is objectively measured through customer experience, functional quality is related to the interaction between services provider and customer which is the perception of the services. Corporate image dimension is interrelated to the overall organization views perceived by customers. Garvin (1987) stated that perceived quality refers to the features, such as functional and corporate category. Garvin also agreed that perceived quality refers to the element of reputational factors that affect customer's image and reputation.

Parasuraman, Zeithaml, & Berry, (1988) defined perceived quality as an overall evaluation or judgment of superiority of services or product as a result of a comparison between a customer's expectation and actual performance of the services or products. Parasuraman et al., (1988) and Dotchin and Oakland, (1994) pointed out that quality of services is different from the quality of manufactured products due to the former's features of intangibility, simultaneity, and heterogeneity. This is certainly true because in higher education since most of the quality attributes cannot be observed. Likewise,

Athiyaman, (1997) clarify perceived service quality as an overall evaluation and judgment of the a product or services performance.

Perceived services quality is related to consumer retentions or favorable or unfavorable behavioral intention. Favorable behavioral intention can translate into increased volume of purchase and willingness to pay a premium price (Zeithaml, Berry, & Parasuraman, 1996). Conversely, the unfavorable behavioral intention is likely to manifest in customers leaving the company or spending less (Zeithaml et al., 1996). Cronin and Taylor (1992) developed services performance (SERVPERF) scale to assess perceived service quality.

Malaysia is facing increasing pressure to improve the quality and efficiency of the education services (Abdul Manaf, Ahmad, & Ahmad, 2013; Siti Falindah Padlee et al., 2010; Zamberi, 2014). This is because the quality of education can influence students' decision to enroll at a selected university (Soutar & Turner, 2002). Sia (2013) found that students selected a university because of the types of academic programs offered, management standard, quality of education, faculty qualification, and convenience and accessibility of the place of studies. To ensure quality education in HEIs, Malaysia has set up the Malaysia Qualification Agency (MQA), which is accountable for monitoring the quality of higher education institutions based on several criteria that meet the international standards (Bekhet, Alak, & Refae, 2014). Through quality (Morley, 2001; Siti Falindah Padlee et al., 2010), the MQA facilitates the country in attracting international students to choose Malaysia as their educational destination (Siti Falindah Padlee et al., 2010). For this reason, enlightening the quality level of higher education is

an crucial strategy to increase the country's competitiveness and, hence, student employability (Eurico, Oom do Valle, & Albino Silva, 2013). Therefore, the present study considers perceived teaching quality in determining brand loyalty in Malaysian public higher education institutions since a lack of studies in perceived teaching quality (Bennett & Kane, 2014; Calvo-Porrall et al., 2013; Care, 2009). Even if there are studies on perceived quality and brand loyalty in HEIs, mixed findings are observed.

Perin (2012) found that student loyalty to HEI was indirectly influenced by perceived quality, but Hameed, (2013) found a direct positive link between perceived quality and brand loyalty. Others found perceived quality to be a strong predictor of brand loyalty (Aggarwal Sharma, Rao, & Popli, 2013; Pappu, Quester, & Cooksey, 2005; Yoo & Donthu, 2001). Because of the inconsistent findings, the present study considers perceived quality in its research model.

There is also a little consensus in measuring perceived service quality in HEIs. Some considered perceived quality as a uni-dimensional constructs while others a multi-dimensional one. As a result, studies in HEIs have adopted service quality (SERVQUAL), service performance (SERVPERF), and higher education performance (HEdPERF) as summarized in Table 2.6.

Table 2.6

*Summary tables of Services Quality Instrument*

<b>Author</b>	<b>Methodology</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Yusoff, Mcleay, and Woodruffe-burton (2015)	Service-product bundle (Douglas et al., 2006)	Higher education Malaysia n = 1200	Professional environment, students and learning experiences, classroom environment, lecture and tutorial facilitating goods, textbooks and tuition fees, students support facilities, business procedures, relationship with teaching staff, knowledgeable and responsive faculty, staff helpfulness, feedback, and class sizes.	Year of study, program of study, and semester grades had a significant impact on factors, such as students support facilities and class sizes.
Brochado (2009)	Questionnaire distribution SERVQUAL, SERVPERF, HedPERF	Higher education Lisbon- Portugal N = 360	Service quality, overall satisfaction, behavioral intention, and word of mouth.	Major areas requiring managerial intervention, according to SERVPERF, importance-weighted SERVPERF, SERVQUAL, and importance-weighted SERVQUAL, are the tangible dimension. According to HEDPERF, the most deficient dimension relates to non-academic aspects.
Abdullah, Jan, Hazilah, and Manaf (2012)	Questionnaire distribution SERVPERF	General Malaysia N = 500	Assurance, empathy, responsiveness, reliability and tangibles.	Service performance was a multi-dimensional construct. The five dimensions of SERVPERF were assurance, empathy, responsiveness, reliability and tangibles.

Table 2.6 (Continues)

<b>Author</b>	<b>Methodology</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Ahmed and Masud (2014)	Questionnaire distribution HedPERF	Higher education Malaysia N = 300	Services quality, student satisfaction, academic program, responsiveness of academic staff, and academic feedback.	Only five of seven dimensions of service quality had a direct effect on student satisfaction. They were tangibles, academic programs, academic staff, assurance, and empathy.
Abdul Manaf, Ahmad, and Ahmad (2013)	Questionnaire distribution HedPERF	Higher education Malaysia N = 257	Administrative service, tangibles, academic programs, academic staff, delivery of teaching assurance, empathy of academic staff, and overall satisfaction.	Students had a positive perception of administrative service, tangible, delivery teaching and assurance, but not academic program, academic staff, and empathy of academic staff.
Abdullah and Zamhari (2013)	Questionnaire distribution SERVQUAL	General Australia N = 1005	Systemization, employee oriented, assurance, hospitality, and efficiency.	Systemization was the most important dimension.
Sultan and Wong (2013)	Focus group SERVQUAL	Higher education Australia N = 19	Information, past experience, academic, administrative and facilities, satisfaction, trust, brand performance, and behavioral intentions.	Critical antecedents of perceived service quality are information and past experience. Perceived service quality, such as academic, administrative and facilities, student satisfaction and trust were found to have a direct and positive effect on perceived service quality. Brand performance and behavioral intention were found to have an indirect relationship with perceived service quality mediated by satisfaction and trust.

Tables 2.6(Continues)

<b>Author</b>	<b>Methodology</b>	<b>Services</b>	<b>Variables</b>	<b>Findings</b>
Ahmad (2014)	Questionnaire distribution SERVEPERF	Higher Education Malaysia N = 250	University reputation/image program quality and recognition, lecturer and teaching, students learning environment, effective use of technology, counseling, and academic advising support, social life (direct/indirect) facilities, and student satisfaction.	Students were satisfied with all seven dimensions, i.e. university reputation/image, program quality and recognition, lecturer and teaching, students learning environment, effective use of technology, counseling, and academic advising support, and social life (direct/indirect) facilities.
Nejati and Nejati (2008)	Questionnaire distribution SERVPERF	Library/General Tehran N = 100	Reliability, responsiveness, assurance, access, communication, and empathy.	Even though the university library's had conducted several programs to improve the library services, customer satisfaction failed because the crucial aspects of service quality were not identified.

### **2.5.2 Perceived Teaching Quality in Malaysia HEIs**

In the last two decades, there has been an increasing interest in student expectation on perceived service quality in teaching and learning environment, particularly in HEIs. Students' feedback on their experience with university services is a valuable source of information to the university management as part of a quality control procedure and to inform teaching staff about their teaching success (Care, 2009; Voss et al., 2007).

HEIs all over the world are facing fierce competition and strive to be the best service provider (Munteanu, Ceobanu, Bobâlca, & Anton, 2010; Shahijan et al., 2016). In order to be the best higher education service provider, HEIs have to focus on education quality to achieve student satisfaction (Athiyaman, 1997; Nadiri & Mayboudi, 2010). In the context of local HEIs, students prefer to study abroad because of more choices in terms of university and programs offered (Mara et al., 2014). In addition, when studying abroad, students tend to have a better career than if they are to study locally (Charlotte & Hovmand, 2013). They will also gain more experience in learning foreign cultures and languages (Lindley, Mccall, & Abu-Arab, 2013), which are likely to make them more employable (Støren & Aamodt, 2010). Therefore, HEIs need to give more focus on improving the quality of education to attract students and achieve student satisfaction (Canning, 2015; Firdaus Abdullah, 2006; Sultan & Wong, 2011; Yorke, Orr, & Blair, 2014).



One area to improve the quality of education is teaching quality. Cox, Webb, Beauchamp, and Rhodes (2004) and Howard, Chan, and Caputi (2015) found that using appropriate technology during class sessions enhanced positive student's experience with teaching and learning. Douglas et al. (2006) revealed that the most important aspect of teaching and learning was the IT facilities and physical facilities, such as lecture facilities. Hanssen et al. (2015) also discovered the factors that most influenced student satisfaction with a university facility was the quality of its social areas, lecture halls, and libraries. Feedback students receive from their teachers is also important in developing student satisfaction with teaching quality. Williams demonstrated that students who received useful feedback rated higher their experience with teaching and learning. Students who receive feedback are able to know their performance so that they can improve areas of weaknesses (Hill, 1995).

Even though many studies have been conducted to assess perceived quality in HEIs, studies on international students' perception of the teaching quality in HEIs are lacking. For that reason, this current study fills the perceived teaching quality gap by utilizing the National Students Survey (NSS) as an instrument to assess perceived teaching quality in Malaysia HEIs. The NSS is one of the most proven instruments to gain university students' feedback on teaching. The NSS was deliberate to capture students' assessment of teaching and learning as a performance gauge of the quality of university teaching (Ashby, Richardson, & Woodley, 2011; Richardson, Slater, & Wilson, 2007). The 22-item NSS instrument has been used extensively in research of student learning and assessment of teaching effectiveness in HEIs in various countries, such as the United

Kingdom (Ashby et al., 2011; Bennett & Kane, 2014; Langan, Dunleavy, & Fielding, 2013; Yorke et al., 2014), Australia (Care, 2009), and New Zealand (Hedges & Webber, 2014).

## **2.6 Acculturation**

Acculturation is defined as process of cultural changes and values of the long connection between two different ethnic groups (Berry, 1980; Berry, Kim, Minde, & Mok, 1987; Miranda & Matheny, 2000). It has been suggested that acculturation is assessed by two primary dimensions, namely, the maintenance of origin culture, identity, and the maintenance of a relationship with another group. Taff, (1977) defined acculturation as the process of managing a culture. Redfield, Linton, & Herskovits, (1936) clarify acculturation as a phenomenon that results from a group of individuals having different cultures who come into continuous a first-hand contact with ensuing change from their own original culture.

In this study, international students' acculturation can be described as an acculturative process that individuals experience with the Malaysian culture. Acculturation is the result of international students coming into contact with members of the other groups' host culture while still at the same time maintaining their home culture. In the Malaysian HEI context, acculturation is likely to happen because new international students have to participate in the orientation program aimed at exposing them to the university environment and the local culture. The program is also meant to help them reduce

cultural shocks and adjust with the new environment well. According to Mendoza, (1989) the process of acculturation happens in two conditions, which is time base (passage of time) and disclosure to host culture and change.

Dohrenwend and Smith (1962) developed acculturation theory based on the cultural change of individuals or groups who experience a new culture. The cultural changes or cultural differences require them to adapt to a new environment (Berry, 1997). The process of changes impacts on the immigrant's consumption pattern; so, the adjustment and adaptation to the host culture is expressed in changes in their attitudes and behavior in the consumption pattern (Askegaard & Özçaglar-Toulouse, 2011; Palumbo & Teich, 2004; Parameswaran & Pisharodi, 2002; Rana, 2015).

Consumer acculturation has been defined by Penalosa (1994) as a process of adjusting to a dissimilar cultural environment. The process will result in a change in the consumption pattern of the home cultural brand or product preferences (Kipnis, Broderick, & Demangeot, 2014; Vijaygopal, Dibb, & Meadows, 2013). Berry, (2005) stated that acculturation is a long term, extended, solid process that can result in a lasting change in multiple dimensions to involve members of the smaller culture, as well as aspects of the main society. For instance, cross-cultural contact might contribute to acculturative change, which may lead to more than one culture shifting their behaviors and expectations with regard to food, dress, language, and communication pattern among other social activities (Berry, 1997, 2005; Kawasaki, 2013). As more and more people immigrate and settle into new cultures, understanding the acculturation process is

important. This is because, especially in the case of immigrants, adjusting to a new culture is an intense process, which has an effect on an individual's cognition, affect, and behavior (Cabassa, 2003).

There are three domains of acculturation study. They are practices, values, and identification (Schwartz et al., 2013). Several studies have been conducted on the domain of practices (Özbek, Bongers, Lobbestael, & van Nieuwenhuizen, 2015; Saad et al., 2013), cultural values (the belief system connected with a specific group, such as value of individualism versus value of collectivism), and cultural identifications (cultural group or ethnicity attachment). Studies have also been carried out in the domain of culture identification (Berry, Phinney, Sam, & Vedder, 2006; Chen, Heatherton, & Freeman, 2015; Cleveland, Laroche, & Takahashi, 2015; Schösler, de Boer, Boersema, & Aiking, 2015). Berry et al. (2006) identified four categories of immigrants: voluntary immigrant, refugees, asylum seekers, and sojourners as shown in Table 2.7.

Table 2.7  
*Categories of Migrants*

<b>Category</b>	<b>Description</b>
Voluntary immigrants	People who voluntary leave their homelands to search for job opportunities, marriage, or follow family members.
Refugees	People who are involuntarily expatriated by war, discrimination, or causes of natural disasters and move to a new country through the agreement between international aid agencies, like UNESCO, and WTO, and the governments of the countries which agree to accept them.
Asylum seekers	People who choose to seek sanctuary in a new country because of anxiety by persecution or violence.
Sojourners	People who migrate to a new country for a short time and for a specific purpose. They have full intention to return to their country of origin after the time period is over, such as students, seasonal workers, and expatriates.

Source: Berry (2006)

In this study, the focus is given to sojourners. This study attempts to examine the group acculturation effect to consumer behavior of international students (i.e. sojourners), especially in Malaysia HEIs. Towards this purpose, this study refers to Berry's significant work in acculturation strategy. Berry (1997) suggested four achievable strategies involving acculturation: assimilation, separation, integration, and marginalization as shown in Figure 2.3.

In assimilation, people try to adopt both cultures; however the people give priority to the host or alternate culture. Integration can generally be known as biculturalism (Schwartz & Zamboanga, 2008) which is an adoption of cultural customs from both native and alternate cultures. In separation, people refuse to accept the new domain of culture in order to preserve their own ethnic identity. Finally, marginalized people are those who lose all cultural affiliations by eliminating their culture of origin and adopting the practices of the different, dominant culture (Fox, Merz, Solorzano, & Roesch, 2013).

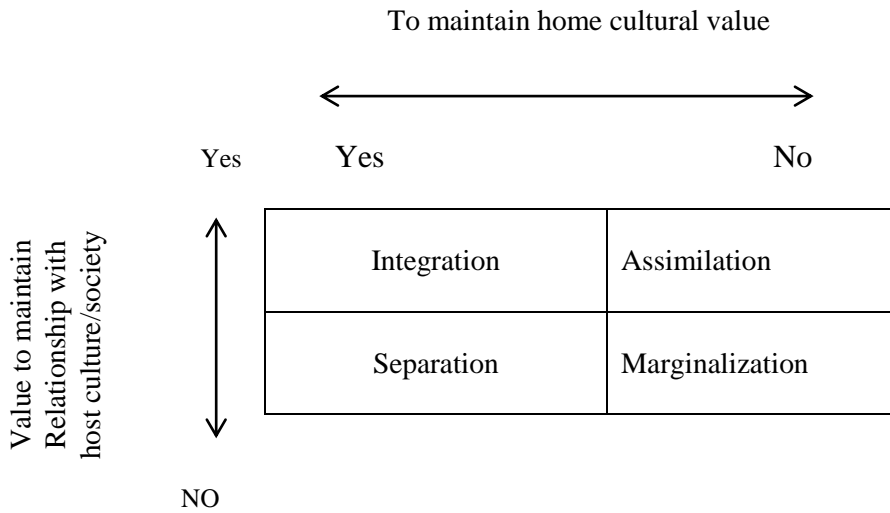


Figure 2.3  
*Acculturation dimensions and acculturation attitudes.*  
Sources: Based on Berry’s (1997) bi-dimensional acculturation model

Table 2.8 summarizes two key studies on the strategy of acculturation. The studies of Berry (1997) and Menzoda (1989) are compared in terms of the definition, conceptualization, and methodology.

Table 2.8  
*Comparison between Berry and Menzoda’s Acculturation Studies*

Berry (1997)	Menzoda (1989)
Separation	Culture resistance People in this category hold their original culture and at the same time ignore interaction with the host culture.
Integration	Culture integration An adoption of cultural customs from both inherent and other cultures.
Assimilation	Culture shift An exchange of other cultural norms for inherent customs.
Marginalization This type of people does not adopt the native or alternate culture.	Culture transmutation Modification of inherent and other cultural practices to create a unique subcultural entity.

In the past three decades, acculturation has been an increasingly studied topic in psychology because it is related to ethnicity (Kuo, 2014; Suinn, Richard-Figueroa, Lew S, & Vigil.P, 1987; Valencia & Johnson, 2006). There are several acculturation models including bi-dimensional and uni-dimensional models that have been suggested (Berry, Trimble, & Olmedo, 1986; Cabassa, 2003; Nelson & Infante, 2014; Nguyen, Smith, Reynolds, & Freshman, 2014) and, consequently, a number of acculturation measures have been established.

To date, there has been little agreement on the conceptualization of acculturation. The first issue pertains to whether acculturation is a unidimensional or a multidimensional constructs. Robert, (1928) proposed a unidimensionality theory of acculturation by seeing the process as it happens to the whole culture through invasion and migration. This theory also indicates that acculturation exists along with the range in which relationship scarify own ethnic culture and align with new dominant society. The multidimensional theory of acculturation developed by Berry (1997) is one of the most widely studied bidimensional models (Cabassa, 2003; Matsudaira, 2006; Thomson & Hoffman-Goetz, 2009; Ward & Kus, 2012).

In a multidimensional model of acculturation, modifications happen in more than one domain (Fox et al., 2013). Berry (1992; 1997) argued that acculturation will lead to a change in the social structure and normative practices at the macro level. However, recently, acculturation also takes place at the individual level, which refers to psychological acculturation (Graves, 1967). At the individual level, acculturation refers

to a psychological change in an individual's behavior and internal characteristic (Berry et al., 1987). The literature on acculturation suggests that studies have been conducted to identify predictors of acculturation. For instance, Lysonski and Durvasula (2013) conducted a study in Nigeria on western brand, product, and life style as a result of globalization.

Gupta (2011) found that the antecedents of acculturation were language, music preference, TV program preference, food, dress, and reading materials towards. Gbadamosi (2012) revealed that personal factors, like age, marital status, education, were relevant in explaining acculturation among minority groups. Literature also indicates that acculturation is a predictor of brand loyalty by (Segev et al., 2014). Pan (2011) examined acculturation as a predictor of negative and positive emotion among international postgraduate student in Hong Kong.

Several studies have demonstrated the moderation effect of acculturation constructs on purchase (Jamal & Shukor, 2014; Ogden, Ogden, & Schau, 2004; Parameswaran & Pisharodi, 2002; Perry, 2008; Weber, Hsu, & Sparks, 2014, 2015). For instance, Jamal and Shukor (2014) examined the moderating effect of acculturation on the association between self-congruity, conformity, need for uniqueness, modesty, and status consumption. However, Jamal and Shukor's findings lack generalizability because they focused on a single religious group. Rana, (2015) revealed that acculturation moderated the effect of ethnic food consumption of non-Muslims on willingness to buy Halal food.



International students make up five percent of the total enrollment in Malaysian public higher education institutions (MOHE, 2016). Many of them managed to complete successfully their studies despite facing cultural difficulties (Chen, Mallinckrodt, & Mobley, 2002). However, the key problem seems to be related to social integration between the international students and host country culture rather than language proficiency, value, education, and identity. This present study investigates the multiple international ethnic groups, specifically those who enroll their study at Malaysian PubHEIs.

Even though acculturation studies have paid much attention to college students (Yoon, Langrehr, & Ong, 2011), limited research has been conducted in examining the impact of acculturation on multiple ethnic groups in the Malaysian higher education context, with the exception of Schwartz et al. (2011). Although, acculturation has been extensively studied in Asian American and Asian residents, there is still limited research on how acculturation is conceptualized and measured in multiple ethnic groups (Schwartz et al., 2011, 2014). Furthermore, as indicated by previous researchers, more investigations need to be conducted on international student acculturation, especially in non-western (Ali et al., 2016; Mourad et al., 2011; Wan et al., 2013; Yusliza & Chelliah, 2010). Also, only a handful number of studies on international students and brand loyalty are available (Podoshen, 2006, 2008; Uslu, Durmus, & Tasdemir, 2013; Segev et al., 2014). This current study tries to fill the existing gaps by introducing the acculturation construct in examining student loyalty and branding.

The waves of international students have increased the focus on acculturation as a significant factor in understanding student (customer) behavior and market segmentation (Gorney, 2007; Maldonado & Tansuhaj, 2002; Zuria, Amat, Rahman, & Ishak, 2010). With the current number of international students of around 115,000 in Malaysia, cultural adaptation in the new environment is becoming significantly important to consider and study. In particular, the current study investigates the dimensions of acculturation, such as assimilation, separation, integration and marginalization of international students at HEIs in Malaysia.

## **2.7 Self-efficacy**

Bandura, (1977, 1986, 1993) was introduced the construct of the self-efficacy and it represents one of the main elements of social cognitive theory. Self-efficacy is describe as “beliefs in one’s competencies to assemble the motivation a person has to accomplish a certain behavior, for example, on how people feel, think, and the behavior desirable to encounter a given situational demand (Bandura, 1997). Bandura conceptualized self-efficacy as either being more focus or task specific (Giled Chen, Gully, & Eden, 2001). However, recent researchers are interested in a more general self-efficacy construct (GSE) (Gardner & Pierce, 1998; Luszczynska, Scholz, & Schwarzer, 2005). General self-efficacy (GSE) refers to generalization through numerous areas of functioning in which people evaluate how efficacious they are (Luszczynska et al., 2005). For instance, a study on general self-efficacy conducted by Chen et al. (2001) found that GSE was a predictor and a moderator variable in motivation research (e.g., goal, effort and performance).

Bandura (1986) posited that perceived self-efficacy plays an essential role in influencing people's motivation and behavior. Self-efficacy can enrich or obstruct the motivation to act. People with a higher self-efficacy will choose to perform a more challenging task and explore something new as compared to those with lower self-efficacy. Further, people with higher self-efficacy have the intention to achieve their goal and not only improve goal setting (Luszczynska et al., 2005). Moreover, according to Bandura (1977), the most powerful determination of behavior is self-efficacy expectancy because it determines the initial decision to perform the behavior.

In an institution of higher education, students' self-efficacy can be observed when they handle difficult tasks or assignments given. Being in a different and a new environment, students are required to be efficacious. Students with strong self-efficacy are able to overcome difficulties and capitalize on chances (Luszczynska, Gibbons, Piko, & Tekozel, 2004). According to Bandura (1993), self-efficacy stimulates problem-solving, thus international students with high self-efficacy will be committed to finishing their studies on time and work towards their future career (Bryan & Omizo, 2005; Wright, Perrone • McGovern, Boo, & White, 2014).

Researchers in education are increasingly giving attention to the role of self-efficacy of students (Bryan & Omizo, 2005; Müge Çelik Örüçü, 2011). Students who consider a course offered as being too difficult to believe that they will never be able to complete the course and will likely avoid from taking it. Gist, (1989) argued that self-efficacy is a

significant motivational variable that influences effort determination and enthusiasm where persons who feel less talented of handling a situation may struggle it because of their feelings of insufficiency or inconvenience. On the other hand, individuals with high self-efficacy will adjust their own learning activities to achieve academic performance (Jiang, Song, Lee, & Bong, 2014; Müge Çelik Örucü, 2011). Judge, Erez, Bono, and Thoresen, (2002) was explained that as a performance-based measure of perceived capability, self-efficacy contrast with conceptually and psychometrically from interconnected motivational constructs, such as outcome expectations, self-concept, or locus of control.

In this study, self-efficacy is considered perceived behavioral control that affects behavioral intention. This study looks at self-efficacy with regards to examining international students' capability to perform a certain job and evaluate their capabilities during their study. According to Schwarzer and Jerusalem (1995), perceived general self-efficacy is a universal psychological construct within various domains in human psychology.

The marketing literature specifically in the service context shows that customers who have high self-efficacy will respond to a service (McKee, Simmers, & Licata, 2006). Hence, those with high self-efficacy will perform better (Jiang et al., 2014; Wright et al., 2014). According to Park and John (2014), brands can help consumers with taxing circumstances in their lives. Specifically, they suggested that consuming brand can increase the consumers' sense of self-efficacy. Alarcon and Edwards (2013) suggested

that future studies should discover both trait and situational motivation aspects since specific self-efficacy is linked with student retention and loyalty (Kahn & Nauta, 2001).

## **2.8 Emotional Brand Attachment**

In recent years, there has been an increasing number of the literature on emotional brand attachment in consumer behavior study. However, researchers have been debating the approaches of and formation of emotional attachment towards university branding (Aznur et al., 2015; Grisaffe & Nguyen, 2011). Current research finds emotional attachment important to the higher education's brands in order to retain and sustain students both in the domestic and international market (Bennett & Ali-Choudhury, 2009; Durkin, McKenna, & Cummins, 2012).

In marketing literature, emotion has been clarified in many ways. For example, Mosca (2000) defined emotion based on a theory of emotion that is the result of chemical and biological response toward behavior. However, Rolls,(2008) contended that emotion is a mental feeling which is developed from emotional experience. Lerner, Li, Valdesolo, and Kassam (2015), and Zeelenberg et al. (2008) pointed out the impact of emotion on decision making. Other scholars are also of the view that emotion is involved during a process of judgment and decision making (Peters, Västfjäll, Gärling, & Slovic, 2006).

Affection (emotion) is an important research topic because traditional research ignored the role of affection and gave preference to the cognitive approach which assumes that customers are rational when making a purchase or consuming a brand (Aguirre-Rodriguez, Bosnjak, & Sirgy, 2012; Carnevale, Inbar, & Lerner, 2011; Vinitzky & Mazursky, 2011). However, studies conducted by neurology scientist showed that emotion is a powerful influence on the decision-making process. In other words, consumers are likely to use emotion more to purchase a product/brand rather than making a rational choice (Bechara, 2004).

Literature indicates that emotion influences behavioral intention (Bigné, Mattila, & Andreu, 2008), brand loyalty (Loureiro, Ruediger, & Demetris, 2012), corporate brand/brand association (Direction, 2015), luxury brand commitment (Li, Robson, & Coates, 2014), satisfaction (Yu & Dean, 2001) and services recovery (Riscinto Kozub, Anthony O'Neill, & Palmer, 2014).

### **2.8.1 Conceptualization of Emotional brand Attachment**

In consumer behavior context, emotional brand attachment has been conceptualized as a strong connection between consumer and the specific object, product, and brand (Thomson, MacInnis, & Park, 2005). However, Stahl, Heitmann, Lehmann, and Neslin (2012), Freling, Crosno, and Henard (2011), and Fournier (1998) argued that emotional brand attachment has been conceptualized in consumer-brand context based on a metaphor where consumers form a relationship with brands similar to how they form a

romantic relationship. Several researchers (Garbarino & Johnson, 1999; Hye Young & Lee, 2010; Morgan & Hunt, 1994) suggested that emotional brand attachment is developed from commitment and trust in the relationship marketing. Moreover, Schmitt (2012) and Smith and Ellsworth (1985) contended that a brand evokes positive and negative moods of consumers. The positive and negative affect can span as a mild affect (positive moods) and strong affect (a specific emotion). Smith and Ellsworth (1985) defined emotions as joy, sorrow, happiness, sadness, and love.

In the last two decades, the pioneering work on attachment was conducted by Bowlby (1982) in the realm of parent-child relationship to understand the process of affection regulation. Bowlby argued that infants are born with attachment behavior and with a sense of security that their environment is safe. According to Bowlby, an attachment is emotionally laden focus between a person and a specific target, such as place, brand, product, and people. Previous studies (Bowlby, 1982; Fraley & Shaver, 2000) showed that emotional brand attachment has a high motivation and behavioral effect. Those who showed strong attachment wanted to preserve the closeness to the attachment target, would suffer separation when the attachment target is detached and have a strong pro-attachment-target orientation.

In consumer behavior, attachment can be explained as a commitment to a brand (Thomson, MacInnis, & Park, 2005). Emotional brand attachment is referred to as an element used to make judgment and reasoning toward a specific behavior, such as loyalty and willingness to pay a price premium for a brand (Japutra, Ekinici, & Simkin, 2014;

Loureiro, Ruediger, & Demetris, 2012). Park, MacInnis, and Priester (2008) argued that commitment is an outcome of brand attachment where strong commitment will form attachment towards the brand. This argument is consistent with the theory of emotional brand attachment, which posits that attachment is a consequence of a series of constant satisfactory results with the brand (Orth et al., 2010) and connections to self-identity (Park et al., 2010). Consumers form emotional brand attachments to both branded product or services (Thomson et al., 2005; Park, MacInnis, Priester, Eisingerich, & Iacobucci, 2010), places (Giuliani & Feldman, 1993), material possession (Klcinc & Baker, 2004), attachment style (Haltigan et al., 2014), and adult romantic relationship (Hadden, Smith, & Webster, 2014).

Emotional brand attachment is an important construct that describes the bond or personal relationship with a brand (Paulssen & Fournier, 2007; Thompson et al., 2006). Paulssen and Fournier, (2007) found that business relationships behave in similar ways to personal relationships; however, different terminologies have been used to refer to emotional brand attachment (Vlachos, Theotokis, Pramataris, & Vrechopoulos, 2010). Thompson et al. (2006) and Thomson et al., (2005) used the term 'emotional attachment' in brand management while Carroll and Ahuvia (2006) and Batra, Ahuvia, and Bagozzi (2012) used the term 'love'. Meanwhile, while Yim, Tse, and Chan (2008) used 'customer-firm affection'. In this study, attachment refers to emotional attachment to a brand. Affective attachment (emotion) in the present research refer to the comparative strength of a student's feeling attach to, identification with, and participating in a university. In this study, the definition given by Thomson et al., (2005) was adopted. Emotional brand



attachment represents students' feeling of belongingness, and a sense of attachment to the university reflects a student's psychological bond with the university. Fullerton and Fullerton (2009) asserted that the affective dimension is important in explaining consumer loyalty and consumer retention toward a brand, service, or product.

Thus variety of conceptualized of emotional brand attachment from previous scholar, however the researcher have been conceptualized emotional brand attachment as a emotional bond between customer and brand by (Thomson et al., 2005). This present study was assumed that international students have emotional bonding on places of their studies. Moreover the concept of emotional brand attachment captures a judgment and reasoning to connect to a behavior such as loyalty and willingness to pay a price premium for a brand (Japutra, Ekinci, & Simkin, 2014; Loureiro, Ruediger, & Demetris, 2012). Thus, in the current context of study, students' are willing to spend extra money to study abroad.

Emotional brand attachment involves a personal experience between the consumer and the brand (Belk, 1988), whereas satisfaction is cultivated from only a few buying experiences. In the same way, Yim et al. (2008) differentiated consumer-firm emotional attachment from consumption affection. According to Carroll & Ahuvia, (2006), sense of emotional attachment contains passion, positive evaluation, and a statement of love. Further, the main role of attachment is the formation of emotional safety through the satisfaction of a person's needs (Hazan & Shaver, 1994; Thomson, 2006). Moreover, Fraley and Shaver (2000) suggested that for a human relationship to be reflected an

attachment relationship, the attachment character should stimulate the other party's feelings of safety and self-confidence.

General emotional attachment is the indicator of an emotion-laden relationship between a consumer and a consumption object, such as a special possession, place, or brand (Thomson et al., 2005). For example, a consumer experiencing emotional attachment to a brand may experience cognitions, such as profound interest in seeing the brand succeed. According to Pimentel and Reynolds (2004) the consumer may also experience feelings of loss upon the brand's departure from the market, show increased willingness to participate in the brand community, and engage in an extended search for branded products.

Various researchers (Fedorikhin, Park, & Thomson, 2008; Park et al., 2010; Thomson, 2006; Thomson et al., 2005) indicated that emotional brand attachment is more specific than emotional attachment, and it is the combination of a self-implicated relationships between a consumer and a brand with the presence of automatic thought and feelings about the brand. Thus, it appears that the crux of brand attachment's aim is a self-brand relationship that is strong enough to induce automatic thought and feeling about the brand. According to the connection-prominence attachment model, a consumer is more likely to be committed to a brand with which he or she has a strong connection and experiences automatic thoughts or feelings (Malär, Krohmer, Hoyer, & Nyffenegger, 2011; Park et al., 2010; Schmitt, 2012).

Thomson et al. (2005) developed a tool for measuring emotional attachment, which is basically a relationship between a person and target characterized by “hot affect” combined with an orientation of love or passion. Their 10-item scale is composed of ratings of descriptor applicability, such as affectionate, passionate, and attached to an object. In previous research, the only six-item scale was used (Malär et al., 2011). However, in this research, the 10-item scale was employed. In explaining attachment to a brand that predicts subsequent behavior beyond involvement, brand attitude, and satisfaction. Thomson et al. (2005) proposed three structural mechanisms of emotional brand attachment consisting of affection, connection, and passion. Emotional attachment has been celebrated as a mediator in building emotional brands. Jawahar and Maheswari, (2009) found that emotional attachment acted as a partial mediator in building emotional brands.



### **2.8.2 Emotional Brand Attachment as a Mediator**

The present study investigates the role of emotion in human judgment and decision-making process (Simonson, Bettman, Kramer, & Payne, 2013; Zeelenberg et al., 2008; Bagozzi et al., 1999). Review of literature highlights that emotional attachment has been investigated in various contexts, such as in vacation (Jani & Han, 2015; Walls et al., 2011), fashion (Watson & Ruoh-Nan Yan, 2013), charity (Baxter & Glendinning, 2013; Hibbert & Horne, 2006), adolescents study (Chavda, Haley, & Dunn, 2006), marketing communication (Muehling, Sprott, & Sultan, 2014; Pescher, Reichhart, & Spann, 2014), corporate social responsibility (Haesun Park Leslie Stoel, 2006), and retailer (Hume &

Sullivan Mort, 2010; Jani & Han, 2015; Vlachos & Vrechopoulos, 2012). Bagozzi, Gopinath, and Nyer (1999) reviewed studies on emotional behavior and found that emotion has been examined as a marker, mediator, and moderator of consumer responses. Emotions constitute a major part of individual personality and influence consumer behavior and perception during the consumption experience.

A theoretical model in which emotional brand attachment is considered as a mediator has not been well developed, especially in the context of higher education branding. However, studies that have considered the mediating effect of emotional brand attachment are available. Hyun, Kim, and Lee (2011) found that emotional response (pleasure) was affected significantly by hedonic value but not by utilitarian value. Hudson, Roth, Madden, and Hudson (2015) observed that emotional brand attachment mediated between marketing communication interaction and behavioral outcome. In a different study, Chopik (2015) revealed that emotion was positively associated with behavioral intention. Emotional brand attachment construct has also been shown to be an important construct in the marketing domain by various scholars (Jim & Voss, 2014; Theng So et al., 2013).

This study is different from previous works as it examines the causal effect of emotional brand attachment on loyalty and the role emotional brand attachment as a mediator. In the higher education context, emotional attachment is a psychological mechanism that explains how loyalty toward a university is formed.

## 2.9 Proposed Research Model

This study focused on the major determinants of brand loyalty. Figure 2.4 illustrates the research model developed that shows the purported associations between the independent variables (university image, perceived teaching quality, acculturation, and self-efficacy), the intervening variable (emotional brand attachment), and the dependent variable (brand loyalty).

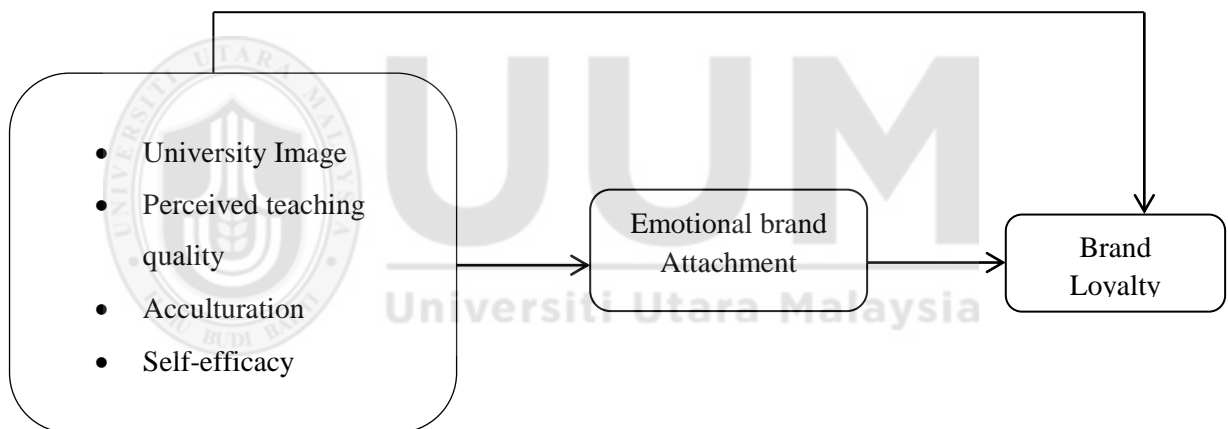


Figure 2.4  
*Research model of the present study*

The research model of this study has been developed using variables extracted from the relevant literature in service marketing. As discussed in the previous chapter, this study is concerned with understanding international students' perception towards a service provider (PubHEI) and their behavioral loyalty. The research model consists of three related parts. The first part links university image, perceived teaching quality,

acculturation, and self-efficacy with emotional brand attachment. The second part links between emotional brand attachment and brand loyalty. Brand loyalty has two dimensions, i.e. attitudinal and behavioral loyalty. The last part examines the mediating effect of emotional brand attachment on the link between the exogenous variables and the endogenous variable.

## **2.10 Hypotheses Development**

Based on the research model above, thirteen hypotheses are formulated as follows.

### **2.10.1 University Image and Brand Loyalty**

According to Kotler (1995), university image can be defined in many ways. Some researchers defined university image as a set of beliefs and impression about a place, destination or organisation (Chun, 2005; Mercedes Marzo-Navarro, Pedraja-Iglesias, & Rivera-Torres, 2005; Olmedo-Cifuentes, Martinez-Leon, & Davies, 2014). Previous literature shows that image can be developed by different things such as product, brand, and organisation (Cretu & Brodie, 2007; Lemmink, Schuijf, & Streukens, 2003; Nguyen & Leblanc, 2001a).

Previous studies found has a relationship between the perceived image and loyalty (Hosseini & Nahad, 2012; MacMillan, Money, Downing, & Hillenbrand, 2005; Nettet et

al., 2011). Similarly, university image was found to be a key predictor of student loyalty (Alves & Raposo, 2010; Palacio et al., 2002; Wilkins & Huisman, 2013).

This variable, university image and reputation strongly affect and influence student retention and loyalty in higher education (Alves & Raposo, 2010; Nguyen & LeBlanc, 2001b). However, previous literatures have shown a lack of studies on loyalty is implemented in higher education in Malaysia context. Thus, the following hypothesis is offered.

***H1: There is a significant relationship between university image and brand loyalty.***

### **2.10.2 Perceived Teaching Quality and Brand Loyalty**

In this current study, perceived quality is defined as an accepting view overall judgement of the overall excellent, or the superiority of the teaching quality by international student in public higher education institutions. In the higher education context, quality can be regarded as occur when a student was satisfied and teaching quality satisfaction is maximised (Alves & Raposo, 2010; Brown & Mazzarol, 2009). Some studies (de Macedo Bergamo et al., 2012; Jung, Lee, Kim, & Yang, 2014; Martenson, 2007) indicate that perceived quality has a significant impact on brand loyalty. Therefore, perceived quality will build brand loyalty. The following hypothesis is therefore proposed:

***H2: There is a significant relationship between perceived teaching quality and brand loyalty.***

### **2.10.3 Acculturation and Brand Loyalty**

Review of acculturation literature reveals that acculturation has a moderating effect on the attitude towards food consumption and advertising. Acculturation also appears to moderate attitude and behavior (Padgett, Kim, Goh, & Huffman, 2013; Sunhee Seo, Phillips, Jang, & Kim, 2012) such as consumer decision making (Jun, Ham, & Park, 2014; Ogden et al., 2004) and predictors to a purchase pattern and brand loyalty (Podoshen, 2006, 2008; Segev et al., 2014; Uslu et al., 2013; Wu, 2011). However, the result of the finding is inconsistent (Segev et al., 2014; Uslu et al., 2013). This study suggests that international students' which acculturated could have a sense of loyal on university brand. Students may feel more assured to recommend their university to their friends if the university culture is similar to their own culture. This leads to the following hypothesis:

***H3: There is a significant relationship between acculturation and brand loyalty.***

### **2.10.4 Self-Efficacy and Brand Loyalty**

Marketing literature in the service context shows that customers with high self-efficacy will respond to a service (McKee, Simmers, & Licata, 2006). Hence, those with high self-efficacy will perform better (Jiang et al., 2014; Wright et al., 2014). According to Park and John (2014), brands can help consumers with challenging situations in their lives and fit with them. Specifically, they suggested that using a specific brand can increase the consumers' sense of self-efficacy, which refers to the belief in one's capabilities to



perform well in a particular situation (Bandura, 1995). Furthermore, in other scopes of studies like technology adoption, self-efficacy is a predictors in explaining the behavioral intention (van Beuningen, de Ruyter, Wetzels, & Streukens, 2009; Wang, Harris, & Patterson, 2013; Wang, Yeh, & Liao, 2013).

Therefore, self-efficacy can be seen as an important part of predicting and describing human behavior (Ajzen & Fishbein, 1977; Alalwan, Dwivedi, Rana, Lal, & Williams, 2015). In the light of these findings by previous literature, the researcher attempt to investigate whether there is a self-efficacy effect on brand loyalty. Thus, the following hypothesis needs to be substantiated:

***H4: There is a significant relationship between self-efficacy and brand loyalty.***

#### **2.10.5 University Image and Emotional Brand Attachment**

Previous research showed that university image has a significant impact on student loyalty (Alves & Raposo, 2010; Belanger, Mount, & Wilson, 2002; Helgesen & Nettet, 2011). However, this relationship has rarely been tested in the context of a study destination. Alves and Raposo (2010) found that a positive image of a college and university can fascinate existing students to attach on the university brand name.

Other studies also indicated that a university that has a positive image is likely to make students feel loyal to the institution (Brown & Mazzarol, 2009; Casidy, 2013; So et al., 2013). Consequently, the more favorable the university image is, the more likely

international students are emotionally attached to the place or destination, resulting in their loyalty to a specific university (Veasna, Wu, & Huang, 2013; Wilkins & Huisman, 2013; Papagiannidis & Alamanos, 2016). Thus, the following hypothesis is offered:

***H5: There is a significant relationship between university image and emotional attachment.***

#### **2.10.6 Perceived Teaching Quality and Emotional Brand Attachment**

Perceived quality is posited to be related to emotional attachment to a brand, as conceptualized by Low & Lamb Jr, (2000), which is a brand association dimension. Previous studies on perceived quality, and emotional attachment showed this construct is crucial for student loyalty (de Macedo Bergamo et al., 2012; Dennis et al., 2016; Hennig-Thurau et al., 2001; Jillapalli & Jillapalli, 2014). Gracia, Bakker, and Grau (2011) revealed a mediating effect of customer's positive affect on the relationship between perceived services quality and loyalty. In line with the discussion above, this study proposes that perceived quality impact emotional attachment to higher education institutions in Malaysia. Thus, the following hypothesis is offered:

***H6: There is a significant relationship between perceived teaching quality and emotional brand attachment.***

### **2.10.7 Acculturation and Emotional Brand Attachment**

Past literature found that consumer acculturation affects consumer consumption behavior and decision making (Chai, Deans, & Biggemann, 2012; Perez, 2011; Podoshen, 2006; Sunhee Seo et al., 2012). In higher education, developing strong student relationships is important because of the intangible and often the interpersonal nature of the service delivery process (Tran, 2012; Williams Jr et al., 2012). Nevertheless, sustaining long-term relationships require a deep understanding of student expectation that inspires bonding, commitment, and loyalty (Chai et al., 2012).

Student acculturation and relationship marketing concept are becoming important marketing practices directed at ethnic and student communities in higher education (Morshidi, 2008). Therefore, to fill the gap of acculturation in higher education branding, a better understanding of the stimulus of student acculturation that affects student interpersonal behavioral is necessary. Bay and Daniel, (2008) suggested social bonds as a variable for future studies because they are important in developing the relationships between students and the institution of higher education. In response to Daniel's call, this study investigates the influence of acculturation on interpersonal, emotional attachment to the place of studies among international students in Malaysia. This leads to the following hypothesis:

***H7: There is a significant relationship between acculturation and emotional brand attachment.***

### **2.10.8 Self-Efficacy on Emotional Brand Attachment**

Basically, self-efficacy has been used to explain attitudes and behaviors in various in services and business related setting, including brand (Ji Kyung & John, 2014), internet banking (Alalwan et al., 2015) and engagement (Llorens, Schaufeli, Bakker, & Salanova, 2007). Gist, (1987) and Marilyn E Gist, (1989) describe that self -efficacy also has been shown to be critical motivation variable that influencing the individual choices, emotional reaction, goals, coping, effort and persistence.

Another example of self-efficacy as a motivation, where past studies indicate that past behavior ( physical activity) as a predictor of intention does not always distinguish the effect of social cognitive influences on intention, particularly where perceived behavioral control and self-efficacy are concerned (Hagger, Chatzisarantis, & Biddle, 2001; Rhodes & Courneya, 2003). Research findings support this assumption in various studies on the influence of parents and attachment (Fass & Tubman, 2002; Wei, Russell, & Zakalik, 2005) student and career decision (Quimby & O'Brien, 2004), student well-being (Santos, Magramo Jr, Oguan Jr, & Paat, 2014; Van Dinther, Dochy, Segers, & Braeken De, 2014), and technology (Beuningen, de Ruyter, Wetzels, & Streukens, 2009; Oakley & Palvia, 2012). But inconsistent findings have been reported on the relationship between self-efficacy and attachment (Bilgin & Dincer, 2011; Parsa, Yaacob, Redzuan, Parsa, & Esmaeili, 2014). Hence, further investigation should be conducted to confirm the findings. Therefore, the following hypothesis is offered:

***H8: There is a significant relationship between self-efficacy and emotional brand attachment.***

### **2.10.9 Emotional Brand Attachment on Brand Loyalty**

Literature in marketing indicates that consumer emotional brand attachment and brand loyalty are interrelated (Vlachos et al., 2010; Vlachos & Vrechopoulos, 2012; Park et al. 2010; Louis & Lombart, 2010; Tsai, 2014). Grisaffe and Nguyen (2009) highlighted that emotional attachment to a brand is relatively a new construct in the marketing literature especially in consumer behavior. However, recent studies observed that emotional attachment affects re-patronage intentions (Vlachos et al., 2010; Vlachos & Vrechopoulos, 2012). Correspondingly, investing in building an emotional attachment with consumers is a worthwhile effort.

Park et al., (2010) asserted that attachment to a brand has two dimensions: brand-self connection and brand prominence. Park et al., (2010) argued that people who are strongly attached to a brand are willing to expend personal resources (e.g., money, time and effort) to maintain their relationship with the brand. Moreover, consumers who perceived the benefit they would gain by being in a relationship with the brand were found to have an intention repurchase in the future (Louis & Lombart, 2010). In consumer behavior, studies have shown a significant relationship between brand attachment and loyalty (Alarcon & Edwards, 2013; Louis & Lombart, 2010; Park et al., 2010; Vlachos & Vrechopoulos, 2012). From the discussion above, it is can be logically concluded that attachment to the brand has a positive relationship with brand loyalty. Thompson et al. (2006) stated that emotional attachment and bond are developed after an experiential episode.

Hence, further research is necessary to a better understanding of how international students develop emotional attachment to their preferred university. International student's emotional brand attachment may indicate brand loyalty and may increase their willingness to pay more, recommend, and engage in positive WOM (Jimenez & Voss, 2014; Thomson et al., 2005). But there are limited empirical studies on consumer attachment to the brand (Tsai, 2014; Orth, Limon, & Rose, 2010; Thomson et al., 2005; Georgia et al., 2015). Therefore, this study attempts to reduce the gap. Hence, the following hypothesis is postulated:

***H9: There is a significant relationship between emotional brand attachment and brand loyalty.***

#### **2.10.10 The Mediating Effect of Emotional Brand Attachment**

The following hypotheses are formulated to test the indirect effect of emotional brand attachment.

***H10:*** Emotional attachment mediates the relationship between university image and brand loyalty.

***H11:*** Emotional attachment mediates the relationship between perceived teaching quality and brand loyalty

***H12:*** Emotional attachment mediates the relationship between acculturation and brand loyalty

***H13:*** Emotional attachment mediates the relationship between self-efficacy and brand loyalty.

## 2.11 Chapter summary

This chapter has reviewed the literature to the study of the construct. Gaps within the literature and studied variables have also been modified. The underlying theories that explained the criterion variables in this study have been taken into account and properly discussed. Based on the theory of (S-O-R) for this study has been designed and formulated and presented. Finally, based on the cumulative literature review and the derivation of relationships among the variables, the study hypothesis has been postulated.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the method employed to collect data for the present study. Specifically, the chapter covers the nature and the methodology of the study, research philosophy, research design and research method, sampling technique, population of study, data collection procedures and proposed techniques of data analysis. This chapter offers an elaboration on the questionnaire design of variables, as well as presents the results of pre-test and pilot tests.

#### **3.2 Research Methodology**

Methodology refers to the strategy, procedure and process used to generate knowledge in certain areas of study (Bryman & Bell, 2011; Creswell, 2012; Creswell, 2003). It is based on a set of conceptual and philosophical postulations that justify the use of a method (Vaus, 2001). According to Sauders, Lewis, and Thornhill, (2003), a researcher needs to choose and employ a methodology that is consistent with the research philosophy.



### 3.2.1 Research Philosophy

There are two main research philosophies identified in the literature. They are positivism and interpretivism (Saunders et al., 2009). Positivism advocates the application of scientific method in a research. Interpretivism, on the other hand, is rooted in the sociology of regulation (Bryman & Bell, 2011), in which social actors are active constructors of the meanings of their actions. This interpretivism philosophy is primarily employed in qualitative research that emphasizes an inductive approach to generating theory (Malcolm, 2000; Tushnet, 1983). Because the present study is interested in observing causal relationships and generalizing the observation in a larger population, therefore positivistic philosophy was adopted. Consistently, quantitative methodology was appropriate to achieve the goal (Saunders et al., 2009).

This study investigates the relationship between numerous predictors of emotional brand attachment and brand loyalty in the context of higher education institutions. The predictors examined were university image, perceived teaching quality, self-efficacy and acculturation, given that, a quantitative research design was adopted. Using this quantitative design, the researcher employed intercept surveys which were conducted through self-administered questionnaires to obtain data from international students. The constructs examined were measured by multiple items on a seven-point Likert scale. All items were adapted and modified from existing measures. Before the measures were finally used, a pre-test and pilot test were conducted to reduce measurement error by ensuring that the wording of the items was clear. Such tests are important to determine

the validity and reliability of the instruments as well as to address any potential problems anticipated to arise during the actual data collection process. Questionnaires were distributed to international students studying in six public universities. Since, a list of international students was not available a filter question was included to identify the correct participants.

### **3.3 Research Design**

Research design refers to a framework of collection and analysis of data. According to Vaus (2001), the function of a research design is to certify that the data collected will be able to answer the research questions as unambiguously as possible. A research design is also considered a framework or structure to carry out the research which involves the connection of philosophy, strategy and method (Cresswell, 2012). Ekinci (2015) asserted that a research design is a guideline or blueprint for researchers on how to conduct the study.

In general, a research design can be classified into five different types, namely, experimental design, cross sectional, longitudinal design, case study and comparative design (Bryman & Bell, 2011; Krosnick, 1999). Traditionally, in a consumer research, the cross-sectional design is more relevant than other types of research design (Bryman & Bell, 2011; Fowler, 2014). Thus, in this study a cross-sectional survey was adopted. In

social science studies, a survey often calls for a cross-sectional design (Bryman & Bell, 2011) in which participants are asked specific questions (Fowler, 2014) at a point in time.

However, a survey research is not without limitations (Biemer & Lyberg, 2003), one of which is nonresponse bias. Nonresponse errors occur when participants do not provide data or provide partial data only (Sharon, 2009). Nonresponse will lead to missing data, which can affect the validity of the data. Another limitation is related to measurement error.

Several scholars state that measurement errors are related to the interviewer, participant, instrument, and mode of data collection (Alwin, 1991; Biemer & Lyberg, 2003). These sources of errors can contaminate the findings and have to be addressed. Figure 3.1 shows that a survey consists of five important stages that are executed sequentially from research objective formulation to analysis of data.

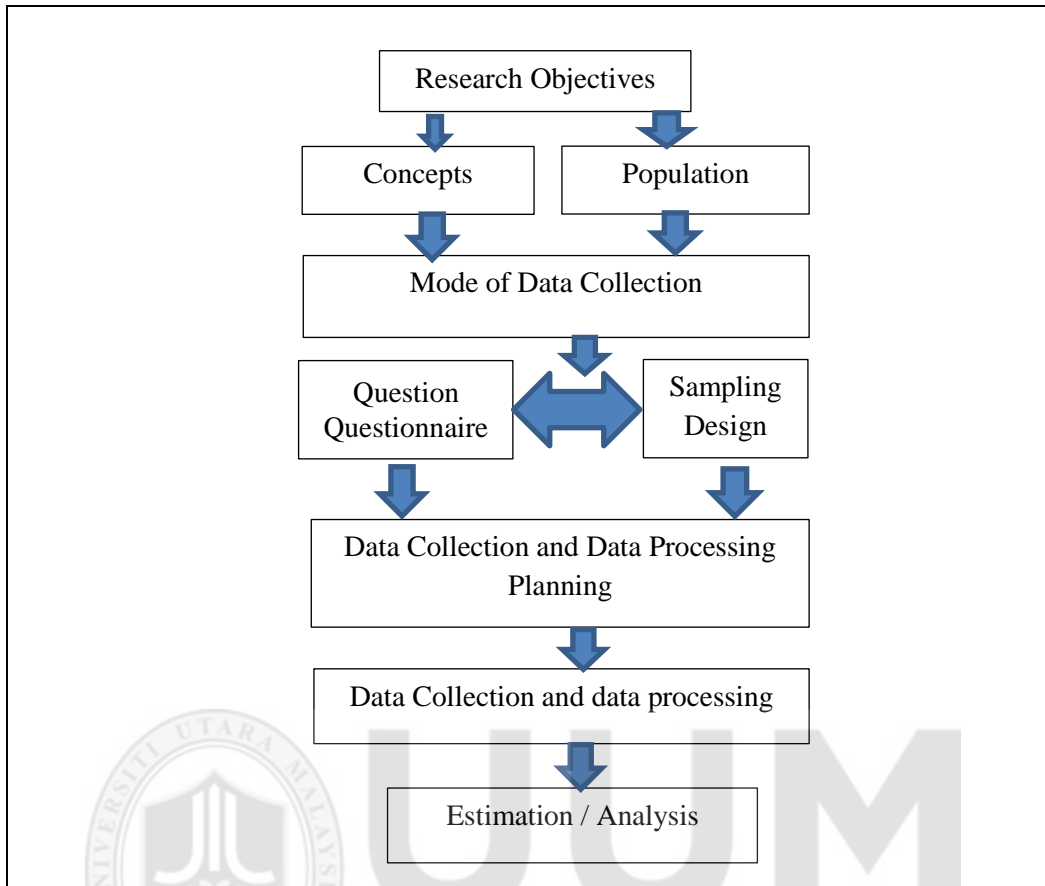


Figure 3.1

*A survey process*

Source: (Biemer & Lyberg, 2003)

### 3.3.1 Research Method

To achieve the research objectives and to answer the research questions, this study employed a survey-based approach. Fowler, (2014) acknowledged that a survey is one of the techniques used to gather data on personal and social facts, attitude and belief in a specific period of time. According to Biemer and Lyberg (2003), surveys can detect nonresponse bias. A survey is less time consuming, cost effective, and can be administered to large sample size (Leeuw & Hox, 1988; Sharon, 2009). A survey can be conducted through interview (e.g., telephone, personal interview, computer-assisted

interview and through electronic media), self-administered questionnaire (e.g., email, postal questionnaire, and delivery and collection questionnaires) and, people and event observation (e.g., with videotaping or audio recording) (Fowler, 2014; Sauders et al., 2003).

In this study, a self-administered questionnaire was utilized to obtain the data. Self-administered questionnaire refers to the data gathered without interference from the researcher. That is, participants read the questionnaire and record their answers without assistance from the researcher (Leeuw & Hox, 1988). To distribute the questionnaire, enumerators were recruited.

### **3.4 Sampling**



Sampling is the process of selecting a sufficient number of subjects from a research population to address the research objective (Ekinci, 2015; Fowler, 2014). In this study, probability sampling was employed instead of non-probability sampling. Sekaran (2006) highlighted that probability sampling enables researchers to generalize their findings, whereas random selection can ensure that each member in the population has an equal chance to be selected (Ekinci, 2015; Sekaran & Bougie, 2010).

### 3.4.1 Population

The population in this study is international students who are currently enrolled in public universities in Malaysia i.e. research universities, comprehensive university, and focus universities. The numbers of international students in these universities are approximately 28,985 in 20 public universities located throughout Malaysia (MOHE, 2015). In this research, the target population is defined as a “a foreigner studying in Malaysia”, aged 18 and above, and is enrolled in a public university.

Sampling is done using quantitative research to study a representative sample that closely produces features of interest in the larger population (Fraenkel & Wallen, 1993). Also, a sampling frame in this research can be defined as a list of all units in the population to be studied. According to Alan Bryman and Bell, (2011), a sampling frame is the population that actually has a chance to be selected. Due to fact that the name list of international students is not to be revealed to the researcher or public, the selection of the sample frame has to be based on available data provided by the Ministry of Higher Education (MOHE). Based on sources by Ministry of Higher Education and review of literature, and as summarized in Table 3.1 below, it's shown that the public higher education has three categories a research university, focus and comprehensive university.

The research universities currently are Universiti Kebangsaan Malaysia (UKM), Universiti Malaya (UM), Universiti Putra Malaysia (UPM), Universiti Teknologi

Malaysia (UTM) and Universiti Sains Malaysia (USM) which specialize in research and innovation. While a comprehensive university offers a variety of academic study programs at various levels. Comprehensive universities in Malaysia are Universiti Malaysia Sabah (UMS), Universiti Islam Antarabangsa (UIAM), Universiti Teknologi MARA (UiTM), and Universiti Malaysia Sarawak (UNIMAS) (MOHE, 2016).

Focused universities are universities that specialize in specific areas, such as, engineering and technology, and management. Focused universities in Malaysia are Universiti Malaysia Perlis (UniMAP), Universiti Malaysia Pahang (UMP), Universiti Pendidikan Sultan Idris (UPSI), Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Teknikal Melaka (UTeM), Universiti Malaysia Terengganu (UMT), Universiti Sains Islam Malaysia (USIM), Universiti Utara Malaysia (UUM), Universiti Malaysia Kelantan (UMK), Universiti Sultan Zainal Abidin (UNIZA) and Universiti Pertahanan Nasional Malaysia (UPNM) (MOHE, 2016). Table 3.1 summarizes the total number of international students enrolled by university category in the year 2015.

Table 3.1  
*Summary of international student in Malaysia PubHEIs*

University category	Name of university	Number of international students
Research university	Universiti Malaya	4453
	Universiti Sains Malaysia	1590
	Universiti Kebangsaan Malaysia	2871
	Universiti Putra Malaysia	3453
	University Teknologi Malaysia	2866
	N <sub>h</sub>	15233
Focus university	Universiti Pendidikan Sultan Idris	211
	Universiti Malaysia Terengganu	134
	Universiti Utara Malaysia	2717
	Universiti Tun Hussein On Malaysia	497
	Universiti Pertahanan Nasional Malaysia	
	Universiti Sains Islam Malaysia	53
	Universiti Teknikal Melaka	766
	Universiti Malaysia Perlis	441
	Universiti Malaysia Pahang	905
	Universiti Sultan Zainal Abidin	494
	Universiti Malaysia Kelantan	211
	N <sub>h</sub>	72
		6499
Comprehensive university	Universiti Teknologi MARA	347
	Universiti Islam Antarabangsa Malaysia	5891
	Universiti Malaysia Sarawak	438
	Universiti Malaysia Sabah	577
	N <sub>h</sub>	7253
Total		N= 28985

Sources: MOHE 2015

However, only six universities were selected for this study through stratified random sampling, which comprises of two from each university category: research, focus and comprehensive. Each category is represented by the following the sample size of international students: from research universities (RUs) 297, focus universities (FUs) 127 and comprehensive universities (CUs) 141. However, at this point the international students have not yet been distinguished from non-international students.



In order to properly identify if the respondents are international students or not, a question regarding country of origin was inserted into the demographic section in the questionnaire. The list of university categories is sourced from (MOHE 2015). The number of the international students enrolled in 2015 was 28,985. According to Gray and Diehl, (1992) and Hair, Money, Samouel, and Page, (2007) proportionate stratification is a type of stratified sampling in which the sample size of each stratum is proportionate to the population size of the stratum. This means that the number of sampling units drawn from each stratum should be relatively homogeneous (Sekaran & Bougie, 2010). According to Zikmund, Babin, Carr, and Griffin, (2012), the list of population elements must be obtained for stratified random sampling.

This study will implement the random sampling technique in data collection from respondents. Proportionate stratified sampling was utilized in order to ensure the size of the sample is drawn from each stratum is proportionate to the population size of stratum (Malhotra, 1999). The major concern of using stratified proportionate sampling is to increase precision without incurring cost.

### 3.4.2 Sample size

Once the decision was made about the sampling technique, the next step was to identify the sample size through proportionate stratified sampling. According to the Ministry of Higher Education (2016), as at 2015, the total number of international students enrolled at public universities was 28,985. Roscoe, (1975) suggests that the appropriate sample size for research is at least 30 and no more than 500, but, in this study, the formula of (Krejcie & Morgan, 1970) was employed to determine the sample size. According to Krejcie and Morgan, for more than 20,000 students, a minimum sample size of 377 is enough for any research. For SEM analysis, at least 100 usable samples are required (Byrne, 2010).

However, since a low response rate was anticipated, it was decided to oversample, which is typical in social science studies. Salkind, (1997) suggested oversampling where the sample size is increased by 40-50% to compensate for the low response rate. Following this recommendation, the number of questionnaires distributed was increased by 50%, to 565, broken down to: 297 sets of questionnaire among research universities, 127 focused universities, and 141 comprehensive universities as per Table 3.2 below.

This study uses the stratified proportionate random sampling technique to select the sample size. The sample size drawn from each segment is proportionate to the population size of segment (Malhotra, 1999).

A sample for each stratum was calculated using the following formula by (Babbie, 2007):

$$n_h = (N_h / N) * n$$

$n_h$  = sample size of the stratum  
 $N_h$  = population size of stratum  
 $N$  = total population  
 $n$  = total sample size

Where  $n_h$  is a sample of the stratum  $h$ ,  $N_h$  is the population size of the stratum which is from research universities (15233), focus universities (6499) and comprehensive universities (7253), while  $N$  is the total population size (28985) and  $n$  is the total sample size (565). The following is the breakdown of the sampling size for this research base on the formula above. Table 3.2; illustrates the breakdown the sample sizes of this research.

Table 3.2  
*Distribution proportionate stratified random of International student in Malaysia PubHEIs*

<b>University category</b>	<b>Number of international students</b>	<b>Sample identify</b>
Research university	15233	297
Focus university	6499	127
Comprehensive university	7253	141
Total	28985	565

Sources: Researcher

### **3.4.3 Unit of Analysis**

The unit of analysis is individual international students who study at public universities in Malaysia. The questionnaires were distributed to international students who had prior experience studying in the current university. For the purpose of this research, international students were defined as undergraduate or postgraduate students who have been studying for more than one year at the public university on a full time or part-time basis. This group of international students was chosen because they were considered key students in the university and have had experience with university facilities and the environment, so, they would be able to provide input on factors influencing the loyalty to the institutions. The approach of selecting participants in higher education was employed by researchers in service marketing (Ginns, Prosser, & Barrie, 2007; Petruzzellis, D'Uggento, & Romanazzi, 2006; Zamberi, 2014) based on semester and education levels such as undergraduate and post graduate.

### **3.5 Data Collection Procedure**

Intercept survey is a popular data collection method among marketing scholars Hornik & Ellis, (1988) employed in shopping malls to gather participants' opinions and experiences about certain products or brands. Bush and Hair, (1985) noted that intercept surveys provide a good response rate. Although an intercept survey is synonymous with convenience sampling, previous studies associated it with the random sampling technique because it reduces deviation in population characteristics (Gabriel, Leichtling, Bolan, &

Becker, 2013; Khare, 2015; LaTour & Rotfeld, 1997; Lee & Lee, 2015; Wong & Sohal, 2002). Since the name list of international students is confidential, an intercept survey was appropriate as the primary technique to collect data. In addition, generally this method is likely to yield higher response rates than any other collection techniques (Bush & Hair, 1985). Similarly, Sudman (1980) noted that intercept surveys could yield a 67.8% response rate compared to mail and telephone surveys. Other scholars highlighted that the range of response rate was between 50% and 80% (Khare, 2015; LaTour & Rotfeld, 1997; Miller, Wilder, Stillman, & Becker, 1997).

To conduct the survey, enumerators were employed and sent to all selected universities where they were trained how to intercept potential participants. Once trained, each enumerator was stationed at different entrances in the universities, such as, at the library, the university mall, and residential halls. The enumerators work from 9:00 a.m. to 11:00 a.m. and 3:00 p.m. to 5:00 p.m. every day, including weekends, rotating their locations at every shift. In selecting the sample, the enumerators were instructed to choose every 5<sup>th</sup> international students that walked through their designated location. They were also asked to record all refusals to participate. Even though the enumerators took the necessary steps to reduce biases, there was no guarantee that biases did not take place; nonetheless, such a technique in distributing the questionnaire helped minimize the biases (Sudman, 1980). The survey was conducted from the month of February until end of March 2015.

Using the questionnaire as the key data collection method was advantageous as researchers can obtain data fairly easily, and the questionnaire responses can be easily coded (Bryman & Bell, 2011).

### **3.6 Questionnaire Design**

A questionnaire must be designed with specific research objectives in mind. Figure 3.2 shows the questionnaire design process in this study, following the suggestion of (Ekinici, 2015). First, the items to measure the variables/concepts in the study and the target participants were identified. Second, a draft questionnaire was prepared. Related to this step, considerations on the language, wording, sequence of items, and format were made. Finally, the items in the questionnaire were pilot tested to assess whether they could be easily and clearly understood. At this stage too, the validity and reliability of the measures used were examined.

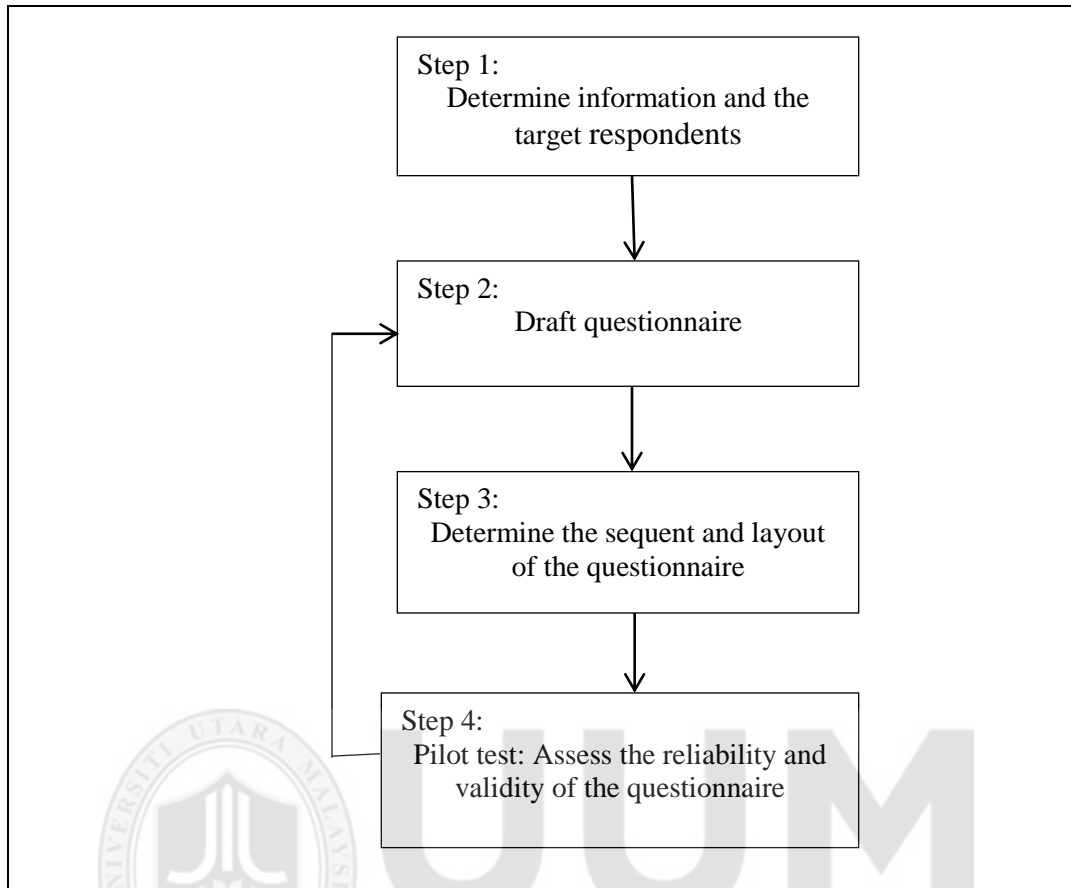


Figure 3.2  
*Steps in questionnaire design*  
 Source: Ekinci (2015)

There were seven sections in the questionnaire; each corresponded to the study construct. Section One had 21 items on university image, Section Two, 21 items on perceived teaching quality, Section Three, 29 items on acculturation, Section Four, 10 items on self-efficacy, Section Five, 10 items on emotional brand attachment, and Section Six, 15 items on brand loyalty. In addition, 10 demographic items were included in Section Seven.

The questionnaire was designed in a closed-ended form whereby participants were given a choice of fixed alternatives. The advantage of a closed-ended questionnaire is that

participants can immediately read the items (questions) asked without having to remember their responses (Ekinci, 2015). However, this structure limits rapport between the researcher and the participants (Remler & Ryzin, 2015). An introduction was placed on the first page of the instrument informing that the survey is solely for academic purposes and that all the answers will be strictly private and confidential.

### **3.6.1 Measures**

Six constructs were examined in this study. They are university image, perceived teaching quality, acculturation, self-efficacy, emotional brand attachment, and brand loyalty. Items used to measure each construct were adapted from previous literatures and modified to suit the context of the current study. A total of 106 items were used. Table 3.3 shows a summary of the items and their sources.



Table 3.3  
*The measurement scale development*

<b>Constructs</b>	<b>No. of items</b>	<b>Sources</b>
<b>University image</b>	<b>21</b>	Lymar & Mohajerani, (2013)
Quiddity	7	
Covenant	11	
Symbolic and external representation	3	
<b>Perceived teaching quality</b>	<b>21</b>	Ashby et al. (2011)
Teaching and course	4	
Organization and management	3	
Assessment and feedback	5	
Personal development	3	
Academic support	3	
Learning	3	
<b>Acculturation</b>	<b>29</b>	Berry (1980)
Assimilation	8	
Separation	7	
Integration	5	
Marginalization	9	
<b>Self-efficacy</b>	<b>10</b>	Schwarzer & Jerusalem, (1995)
<b>Emotional brand attachment</b>	<b>10</b>	Malar et al. (2011); Yim, Tse, & Chan, (2008)
Affection	4	
Connection	3	
Passion	3	
<b>Brand loyalty</b>	<b>15</b>	Hennig-Thurau, Langer, and Hansen (2001), Sui & Baloglu, (2003)
Attitudinal	10	
Behavioral	5	

In addition to the above constructs, demographic data of the participants were collected. The demographic variables included age, country of origin, education level, mode of study, courses, gender, marital status and race or ethnicity.

All items in Table 3.3 were measured on a seven-point Likert scale. According to Dawes (2008), this scale allows participants to have more options in responding and the answers are likely to be conceivably better (i.e. higher relative score). Besides, Spector (1992) pointed out that more response choices allow for greater precision.

### 3.6.1.1 Brand Loyalty

Brand loyalty in this research refers to composite loyalty, which is behavioral indicators that signal a students' intention and enduring desire to recommend the university to others by using positive word-of-mouth communication. Brand loyalty is also reflected in the students' desire to maintain valued relationship with the university by furthering their studies at the same university. The definition is consistent with the definition that offered by Henning-Thurau et al. (2001) and Zeithaml et al. (1996). According to Sui and Baloglu, (2003), brand loyalty represents the loyalty of a student resulting from the experience during and after his or her time at the institutions of higher education.

Brand loyalty encompasses attitudinal and behavioral components. Students' loyalty are reflected in their intention to remain in the same course or the same university, their recommending of the university to others, and in their intention to further their education at the same university in the future (Baloglu, 2002; Dick & Basu, 1994; Hennig-Thurau et al., 2001; Oliver, Rust, & Varki, 1997; Jacob Jacoby & Chestnut, 1978).

Brand loyalty is measured by 15 items by that encompasses of attitudinal and behavioral loyalty (Sui & Baloglu, 2003; Hennig-Thurau et al., 2001). The items are shown in Table 3.4.

Table 3.4  
*Items on Brand Loyalty*

<b>Dimensions</b>	<b>Items</b>
Attitudinal	<ol style="list-style-type: none"> <li>1. I would recommend my course to someone else.</li> <li>2. I would recommend my university to someone else.</li> <li>3. I'm very interested in keeping in touch with "my faculty."</li> <li>4. If I was faced with the same choice again, I would still choose the same course.</li> <li>5. If I was faced with the same choice again, I would still choose the same university.</li> <li>6. I would become a member of any alumni organizations at this university or faculty.</li> <li>7. I will say positive things about this university to other people.</li> <li>8. In my future ,I will continue my post graduate education in this university.</li> <li>9. I will encourage my friends and relatives to join this university.</li> <li>10. When the issue of universities come up in conversation, I would recommend this university.</li> </ol>
Behavioral	<ol style="list-style-type: none"> <li>1. I take pride in telling other people about my experiences in this university.</li> <li>2. I tell other people positive things about this university.</li> <li>3. If I saw an idea that I liked at another university, I would share this idea with this university's management and employees.</li> <li>4. I would allow my name and positive comment I made about this university to be used in media.</li> <li>5. I am more likely to tell management or employees about problems that occur at this university than other university.</li> </ol>

### 3.6.1.2 Emotional Brand Attachment

Emotional brand attachment is clearly an emotional bond linking an individual with a specific object or brand (Thomson et al., 2005). Emotional brand attachment is defined in this current study as emotional attachment between a consumer (student) and brand (i.e. university name) (Thomson et al., 2005). Three dimensions of emotional attachment are examined. They are compressed affection, passion and connection. Ten items adapted

from various studies were used to measure emotional brand attachment and its dimensions (Malär et al., 2011; Yim et al., 2008) as shown in Table 3.5.

Table 3.5  
*Items on Emotional brand Attachment*

<b>Dimensions</b>	<b>Items</b>
Affection	<ol style="list-style-type: none"> <li>1. I always enjoy my experience at this university.</li> <li>2. I always have warm and comfortable feeling when staying at this university.</li> <li>3. I experience great happiness when staying at this university.</li> <li>4. My feeling toward the University can be characterized as peaceful.</li> </ol>
Connection	<ol style="list-style-type: none"> <li>1. I care about maintaining my relationship with this university.</li> <li>2. I have decided that this is “my” university.</li> <li>3. I could not let anything get in the way of my attachment to this university.</li> </ol>
Passion	<ol style="list-style-type: none"> <li>1. I will never get bored of going to this university.</li> <li>2. I find myself always thinking about staying at this university.</li> <li>3. My feelings toward the University can be characterized by passion.</li> </ol>

### 3.6.1.3 University Image

University image is defined as the sum of a student’s beliefs or the feeling that he or she has towards an object (i.e.university) (Landrum et al., 1998; Arpan et al., 2003; Kotler & Fox, 1995; Nguyen & LeBlanc, 2001). The construct of university image was developed by (Yavas & Shemwell, 1996). This construct had four dimensions: quiddity, covenant (mission and vision), covenant (learning and social environment, and symbolic and external communication. Twenty one items developed by previous researchers were used

to measure this construct and its dimensions. The Cronbach's alphas were reported to range from 0.73 to 0.92. Table 3.6 illustrates the items.

Table 3.6  
*Items on University Image*

<b>Dimensions</b>	<b>Items</b>
Covenant (mission and vision)	<ol style="list-style-type: none"> <li>1. Graduates of this university have excellent job and career prospects.</li> <li>2. A degree from this university has a high status in the outside world.</li> <li>3. A degree from this university will be useful to a person throughout his or her entire life.</li> <li>4. This university is committed to being among the top universities in this sector.</li> <li>5. This university has a clear and desirable mission.</li> </ol>
Symbolic and external representation	<ol style="list-style-type: none"> <li>1. This university name and logo is memorable.</li> <li>2. The university name and logo tells me a lot about the nature of the university.</li> <li>3. The things I have heard about this university from newspaper reports, television, conversations with other people, etc. present a good image of the university.</li> </ol>
Covenant (learning and social environment)	<ol style="list-style-type: none"> <li>1. This university has excellent student support services (help with study skill, academic writing, etc.).</li> <li>2. This university has a lively social environment with many opportunities to make new friends.</li> <li>3. This university has an excellent library, information technology, and other learning facilities.</li> <li>4. The university has teaching and support staff who are easily accessible to students.</li> <li>5. The university has many clubs and societies.</li> <li>6. The university has excellent sports and leisure facilities.</li> </ol>

Table 3.6 (continues)

Dimensions	Items
Quiddity	<ol style="list-style-type: none"> <li>1. The university is located in an area that is convenient for me.</li> <li>2. The university has academic entry requirements that are appropriate for someone like me.</li> <li>3. Lecturers of the university have impressive research and publication records.</li> <li>4. The university has a proportion of foreign students that I find desirable.</li> <li>5. The university has a physically attractive campus.</li> <li>6. The university is located in an area that is physically safe.</li> <li>7. The university is located in a geographical area that has many attractions and entertainment facilities.</li> </ol>

### 3.6.1.4 Perceived Teaching Quality

Perceived quality is described as the students' overall evaluation and judgment of teaching and learning effectiveness of academic staff in institutions of higher education. To measure the students' judgment of teaching and learning, the Program Experience Questionnaire (PEQ) and Course Experience Questionnaire (CEQ) from the National Student Survey (NSS) questionnaire inventory (Ramsden, 1991; Richardson et al., 2007; Wilson, Lizzio, & Ramsden, 1997) were used. While the CEQ consists of five dimensions; good teaching, clear goal and standards, appropriate assessment, appropriate workload, and generic skill (Ramsden, 1991; Wilson et al., 1997); the PEQ consists of six dimensions: teaching the course, organization and management, assessment and feedback, personal development, academic support, and learning sources (Richardson et

al., 2007). Twenty one items were used to measure all dimensions. The items were adapted from (Ashby et al., 2011). It was reported that the Cronbach's alpha of the items was 0.76 (Ashby et al., 2011). Table 3.7 shows the items.

Table 3.7  
*Items on Perceived Teaching Quality*

<b>Dimensions</b>	<b>Items</b>
Teaching in my course	<ol style="list-style-type: none"> <li>1. This university lecturer is good at explaining things to the students.</li> <li>2. This university lecturer has made the subject interesting.</li> <li>3. This university lecturer is enthusiastic about what they are teaching in class.</li> <li>4. The course at this university is intellectually encouraging.</li> </ol>
Organization and management	<ol style="list-style-type: none"> <li>1. The timetable works efficiently as far as my activities are concerned.</li> <li>2. Any changes in the course or teaching have always been communicated effectively to the student.</li> <li>3. This university course is well organised and is running smoothly.</li> </ol>
Assessment and feedback	<ol style="list-style-type: none"> <li>1. Lecturer of the university give prompt feedback on student's work.</li> <li>2. I have received detailed comments on my work from my lecturer during in class.</li> <li>3. Feedback on my work has helped me clarify things I did not understand.</li> <li>4. The criteria used in marking have been clarified in advance by the lecturer.</li> <li>5. This university assessment arrangements and marking have been fair for all students.</li> </ol>
Personal development	<ol style="list-style-type: none"> <li>1. This university course has helped me to present myself with confidence.</li> <li>2. My communication skills have improved since I study at this university.</li> <li>3. As a result of the course, I feel confident in tackling unfamiliar problems.</li> </ol>
Academic support	<ol style="list-style-type: none"> <li>1. I have received sufficient advice and support with my studies.</li> <li>2. I have been able to contact lecturers when I needed to.</li> <li>3. Whenever I need advice regarding my study, the university staff are able to give me a good ones.</li> </ol>

Table 3.7 (continues)  
*Items on Perceived Teaching Quality*

<b>Dimensions</b>	<b>Items</b>
Learning resources	<ol style="list-style-type: none"> <li>1. The library resources are good enough for my needs.</li> <li>2. I have always been able to access to general IT resources when required.</li> <li>3. When required, there is sufficient access to specialised equipment, facilities, or rooms.</li> </ol>

### 3.6.1.5 Acculturation

Acculturation is operationalized as cultural changes and the outcome of a long interaction between two different cultural groups (Berry et al., 1986). Four dimensions were examined: assimilation, separation, integration and marginalization. Acculturation was measured by 29 items adapted from Barry (2001). It was reported that the Cronbach's alphas of the 29 item scale were between 0.77 and 0.85. Table 3.8 shows the items.

Table 3.8  
*Items on Acculturation*

<b>Dimensions</b>	<b>Items</b>
Assimilation	<ol style="list-style-type: none"> <li>1. I write better in Malay than in my native language (for example: Nigerian, Iranian, Arabica, etc.).</li> <li>2. When I am in my hostel, I typically speak Malay.</li> <li>3. If I were asked to write an assignment, I would prefer to write in Malay.</li> <li>4. I get along better with Malaysian than Asians.</li> <li>5. I feel that Malaysian understand me better than Asians do.</li> <li>6. I find it easier to communicate my feelings to Malaysians than to Asians.</li> <li>7. I feel more comfortable socializing with Malaysians than I do with Asians.</li> <li>8. Most of my friends at school are Malaysians</li> </ol>




Table 3.8 (continues)  
*Items on Acculturation*

<b>Dimensions</b>	<b>Items</b>
Separation	<ol style="list-style-type: none"> <li>1. Most of the music I listen is Asian.</li> <li>2. My closest friends are Asian.</li> <li>3. I prefer going to social gatherings where most of the people are Asian.</li> <li>4. I feel that Asians treat me as an equal, more so than with Malaysian.</li> <li>5. I would prefer to go out on a date with an Asian than when I am with a Malaysian.</li> <li>6. I feel more relaxed when I am with an Asian than when I am with a Malaysians.</li> <li>7. Asians should not date non-Malaysian.</li> </ol>
Integration	<ol style="list-style-type: none"> <li>1. I tell jokes both in Malay and in my native language (for example: Nigerian, Iranian, Arabic, etc.).</li> <li>2. I think as well in Malay as I do in my native language (for example: Nigerian, Iranian, Arabic, etc.).</li> <li>3. I have both Malaysian and Asian friends.</li> <li>4. I feel that both Asians and Malaysians value me.</li> <li>5. I feel very comfortable around both Malaysians and Asians.</li> </ol>
Marginalization	<ol style="list-style-type: none"> <li>1. Generally, I find it difficult to socialize with anybody Asian.</li> <li>2. I sometimes feel that neither Malaysians nor Asians like me.</li> <li>3. There are times when I think no one understands me.</li> <li>4. I sometimes find it hard to communicate with people.</li> <li>5. I sometimes find it hard to make friends.</li> <li>6. Sometimes I feel that Asians and Malaysians do not accept me.</li> <li>7. Sometimes I find it hard to trust both Malaysians and Asians.</li> <li>8. I find that both Asians and Malaysians often have difficulty understanding me.</li> <li>9. I find that I do not feel comfortable when I am with other people.</li> </ol>

### 3.6.1.6 Self- Efficacy

Self- efficacy is based on the social cognitive theory (SCT) by Bandura (1997a), and is commonly referred to as the belief or capability to perform in different situations (Giled Chen et al., 2001). Other scholars conceptualized self-efficacy as the confidence in dealing with a wide range of situations (Schwarzer, Bäßler, Kwiatek, Schröder, & Zhang, 1997; Sherer et al., 1982; Sherer & Adams, 1983). This study used the measurement scale developed by Schwarzer and Jerusalem (1995) which consists of 10 items. The scale has been shown to have high stability, reliability, and construct validity (Leganger, Kraft, & Roysamb, 2000 ; Santos et al., 2014; Schwarzer & Born, 1997). Table 3.9 shows the items.

Table 3.9  
*Items on Self-efficacy*



Items	
1.	I can always manage to solve difficult problems if I try hard enough.
2.	If someone opposes me, I can find the means and ways to get what I want.
3.	I am certain that I can accomplish my goals.
4.	I am confident that I could deal efficiently with unexpected events.
5.	Thanks to my resourcefulness, I can handle unforeseen situations.
6.	I can solve most problems if I invest the necessary effort. I can remain calm when facing difficulties because I can rely on my coping abilities.
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.
8.	When I am confronted with a problem, I can find several solutions.
9.	If I am in trouble, I can think of a good solution.
10.	I can handle whatever comes my way.

### 3.7 Pilot Study

Piloting is implemented to ensure that the research instrument as a whole function well (Bryman, 2011). A pilot study is generally conducted for the following reasons: (1) to allow researchers to examine the adequacy of instructions and the appropriate wording used; (2) to determine how well the questions flow and remain the reliable, while moving some of them around; and (3) to identify the difficulties during the data collection stage (Bryman & Bell, 2011). Also, the pilot study is conducted to ensure the validity and reliability of the research instrument.

As a general rule of thumb, 30 participants need to be involved in a pilot test (Lunsford & Lunsford, 1995). In this study, the pilot test was conducted in October 2014 among 150 international students of Universiti Utara Malaysia (UUM). Employing the intercept survey method, participants were asked to complete a self-administrated questionnaire. A total of 101 valid questionnaires were collected and used for further analysis, representing a 67.3% response rate. Majority of the participants were male (61.4%) while the rest, female. Table 3.10 illustrates the demographic profile of the participants involved in the pilot test.

Table 3.10  
*Demographic Profile of Participants*

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage %</b>
<b>Gender</b>		
Male	62	61.4
Female	39	38.6
<b>Education Level</b>		
Undergraduate	37	36.6
Masters	41	40.6
PhD/ DBA	23	22.8
<b>Country</b>		
China	22	21.8
Indonesia	10	9.9
Iraq	9	8.9
Jordan	13	12.9
Libya	4	4.0
Nigeria	14	13.9
Palestine	5	5.0
Saudi	3	3.0
Somalia	5	5.0
Sri Lank	1	1.0
Sudan	3	3.0
Thailand	4	4.0
Uganda	1	1.0
Uzbekistan	1	1.0
Yemen	6	5.9
<b>Program</b>		
Business Administration	21	20.8
Accounting	13	12.9
Computer Science	3	3.0
Information Technology	13	12.9
Language and Linguistics	4	4.0
Economy	2	2.0
Education	5	5.0
Law	2	2.0
Sciences	4	4.0
Others program	34	33.7
<b>Scholarship</b>		
Yes	19	18.8
No	82	81.2

Statistical Package for Social Sciences (SPSS) version 21 was employed to analyse the pilot data. After some items were reversed, a reliability test was carried out and a reliability coefficient was obtained. Table 3.11 illustrates the Cronbach's alpha coefficient of the pilot test variables. The finding indicates that the alpha coefficients of university image, perceived teaching quality, acculturation, self-efficacy, emotional brand attachment, and brand loyalty ranged from 0.90 to 0.96.

Table 3.11  
*Value of Cronbach's Alpha of Variables in the Pilot Test*

<b>Construct</b>	<b>Cronbach's alpha</b>	<b>No. of items</b>
University image	0.90	21
Perceived teaching quality	0.91	21
Acculturation	0.94	29
Self-efficacy	0.94	10
Emotional brand attachment	0.94	10
Brand loyalty	0.96	15

According to Nunnally & Bernstein, (1978), Cronbach's alpha of 0.7 and higher is considered adequate; however the cut-off value for alpha can be slightly lower ( $\alpha = 0.6$ ) for a newer scale. Since the scales used in this current study were adapted and modified from previous studies, the alpha coefficient of 0.9 was considered adequate.

### **3.8 Data Analysis**

By utilizing Statistical Package for Social Science (SPSS) computer software version 21 and Smart Partial List Square 2.0, the data obtained has been analyzed descriptively and inferentially. Furthermore, the analysis included confirmatory factor analysis (CFA) and reliability to test the goodness of measures. Data were also screened for missing data, outliers, normality, and multicollinearity. Descriptive analysis was run to develop a profile of the participants.

#### **3.8.1 Data Screening**

Data screening is a process to identify whether data are entered correctly, whether there are missing values, and whether there are outliers (Scherbaum & Shockley, 2015). To check whether the data had been entered correctly, frequency analysis was run on all variables under study. The frequency tables show whether there were extreme values or incorrect values entered. For instance, an item measured on a seven-point scale should have a value ranging from 1 to 7. A value of more than 7 would indicate that a wrong value was entered and should be corrected.

### 3.8.1.1 Missing Data

According to Allison (2003), missing data or values can be defined as data that are missing for some variables or cases. Missing data due to a participant who was not available to answer questions is known as unit nonresponse; however, missing data due to a participant not responding to a number of individual items is called items nonresponse (Schafer & Graham, 2002). Hair et al. (2010) recommended that researchers measure the pattern of missing data and determine the amount of missing data for the overall data set. By assessing the pattern of the missing data, researchers can determine whether or not the occurring missing data are related to items (Roderick & Rubin, 2002; Schafer & Graham, 2002). This means that the pattern of missing values should be randomly distributed and not centered on a specific set of questions. Tabachnick and Fidell (2007) asserted that if missing data are not randomly distributed, they will lead to a biased result.

Once the pattern of missing data has been determined, the approach to remedy the missing data can be selected. According to Enders and Bandalos (2001), for a sample of 500-600 participants, if more than 15% of the overall items are not answered, they should be excluded from the data set. Hair et al. (2010) suggests several options in addressing missing data:

1. If the missing data are below 10% and no specific non-random pattern appears, the missing data can generally be ignored.
2. If the missing data are more than 20%, the researcher must consider specific approaches in diagnosing the randomness of the missing data.

Another method that has been used to handle missing data is Expectation Maximization (EM). Using this technique, the missing data will be replaced by software. EM approach is “an iterative two-stage method” (E and M stages) in which the E stage makes the best possible estimates of the missing data and the M stage, then makes estimates of the parameters (mean, standard deviation, or correlations) which is assuming the missing data is replaced (Hair, Joseph . et al., 2010,p.50). This research employs EM as the imputation technique to replace missing data since it has been shown to work effectively in instances involving the nonrandom missing data process (Hair, Black, et al., 2010). All the missing data will be recorded by the researcher.

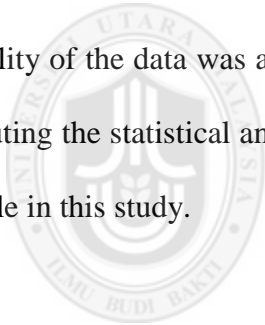
### **3.8.1.2 Outliers**

In addition to missing values, data screening also involves checking for outliers by examining the distribution of data. Simplify put, outliers are the shapes of data distribution (Scherbaum & Shockley, 2015). Here, the researcher is interested to know whether there are extreme values recorded by looking at frequencies and boxplot. If the result shows that the value ranges more than 1.5 box length from the extremity of the box, the researcher needs to decide whether to remove all extreme outliers, retain them, or replace them with a value less than the extreme value (Tabachnick & Fidell, 2007).



### **3.8.1.3 Assessing Normality**

To assess normality is to identify the distribution of data collected. Normality of data is important as it is the underlying basis for many inferences made (Hair et al., 2007). Also it refers to the form of the data distribution for an individual metric variable and its correspondence with normal distribution (Hair, Black, et al., 2010). The normality of the data could be assessed through calculating skewness and kurtosis. Skewness is to measure the deviation of the data distribution from the symmetry; while, kurtosis measures the peaks or flatness of a distribution compared to the normal distribution. The value of normal distribution for skewness and kurtosis is zero (0). This study, the normality of the data was assessed through (1) computing the Shapiro- Wilk statistic, (2) computing the statistical and graphical value for skewness and kurtosis for the dependent variable in this study.



UUM  
Universiti Utara Malaysia

### **3.8.1.4 Assessing Non-Response Bias**

According to Bjertnaes et al. (2008), non-response bias in a survey happens because participants are reluctant to give a response to the questions asked. Nonresponse bias can be checked by assessing the difference between early and late participants on a continuous measure. In this case, a t-test is employed.

Some scholars noted that the problem of nonresponse bias tends to be overstated despite a number of strategies suggested to reduce nonresponse bias and increase response rate (Bjertnaes et al., 2008; Ingen, Stoop, & Breedveld, 2009). Atrostic et al. (2001) acknowledged that there are many reasons for non-response in a survey, such as: complexity of the measurement, economic condition and demographic factors. However, this research put a great effort to maximize response rate and reduce nonresponse by giving attention to the design of the questionnaire and during data collection as recommended by (Kellerman & Herold, 2001).

### **3.8.2 Assessing Common Method Bias**

Common method bias exists due to self-reported survey (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Common method bias is a measurement error that may influence the validity of data (Burton-jones, 2009; Reio, 2010). To check for this bias, Harman's one-factor test is typically employed (Podsakoff et al., 2003). This technique involves using exploratory factor analysis where the unrotated factor solution is examined. The researcher then checks for the number of factors that emerge and the degree of variance accounted for (Andersson & Bateman, 1997; Organ & Greene, 1981; Podsakoff et al., 2003). Common method bias is present when all the items are loaded in one single factor or when one general factor does not explain most of the shared variance or covariance among the measures (Podsakoff et al., 2003; Reio, 2010).

### **3.9 Scale Assessment**

Next, the reliability and validity of the measurement of the construct in this study were assessed. The purpose was to ensure that the constructs were free of random and systematic errors.

#### **3.9.1 Validity**

Validity assessment refers to how well an instrument measures what it is supposed to measure. In other words, validity ensures that a scale conforms to its conceptual definition (Bajpai & Bajpai, 2014). Several methods can be used to check for validity, such as: factor analysis, multi-trait, multi-method matrix correlation, and correlation analysis. According to (DeVillis, 2012), there are three types of validity which are : criterion-related validity, content validity, and construct validity.

##### **3.9.1.1 Content and Face Validity**

Content validity is the extent to which items are relevant to the content being measured (DeVillis, 2012). Besides that, content validity indicates whether the domain of all words and vocabulary is well defined and can explain the meaning of the items (Ekinici, 2015). Cronbach Lee & Meehl, (1955) stated that content validity is established by combining a set of sample items to reflect of the construct being examined. Content validity can only be assessed by item review of experts (Spector, 1992). In this study, a group of experts comprising five academics and three university administrators who deal with

international students was approached. This group of experts was asked to evaluate whether: (1) the words used were clear, (2) the items could explain the meaning of the construct measured, (3) the measurement items were accurate, and (4) there were no redundant or ambiguous items.

They were also asked to provide suggestions for alternative wording (DeVillis, 2012; Spector, 1992). Table 3.12 illustrates the comments and suggestions of the group of experts, and actions taken to improve the quality of the questionnaire. The attachment of the content and face validity are attached as Appendix I.

Table 3.12  
*Comments of Group of Experts on Questionnaire Items*

No.	Suggestions/comments	Actions taken
1.	Items measuring university image should represent Malaysian public university.	Change was made accordingly.
2.	Several items were lengthy and some words were difficult and did not represent the meaning of the constructs.	Long sentences were shortened. Difficult words were replaced with simple words.
3	Some questions were redundant and had the same meaning, especially constructs of university image and perceived teaching quality.	Only items that best measured the construct were chosen and redundancies were eliminated.

### 3.9.1.2 Construct Validity

Construct validity refers to the extent of the result achieved from employing the measure to fit the theories for which the test is designed (Ekinici, 2015; Koksal, Ertekin, & Colakoglu, 2014). To determine construct validity, both discriminant validity and convergent validity are assessed. Convergent validity examines whether the measures of the items in the same construct are correlated highly; and discriminant validity determines whether the measures of a construct are not correlated too highly with other constructs. A number of methods have been suggested for assessing convergent and discriminant validity: factor analysis, correlation, and even more advanced procedures including CFA in SEM.

For the purpose of this study, convergent and discriminant validity were examined by accomplishment of CFA in SEM SmartPLS. The convergent validity was tested by examining factor loading, variance extracted and reliability; while discriminant validity was tested by assessing Fornell-Larcker criterion and cross loading. Table 3.13 summarizes the criteria and the acceptable level to assess convergent and discriminant validity.

Table 3.13

*Criteria and Acceptable Level of Convergent and Discriminant Validity*

Analyses	Criterion	Acceptable level	References
Convergent validity	Factor loading (indicates reliability)	Eliminated from the measurement model if loading in PLS model is smaller than 0.5.	Hair et al. (2007), Chin (1998b)
	Average Variance Extracted (AVE)	More than 0.5 for adequate convergent validity.	Bagozzi and Yi (1988)
	Reliability/ internal consistency (Cronbach's $\alpha$ )	The Cronbach's $\alpha$ should be higher than 0.7 to indicate adequate convergence or internal consistency.	Nunnally and Bernstein (1994), Chin (1998a)
Discriminant validity	Composite Reliability (CR)	However the minimum acceptable level is set at 0.6. More than 0.7 to indicate adequate convergent or internal consistency.	Gefen, Straub, and Boudreau (2000)
	AVE	The square root of the Average Variance Extracted (AVE) that exceeds the intercorrelations of the construct in the measurement model to ensure discriminant validity.	Fornell and Larcker (1981), Chin (1998a, 2010)

### **3.9.2 Reliability**

Reliability concerns internal consistency of a measure. A reliability analysis is done to examine the degree of consistency between items of measurement of a constructs (Hair, Black, Babin, & Anderson, 2010). To evaluate the instrument's reliability, the present study used Cronbach's alpha ( $\alpha$ ). The rule of thumb suggests that a Cronbach's alpha exceeding 0.6 is acceptable (Nunnally & Bernstein, 1994).

### **3.10 Hypothesis Testing Procedures**

To test the research hypothesis, partial least squares path modeling (PLS) was utilized. According to Akter et al. (2011), PLS takes care of the limitations of covariance-based Structural Equation Modeling (CBSEM). With regards to sample size, model identifications, and measurement level, PLS-SEM is superior to CBSEM (Chin, 1998, 2010; Wetzels, Odekerken-Schröder, & van Oppen, 2009). Moreover, PLS path modeling is a technique for estimating multidimensional constructs and complex models in order to achieve a more parsimonious theory and less model complexity (Becker, Klein, & Wetzels, 2012; Chin, 2010; MacKenzie, Podsakoff, & Jarvis, 2005; Wetzels et al., 2009). Similar to covariance-based structural equation modeling (CBSEM), PLS integrates multiple exogenous and endogenous constructs and explicitly recognizes measurement error (Hair, Sarstedt, Ringle, & Mena, 2012). Furthermore, PLS allows for the investigation of the significance of the relationship between research constructs and the

predictive power of endogenous constructs (Chin, 1998). The PLS approach is suitable for theory confirmation, theory development, or predictive application (Chin, 1998).

Since PLS-SEM is based on a series of OLS regressions, it requires a minimum sample size and statistical power (Reinartz, Haenlein, & Henseler, 2009). PLS requires a minimum sample size, that is ten times the maximum number of items comprised in the formative indicators construct, or ten times the largest number of structural paths directed at a particular construct in the inner path model (Hair, Ringle, & Sarstedt, 2013; Tompson, Barcalay, & Hinggin, 1995). Generally speaking, PLS SEM works efficiently with small sample sizes (Reinartz et al., 2009) and PLS-SEM algorithm transforms non-normal data in accordance with the central limit theorem (Dijkstra, 2010). Besides that, PLS is more concerned about maximizing the predictions (explained variances) than the statistical accuracy of the estimate (Hair, Sarstedt, Ringle, et al., 2012). In addition, PLS path modeling allows researchers to simultaneously estimate the factor loadings of the measurement model and the path coefficients of the structural model (Hair, Sarstedt, Pieper, & Ringle, 2012).

### **3.11 Testing the Mediating Effects**

Mediators are also known as intervening variables. In an indirect effect model, variable  $X$  is postulated to exert an effect on the endogenous variable  $Y$  through one or more intervening variables (Preacher & Hayes, 2004). The most common method to test mediation effect suggested by Baron and Kenny, (1986) is the causal steps approach. The



approach requires researchers to estimate two different models using a four-step technique.

Figure 3.3 illustrates the first model which requires that a significant relation between an exogenous variable and an endogenous variable exists. Then, a significant relationship between the exogenous variable and a intervening variable should take place. In the third step there must be a significant relationship between the intervening variable and the endogenous variable. In the last step, the path coefficient of the exogenous variable to the endogenous variable must be larger than the coefficient of the exogenous variable to the endogenous variable with the inclusion of the mediating variable.

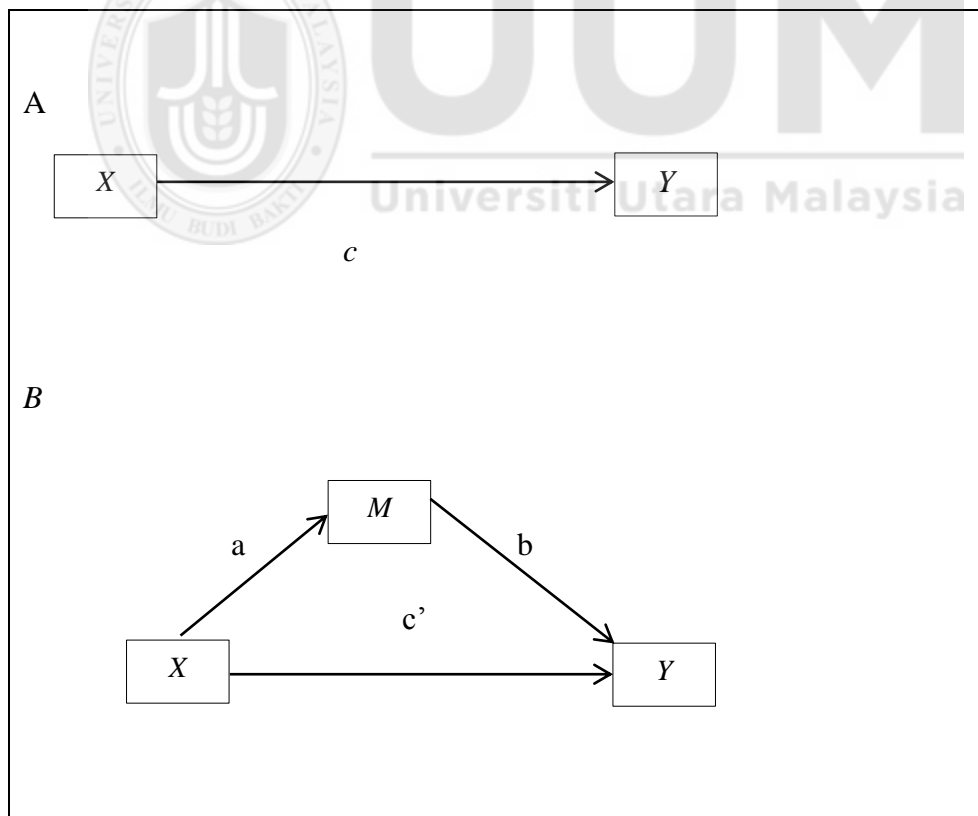


Figure 3.3  
*The total effect of X on Y (A) and a simple mediation model (B).*

The present study, however, uses a three-step technique (Mackinnon, Fairchild, & Fritz, 2007; Preacher & Hayes, 2004; Xinshu Zhao, Jr., & Chen, 2010). The three-step technique involves the following: (1) an exogenous variable significantly predicts a endogenous variable; (2) the independent variable significantly predicts a mediating variable; and (3) the mediating variable significantly predicts the endogenous variable while controlling for the exogenous variable. This techniques allows users analytical opportunities when the exogenous variable is not significantly related to the mediating variable or when the mediating variable is not significantly related to the endogenous variable (or both), or when non significance is due to lower statistical power (Hayes, 2009; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher & Hayes, 2004; Xinshu Zhao et al., 2010). Figures 3.4 and 3.5 show the models of mediation in this present study.(Xinshu Zhao et al., 2010).

A

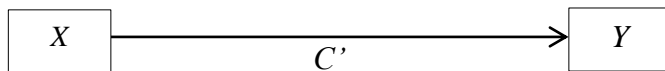


Figure 3.4

*Direct effects of independent variables on a dependent variable.*

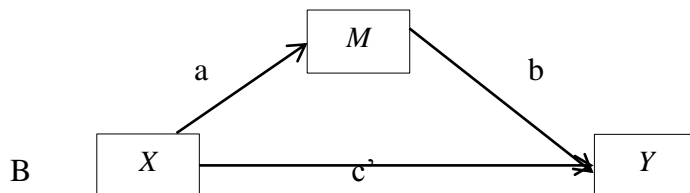


Figure 3.5

*The indirect effect of the independent variable on the dependent variable with the inclusion of mediating variable.*

To assess the significant indirect effect or mediating effect, this current study applied causal steps or bootstrapping strategy (MacKinnon, David, Lockwood, & Williams, 2004). Research shows that bootstrapping is a valid method for testing the mediating variable effect (Lockwood & MacKinnon, 1998)(Bollen & Stine, 1990) especially in Structural Equation Modeling (SEM).

In summary the two models had the following path:

- (i) The direct paths from university image, perceived teaching quality, acculturation and self-efficacy to brand loyalty.
- (ii) The direct path from university image, perceived teaching quality, acculturation and self-efficacy to emotional brand attachment.
- (iii) A direct path from emotional brand attachment to brand loyalty.

The mediating effect will be significant if the following criteria are met (Preacher & Hayes, 2004, 2008):

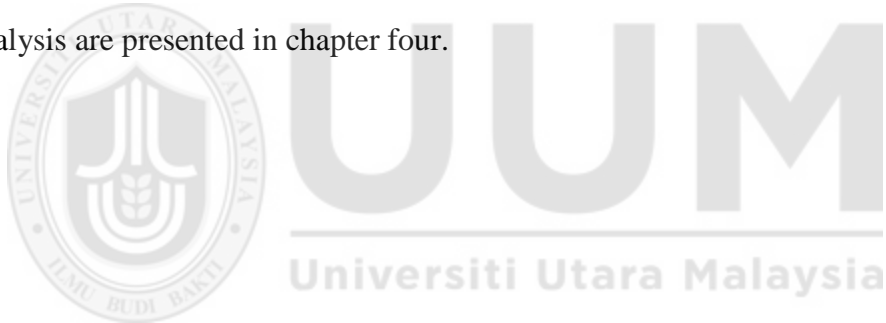
- (i) If path  $a \times b$  is significant, but  $c$  not – indirect effect only (mediation)
- (ii) If path  $a \times b$  is not significant, but  $c$  is –direct effect only (no mediation)
- (iii) If neither  $a \times b$  nor  $c$  is significant – no effect (no mediation)
- (iv) If  $a \times b \times c$  is positive – complementary mediation
- (v) If  $a \times b \times c$  negative – competitive mediation

### **3.12 PLS-SEM Model Evaluation**

To assess the structural model in PLS, two criteria were used: predictive relevance ( $Q^2$ ) (Geisser, 1975; Stone, 1974) and effect sizes ( $f^2$ ).

### **3.13 Summary of The Chapter**

This chapter addresses the methodology that was applied in this study. It emphasizes the research philosophy, research design, sampling, data collection procedure, questionnaire design, pilot study, survey procedure, scale assessment, and data analysis. The results of the analysis are presented in chapter four.



## CHAPTER FOUR

### DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This chapter presents the empirical findings of the study. It also explains how the data were analysed, from examining the background of the participants to assessing the results of hypothesis testing, has been included followed by the discussion results of the study. This chapter covers an overview of the survey participants, the validation process of variables, descriptive analysis of variables, testing of the hypotheses, and last discussion of the result.

#### 4.2 Response Rate

As discussed previously, data were gathered from international students currently studying in six public higher education institutions. Questionnaires along with a personalized cover letter and support letter issued by the Othman Yeop Abdullah Graduate School of Business (OYAGSB) were distributed through enumerators appointed to conduct the research (see Appendix II, III and IV). The questionnaires were self-administrated to 565 first-year second-semester international students selected randomly through conducting the intercept survey method to collect the data.

Out of 565 questionnaires distributed, 450 were returned, yielding a 79% response rate. Forty five questionnaires were excluded because they either had more than 25% of the items unanswered, or because they were answered by first semester students. As a result, an effective sample of 405 responses was achieved. Therefore, a response rate of 79% is considered adequate for analysis; in this current study (LaTour & Rotfeld, 1997; Miller et al., 1997) it was suggested that a response rate between 50% and 80% is sufficient for surveys (see Table 4.1).

Table 4.1  
*Response Rate of the questionnaire*

<b>Repose</b>	<b>Frequency/Rate</b>
No.of distributed questionnaires	565
Returned questionnaire	450
Returned and usable	405
Returned and discards questionnaires	45
Response rate	79%
Valid Response rate	71.68%

Sources: The Researcher

### **4.3 Data Screening**

This section discusses the findings of the data screening process and demographic profile of the participants. After the data had been collected, they were screened before they were used for analysis. Data screening involves four steps: designing the code, coding, entering the data and cleaning the data. The data were screened using the SPSS statistical software version 21.

### 4.3.1 Preliminary Checks

All extreme values caused by error in data entry were identified by a frequency table. This was done by observing the range of values for each item against the scale used. For instance, because a seven-point Likert scale was used, values should be less than seven. No extreme value was identified as a result. From the onset, this study used seven-point Likert scales to give more alternatives to the respondents to respond to the measurement accordingly (Alwin, 1997; Miller, 1956). Moreover, there is employing seven-point Likert scale compared to others. For example, Alwin (1997), reveals that if use the three-point Likert scale it may be ambiguous and confuse the respondent. Therefore, the seven category response scale is better than the three or five category response scales because of effective measurement of direction and neutrality can also be differentiated through each of the three levels as well. Besides, Alwin, (1997) and Andrew and SB Withey, (1976) agree that the seven-point Likert scale response will encourage the respondent by appealing to his senses/feeling and be more reliable compare to the three-point, or five-point category. Perhaps this is something commonly used in research, but the reason not really clear.

Based on the finding by (Dawes, 2008), contrasting with previous literature that point out that seven and five-point scales can re-scale resultant data and provide a higher mean score. On the same token, Miller & Miller (1956, 1994) state in their previous work that seven-point Likert scale is the extent of absolute judgment of information from

respondent. After considering all this, the value of the seven-point Likert scale is evident, therefore this study employs the use of this seven-point category in order to measure the agreement of the respondents.

Next, data were checked for missing values/data. Forty five questionnaires were discarded because they had more than 25% items unanswered, resulting in 405 useable questionnaires for further analysis. Missing values less than 25% were treated by using the Expectation Maximization (EM) imputation technique, as suggested by Hair, Black, Babin, and Anderson (2010). The procedure that is suggested by Hair et al., (2010) to address missing data:

1. If the missing data are less than 10% and no specific non-random pattern appears, the missing data can generally be ignored.
2. If the missing data are more than 20%, the researcher must consider specific approaches in diagnosing the randomness of the missing data.

To determine further whether or not the missing value will threaten the findings, Tabachnick and Fidell (2007) suggests that if 5% or less data are absent the problem of missing data not crucial (p. 63). Secondly, Little's MCAR by Brown, (1994) was employed to verify whether a meaningful pattern of missing values exist for the data. If the  $p$  value is greater than 0.05, the missing data occurs completely at random. The Little's MCAR test shows that the missing items were distributed randomly across different cases and values (chi-square = 163.850, df = 105, Sig. = .000). In this current study, no data was detected missing all the questions were completely answered by



respondents. Therefore, all 405 sets of questionnaire were used in the next stage of analysis using PLS-SEM.

In this current study, nine items were reverse –coded to reduce the response bias (Spector, 1992). On the other hand, the purpose for including negative items, serve to reduce the impact of acquiescent responding measurement variable (Spector, 2006; Stangor, Carr, & Kiang, 1998). Table 4.2 illustrates the reverse –coded items in this current study.

Table 4.2  
*Reverse coded items*

<b>Construct</b>	<b>Items</b>	<b>Measurement</b>
Marginalization	AC.21	Generally, I find it is difficult to socialize with anybody, Asian.
	AC.22	I sometimes feel that neither Malaysians nor Asians like me.
	AC.23	There are time when I think no one understands me.
	AC.24	I sometimes find it hard to communicate with people.
	AC.25	I sometimes find it hard to make friends.
	AC.26	Sometimes I feel that Asians and Malaysians do not accept me.
	AC.27	Sometimes I find it hard to trust both Malaysians and Asians.
	AC.28	I find that both Asians and Malaysians often have difficulty understanding me.
	AC.29	I find that I do not feel comfortable when I am with other people.

Sources: The Researcher

#### 4.4 Normality Test

The data collection was analyzed and the normality of the data was tested. The present study employed a graphical method to check the normality of data collection (Tabachnick & Fidell, 2007). Normality means that the distribution of data is normally distributed, mean of 0, standard deviation, and symmetric bell curve. According to Pallant, (2013), normality can be assessed through test skewness and kurtosis value.

In addition to that, Hair, Sarstedt, Ringle, et al., (2012), also recommended that researchers should perform a normality test on the data. If the data is highly skewed or kurtosis data is detected, this can inflate the bootstrapped standard error estimate (Chernick, 2008), which effects and underestimates the statistical significant of the path coefficient (Dijkstra, 2010). Figure 4.1 shows the results on a histogram and normality test shows that the data for this study are normal.

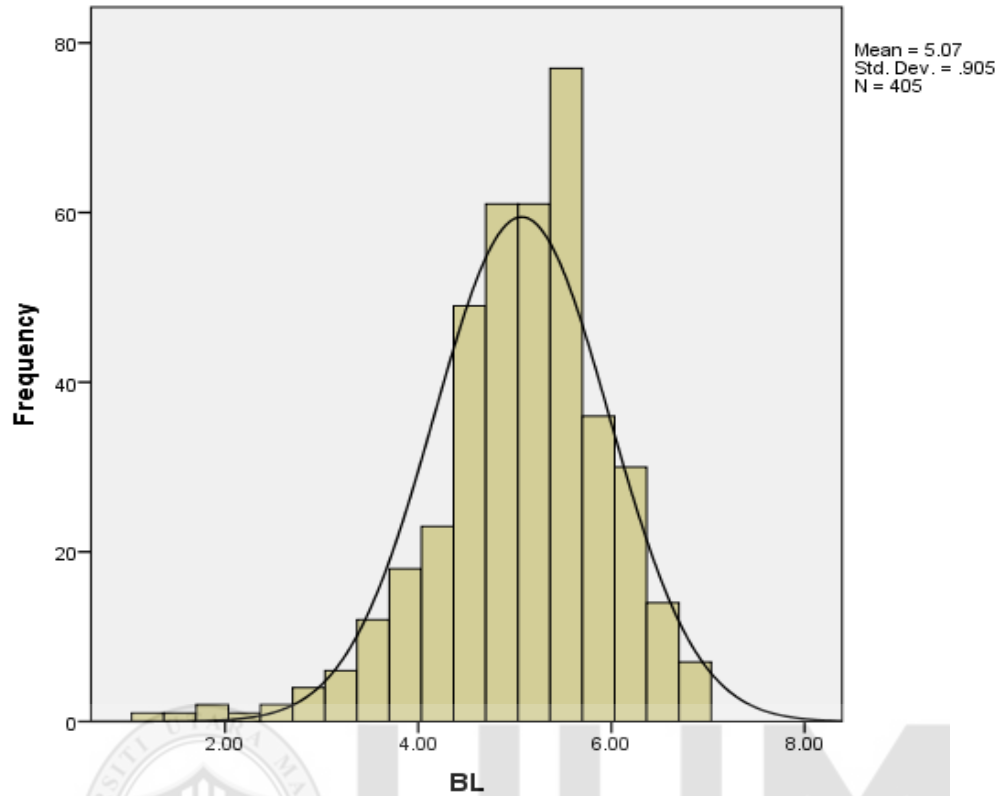


Figure 4.1  
Result of normal curve from histogram ( DV= Brand Loyalty)

#### 4.4.1 Detecting of Outliers

After the handling of missing data was dealt with, the next analysis involved checking for outliers through a box plot. The box plot of each variable showed that case 8 was considered an outlier, as indicated by an asterisk. However, case 8 was retained, following Pallant (2013), who suggested that an outlier can also be detected through a 5% trimmed **mean** and mean value of each construct. If the value mean and trimmed mean are very different, then there is a probability of a serious problem with an outlier. If the difference between the two means is not obvious from the remaining distribution, the

case should be retained. Table 4.3 shows the distributions of 5% trimmed mean and mean value of each variable.

Table 4.3  
*Descriptive statistics assessing outlier*

<b>Construct</b>		<b>5% Trimmed Mean value</b>	<b>Mean value</b>
Brand Loyalty		5.10	5.05
Emotional Attachment	Brand	5.03	4.99
University image		5.10	5.13
Perceived teaching quality		5.05	5.07
Acculturation		3.87	3.91
Self-efficacy		5.23	5.24

Sources: Researcher



#### 4.5 Assessment of Non-Response Bias

Over the last decade, the increasing non-response bias study is increasingly important in research survey studies especially cross-sectional studies (Groves & Peytcheva, 2008; Pforr, Blohm, Blom, Erdel, & Felderer, 2015). To test non-response bias, the researcher assessed the difference between undergraduates and postgraduates of the respondent on a continued measure. Since the data in this study are normally distributed, therefore the t-test was employed to analyze the relationship between undergraduate/postgraduate and dependent variable. Table 4.4 reveals that an undergraduate and postgraduate shows no significant difference, since the significance level for the Levene's test is  $p = 0.059 > 0.05$  variance (undergraduate/postgraduate) of the two groups are the same, therefore

information on the first line t-test tables were employed which refer to the equal variance assumed. The following steps, to assess differences between two groups refer to the column entitled Sig. (2-tailed), and the row entitled Equal variance assumed. The result shows  $p = 0.059 > 0.05$ , there is a non-significant difference between undergraduates and postgraduates.

Table 4.4  
*T- test of non –response Bias*

	<b>F</b>	<b>Sig.</b>	<b>t</b>	<b>Sig. (2-tailed)</b>	<b>95% CI</b>	
					<b>Lower</b>	<b>Upper</b>
Equal variance assumed	1.006	0.316	-1.896	0.059	-0.39	0.007
Equal variance not assumed			-2.005	0.046	-0.38	-0.003

This result specifies that there is statistically no significant difference between education levels. The inferential result shows that there is no significant difference in the level of brand loyalty between an undergraduate and a postgraduate in the response groups. Therefore, data set from both groups can be combined for further analysis.

#### 4.6 Assessment of Common Method Bias

Common method bias is a measurement error that might influence the validity of research findings. In this study, Harman’s one factor test, a most widely used technique to identify common method bias, was employed (Podsakoff et al., 2003). The total variance

explained reveals that the first factor accounted for only 26.51% of the variance. This result also indicates that no single factor emerged from the exploratory factor analysis. Therefore, it can be concluded that common method bias is not an issue in this study. The Appendix V shows the results of Harman's factor test.

#### **4.7 Descriptive Statistics**

After checking for normality and outliers, 405 cases were retained. Table 4.5 exhibits the demographic profile of the participants in terms of gender, age, education level, country origin, programme, scholarship, and mode of study. The table shows that the majority of participants were male (62.5%) and the remaining 37.5% were female, and were in the age bracket between 21 and 25 years of age (62.7%) and only (2.7%) were 41 years old and above, and were self-sponsored (63%) as opposed to (37%) who had scholarships. In terms of education, the majority was undergoing undergraduate studies (72.8%), and (27.2%) of postgraduate. With regard to their country of origin, the participants came from various countries: Indonesia (11.4%), China (10.9%), Yemen (6.9%), Somalia (6.4%), and Nigeria (5.9%). In terms of programme, participants were enrolled in various academic programmes: Science (19.8%), Engineering (16%), and Business Administration (11.1%).

Table 4.5 also shows that 45.2% of the participants use the university website as a source of information about study destination, while 31.6% found information through friends, 21.7% are through parents' recommendation, and only 8.1% from prospectus and leaflets.

Table 4.5  
*Profile of International students*

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Gender</b>		
Male	253	62.5
Female	152	37.5
<b>Age</b>		
Under 20	34	8.4
21-25	254	62.7
26-30	60	14.8
31-35	28	6.9
36-40	18	4.4
41 and above	11	2.7
<b>Semester</b>		
2	68	16.8
3	70	17.3
4	78	19.3
5	60	14.8
6	85	21.0
7	24	5.9
8	19	4.7
9	1	0.2
<b>Education Level</b>		
Undergraduate	295	72.8
Master	54	13.3
PhD/DBA	56	13.8

Table 4.5 (continued)  
*Profile of International students*

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Country</b>		
Afghanistan	3	0.7
Algeria	1	0.2
Australia	5	1.2
Austria	2	0.5
Bahrain	2	0.5
Bangladesh	1	0.2
Bosnia	1	0.2
Brunei	18	4.4
Bulgaria	1	0.2
Canada	4	1
China	44	10.9
Czech Republic	1	0.2
Egypt	2	0.5
England	1	0.2
France	2	0.5
German	1	0.2
Hong Kong	1	0.2
Hungary	1	0.2
India	4	1
Indonesia	46	11.4
Iran	19	4.7
Iraq	19	4.7
Japan	20	4.9
Jordan	4	1
Kazakhstan	1	0.2
Libya	1	0.2
Maldives	1	0.2
Morocco	3	0.7
New Zealand	2	0.5
Nigeria	24	5.9
Oman	6	1.5
Pakistan	14	3.5
Palestine	4	1
Philippine	3	0.7
Qatar	1	0.2
Republic of Ireland	2	0.5
Saudi Arabia	18	4.4
Singapore	3	0.7



Table 4.5 (continues)

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Country</b>		
Somalia	26	6.4
South African	1	0.2
South Korean	20	4.9
Sudan	8	2
Syria	10	2.5
Thailand	9	2.2
Tunisia	2	0.5
Turkey	3	0.7
UAE	2	0.5
Ukraine	2	0.5
United State of America	2	0.5
Uzbekistan	4	1
Vietnam	2	0.5
Yemen	28	6.9
<b>Program</b>		
Business Administration	46	11.1
Accounting	20	4.9
Computer Science/Information Technology	27	6.7
Agriculture	20	4.9
Anthropology and Sociology	2	0.5
Language and Linguistics / Education	36	8.9
Forestry	2	0.5
Psychology	11	2.7
Pharmacy	29	7.2
Economy	35	8.6
Law	3	0.7
Medicine	4	1
Science	80	19.8
Engineering	65	16
Communication	19	4.7
Others	7	1.7
<b>Scholarships</b>		
Yes	150	37.0
No	255	63
<b>University information</b>		
Conversation with friends	128	31.6
University web sites	183	45.2
Parents recommendation	86	21.2
Prospectus and leaflets	33	8.1

#### **4.8 Data Analysis and Results**

This research applies a two-stage approach to data analysis, as suggested by Anderson and Gerbing (1988), with the first stage involving exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). However, only the CFA was conducted because this current study was interested in confirming the scales used and not in developing them (Gerbing & Anderson, 1988; Tojib, Sugianto, & Sendjaya, 2008).

To conduct the CFA, SmartPLS, Partial least Squares (PLS) approach was employed. According to Hutchinson, Lai, and Wang, (2009) SmartPLS is a component-based method. In comparison to other methods like covariance based structural equation modelling, it is a structured latent variable method such as LISREL. Moreover SmartPLS is suitable for predictive application and theory building. Besides, SmartPLS does not require normality of data (Chin, 1998; Wetzels et al., 2009). It also allows analysis of direct, indirect and spurious relationships (Chin, 2010). This present study utilizes CFA to verify the reliability, convergent and discriminant validity of all the items used, in the measurement models following the suggestion of (Fornell and Larcker 1981). The structural model was assessed by using the bootstrapping procedure. The following offers results of the measurement and structural models.

## **4.9 Measurement Model**

The results of the measurement model valid for both exogenous and endogenous variables in this study are presented in the following subsections.

### **4.9.1 Exogenous Variables**

The measurement model includes the relationship among latent variables and manifest variables (indicators) only. The measurement model is calculated through loadings of the variables, reliability, composite reliability, as well as convergent and discriminant validity of all the multi-item scales. This study has formative and reflective measurement models. The PLS path model shows six latent variables and 106 indicator variables. Sixty indicator variables for the three exogenous constructs (iPTQ, iACC, and iSE) were reflective measures. In contrast, one constructs, i.e. university image (UI), has 21 formative items. Therefore the assessment of this measurement model was different.

#### **4.9.1.1 Exogenous Variables Reflective Measurement Model**

The 60 indicator variables for measuring the exogenous constructs of reflective indicators which is perceived teaching quality, acculturation, and self-efficacy are displayed in Figure 4.2. Confirmatory factor analysis (CFA) was performed to test the unidimensionality of the three exogenous constructs individually. The result of the first

run of CFA showed that all indicators were unidimensional. That is, the set of indicator variables loaded onto a single factor. The result also showed that the variance extracted for each factor (construct) was 71.2%, indicating that more than half of the variance of each indicator can be explained by the respective construct.

In the first-order model all factor loadings were at least 0.7 for all indicators of PQ1-PQ21. In the second-order model, the factor loadings for six latent variables of IPTQ construct ranged from 0.67 to 0.90. For iACC and iSE, all factor loadings were also at least 0.7, except for indicators of AC15 (factor loading of 0.65) and SE1 (factor loading of = 0.64). Indicators with factor loadings below 0.5 were deleted (Hair Joseph. Jr F et al., 2007).

Hence, all indicators of iACC 4, which had loadings below 0.5 (AC21, AC22, AC23, AC24, AC25, AC 26, AC 27, AC 28 and AC29) were removed. Result showed that all loadings were well above the minimum threshold value of 0.5 (Hair, William C. Black, et al., 2010; Nunnally & Bernstein, 1978) to indicate reliability of the indicators. Higher-order factor analysis was performed to test a second order measurement model. The results are presented in Table 4.6 and Table 4.7, for each exogenous variable.

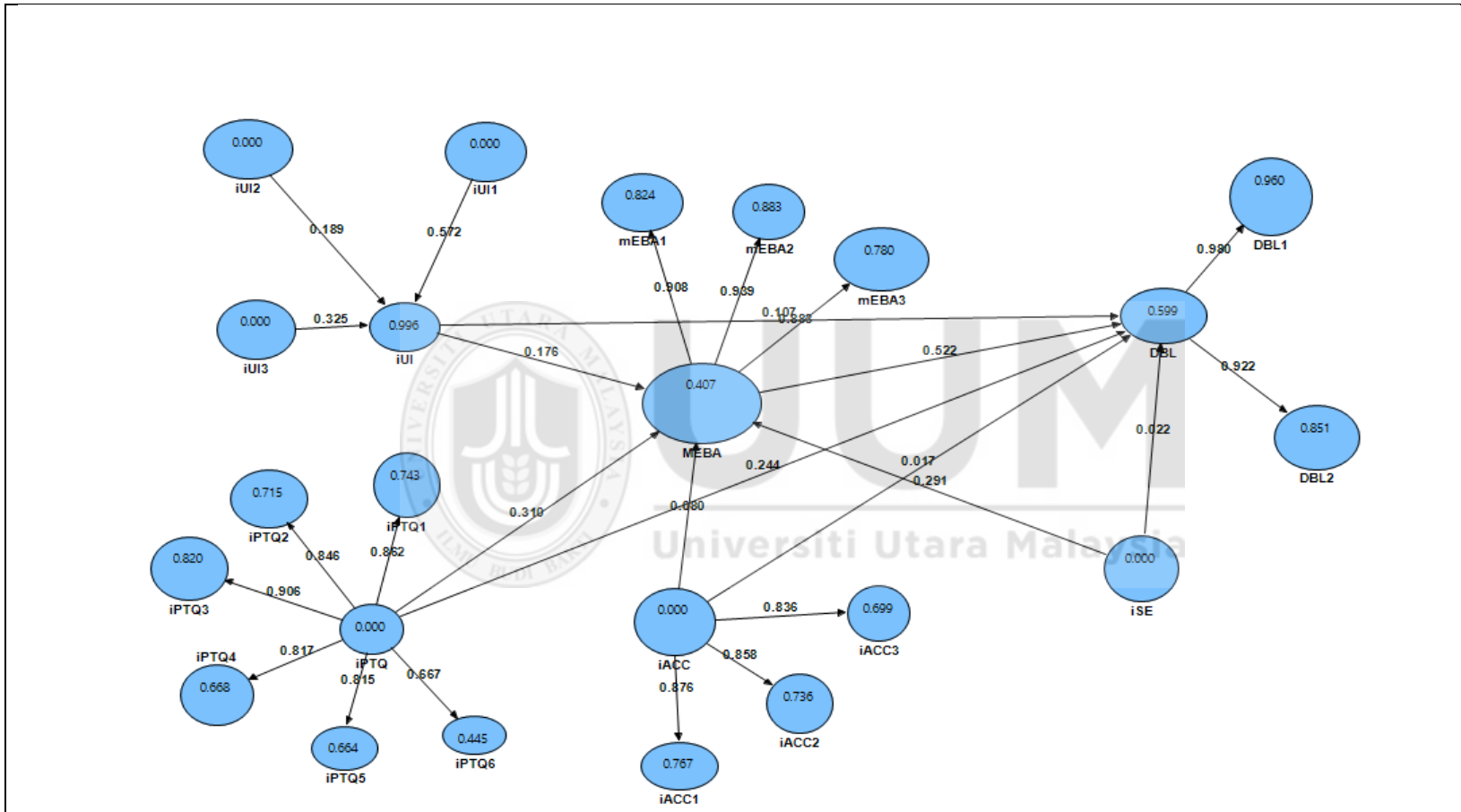


Figure 4.2  
Measurement models of Exogenous Variable

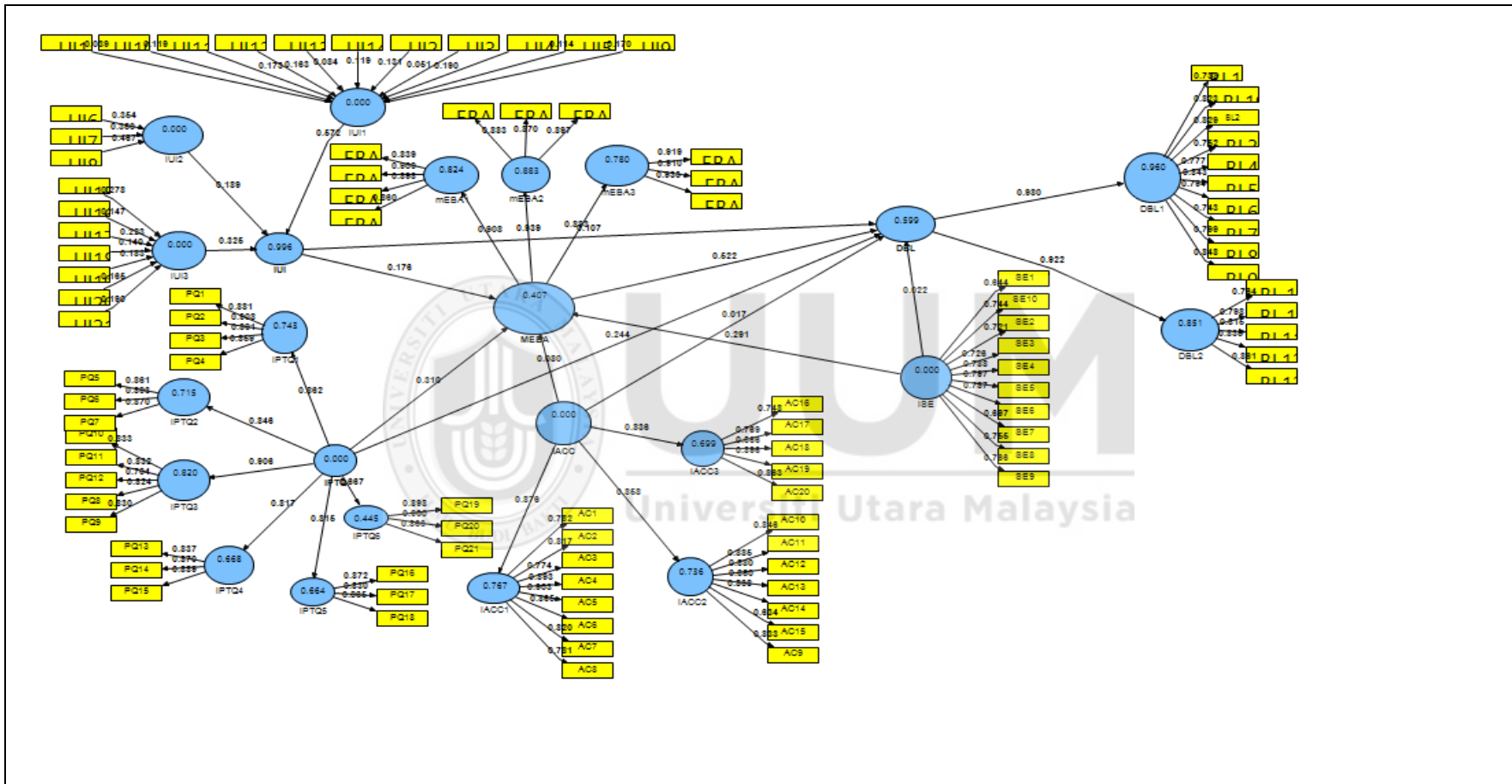


Figure 4.3  
*The result of Measurement model of UI,PTQ,ACC and SE*

Table 4.6  
*Reliability of reflective constructs –first order constructs (Exeogenous)*

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>	<b>Item deleted</b>
The Teaching on my course (IPTQ1)	PQ1	0.88	0.78	0.94	
	PQ2	0.91			
	PQ3	0.89			
	PQ4	0.86			
Organisation and Management(iPTQ2)	PQ5	0.87	0.77	0.91	
	PQ6	0.89			
	PQ7	0.88			
Assessment and feedback (iPTQ3)	PQ8	0.82	0.65	0.90	
	PQ9	0.83			
	PQ10	0.83			
	PQ11	0.83			
	PQ12	0.71			
Personal development (iPTQ4)	PQ13	0.84	0.75	0.90	
	PQ14	0.87			
	PQ15	0.89			
Academic Support (iPTQ5)	PQ16	0.87	0.73	0.89	
	PQ17	0.83			
	PQ18	0.86			
Learning and Resources(iPTQ6)	PQ19	0.89	0.79	0.92	
	PQ20	0.90			
	PQ21	0.86			
Assimilation (iAAC1)	AC1	0.78	0.69	0.95	
	AC2	0.82			
	AC3	0.77			
	AC4	0.89			
	AC5	0.90			
	AC6	0.87			
	AC7	0.82			
	AC8	0.78			

Table 4.6 (Continues)

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>	<b>Item deleted</b>
Separation (iACC2)	AC9	0.83	0.68	0.94	
	AC10	0.85			
	AC11	0.89			
	AC12	0.88			
	AC13	0.86			
	AC14	0.84			
Integration (iACC3)	AC15	0.65			
	AC16	0.75	0.69	0.92	
	AC17	0.77			
	AC18	0.87			
	AC19	0.90			
AC20	0.86				
Marginalization (iACC4)					AC21 AC22 AC23 AC24 AC25 AC26 AC27 AC28 AC29
Self- efficacy(iSE)	SE1	0.64	0.55	0.93	
	SE2	0.71			
	SE3	0.72			
	SE4	0.79			
	SE5	0.80			
	SE6	0.77			
	SE7	0.70			
	SE8	0.76			
	SE9	0.77			
	SE10	0.75			



Table 4.7  
*Reliability of reflective constructs –second order constructs (Exeogenous)*

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>	<b>Item deleted</b>
Perceived Teaching Quality (iPTQ)	iPTQ1	0.86	0.51	0.96	
	iPTQ2	0.85			
	iPTQ3	0.90			
	iPTQ4	0.81			
	iPTQ5	0.81			
	iPTQ6	0.67			
Acculturation(iAAC)	iACC1	0.87	0.51	0.95	
	iACC2	0.86			iAAC4
	iACC3	0.83			

Composite reliability was analysed for all reflective constructs (i.e. iPTQ, iACC, and iSE) to determine internal consistency reliability. Results showed composite reliability values ranging from 0.89 to 0.95. The values explained higher internal consistency reliability of the two constructs in the first-order model and three constructs in the second-order (Chin, 2010; Hair, Hopkins, Georgia, & College, 2014; Hair, Sarstedt, Ringle, et al., 2012; Urbach & Ahlemann, 2010). AVE estimate from the findings was above the cut-off minimum requirement level of 0.5 (Chin, 2010; Hair, Hopkins, et al., 2014; Urbach & Ahlemann, 2010; Wetzels et al., 2009). In sum, the result showed that the amount of latent variable variance components captured from the indicators' relative measurement error was acceptable and confirmed convergent validity. With regard to discriminant validity, the Fornell-Larker criterion was used by determining the establishment of the average variance extracted (AVE) index (Wetzels et al., 2009). Table 4.8 shows the square root of the AVE values of each construct (iPTQ, iACC, and iSE) for both first- and second-order models in comparison to the inter-construct squared

correlations associated with that construct (Claes Fornell & Larcker, 1981; Hair, Hopkins, et al., 2014; Urbach & Ahlemann, 2010). The square root of the AVE values of the first-order indicator exceeded the minimum threshold value, explaining more than 50% of the variance in the observable measures.

Table 4.8

*Second order reflective indicators (Fornell- Lacker Criterion)*

<b>Indicators</b>	<b>DBL</b>	<b>MEBA</b>	<b>iACC</b>	<b>iPTQ</b>	<b>iSE</b>	<b>iUI</b>
DBL	<b>0.903</b>					
MEBA	0.724	<b>0.823</b>				
iACC	0.154	0.148	<b>0.728</b>			
iPTQ	0.616	0.546	0.176	<b>0.673</b>		
iSE	0.377	0.455	-0.056	0.319	<b>Single</b>	
iUI	0.572	0.530	0.172	0.731	0.393	<b>Formative</b>

Bold value indicates the root AVE value of all the four second-order reflective indicators were greater than the corresponding off-diagonal correlations.

The result of cross loading criterion showed the discriminant validity of the measurement model of optic, iACC, and iSE. This can be seen by the higher values of the indicator's loading in comparison to its cross loadings with other variables (or indicators). In sum, the result showed the five forms of validation (i.e. Unidimensionality, internal consistency reliability, indicator reliability, convergent validity, and discriminant validity) of all sets of indicator variables for each construct of iPTQ, iACC, and iSE. In other words, the measurements used were internally consistent and represented the theoretical construct of iPTQ, iACC, and iSE.

Table 4.8: (continues)

*First -order reflective indicators(Fornell-Lacker Criterion)*

Indicators	DBL	iACC1	iACC2	iACC3	iPTQ1	iPTQ2	iPTQ3	iPTQ4	iPTQ5	iPTQ6	iSE	iUI1	iUI2	iUI3	mEBA1	mEBA2	mEBA3
DBL	<b>0.903</b>																
iACC1	0.231	<b>0.830</b>															
iACC2	0.038	0.573	<b>0.824</b>														
iACC3	0.106	0.607	0.642	<b>0.830</b>													
iPTQ1	0.517	0.261	0.126	0.146	<b>0.883</b>												
iPTQ2	0.509	0.206	-0.003	0.033	0.706	<b>0.880</b>											
iPTQ3	0.550	0.238	0.052	0.098	0.735	0.757	<b>0.800</b>										
iPTQ4	0.525	0.199	0.054	0.129	0.600	0.618	0.705	<b>0.870</b>									
iPTQ5	0.500	0.203	0.061	0.119	0.647	0.578	0.668	0.646	<b>0.850</b>								
iPTQ6	0.440	0.110	-0.035	0.019	0.444	0.486	0.488	0.507	0.543	<b>0.890</b>							
iSE	0.377	-0.033	-0.079	-0.031	0.189	0.178	0.287	0.336	0.269	0.371	<b>single</b>						
iUI1	0.547	0.220	0.087	0.042	0.625	0.581	0.619	0.574	0.517	0.466	0.368	<b>Formative</b>					
iUI2	0.462	0.200	0.112	0.048	0.433	0.473	0.495	0.450	0.368	0.381	0.357	0.808	<b>Formative</b>				
iUI3	0.519	0.203	0.076	0.155	0.678	0.585	0.663	0.575	0.571	0.447	0.335	0.755	0.584	<b>Formative</b>			
mEBA1	0.638	0.157	0.082	0.155	0.456	0.417	0.444	0.449	0.371	0.429	0.431	0.456	0.384	0.451	<b>0.877</b>		
mEBA2	0.694	0.172	0.044	0.101	0.457	0.466	0.482	0.414	0.384	0.447	0.435	0.489	0.441	0.483	0.786	<b>0.883</b>	
mEBA3	0.648	0.176	0.042	0.078	0.353	0.371	0.398	0.325	0.324	0.344	0.372	0.425	0.389	0.386	0.651	0.795	<b>0.921</b>

Bold value indicates the root AVE value of all the fifteen first-order reflective indicators were greater than the corresponding off-diagonal correlation

#### 4.9.1.2 Exogenous Variables Formative Measurement Model

Since the current study has 21 formative indicators for the first-order and three latent variables for the second-order model, the approach to assessing the formative model is different. This is because the second-order constructs formed formatively the first-order construct. The first step involves calculating the formative measurement model by examining the convergent validity by correlating the formative measured construct with a reflective measure of the same construct. The result presented in Figure 4.4, Figure 4.5, Figure 4.6 and Figure 4.7, showed the redundancy analysis of iUI1, iUI2, iUi3 latent variables for the university image constructs. The table also illustrates that the path coefficients (iUI1 = 0.97; iUI2 = 0.84; iU3 = 0.87) were above the threshold of 0.8, thus providing support for formative construct convergent validity (Hair, Hopkins, et al., 2014; Hair, Hult, Ringle, & Sarstedt, 2014).

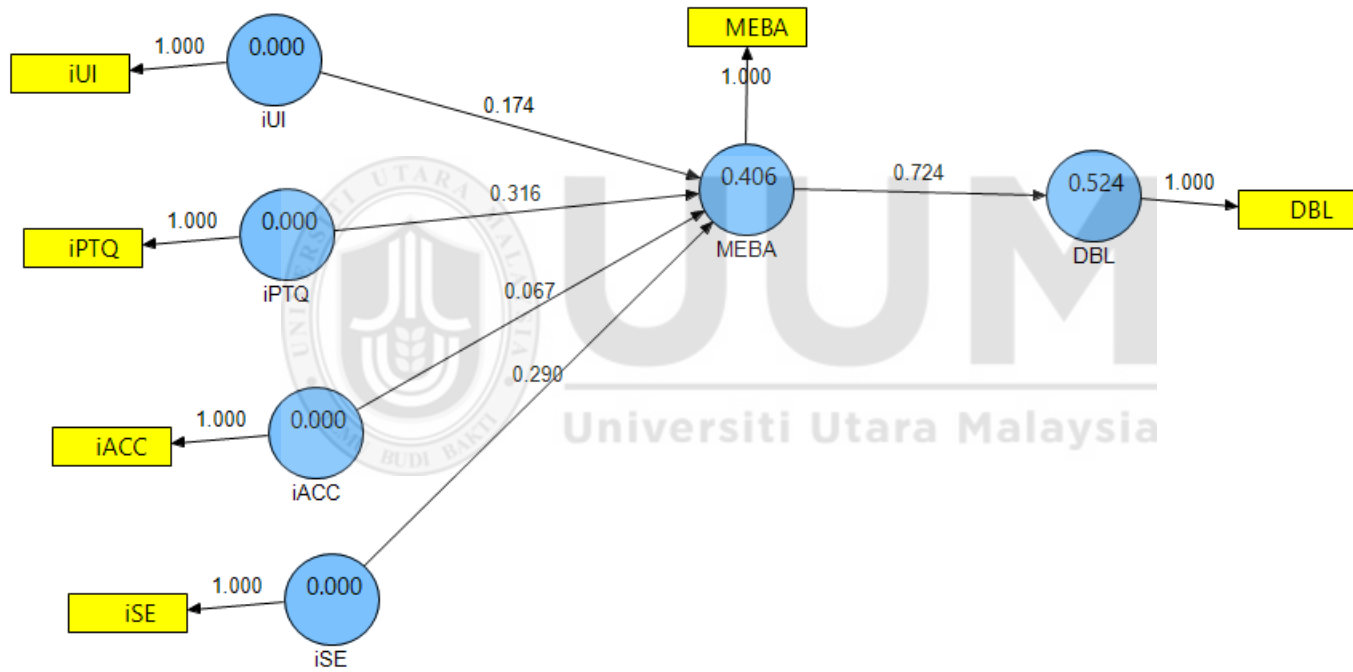


Figure 4.4  
Formative measurement models

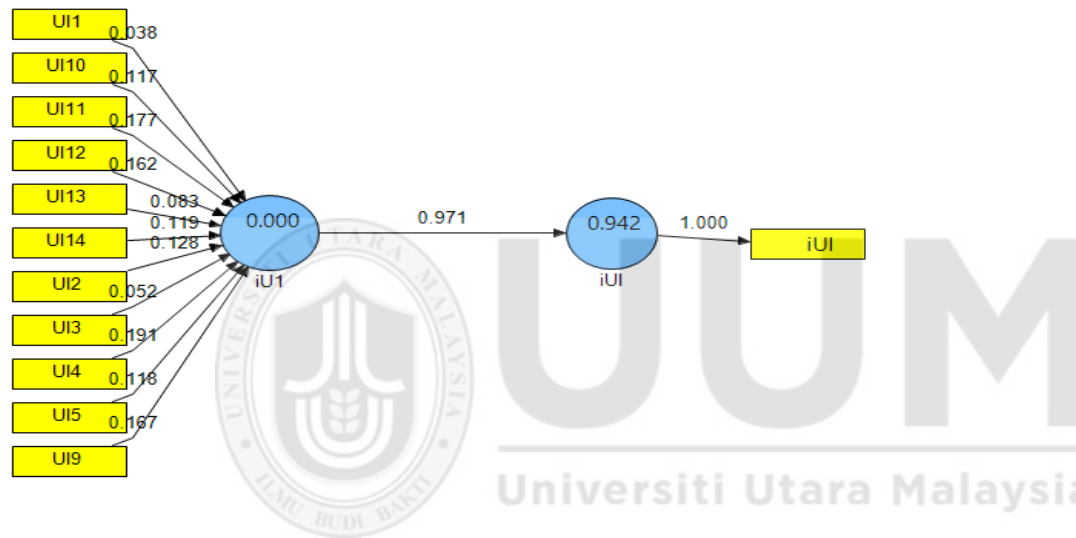
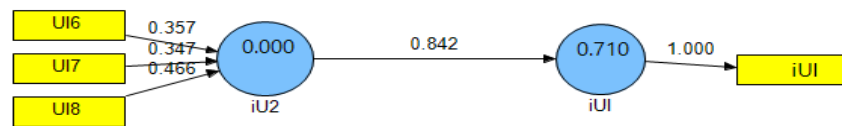


Figure 4.5  
 Convergent validity Assessment of *iUI* –Formative Measurements Models



UUM  
Universiti Utara Malaysia

Figure 4.6  
*Convergent validity Assessment of i UI2 –Formative Measurements Models*

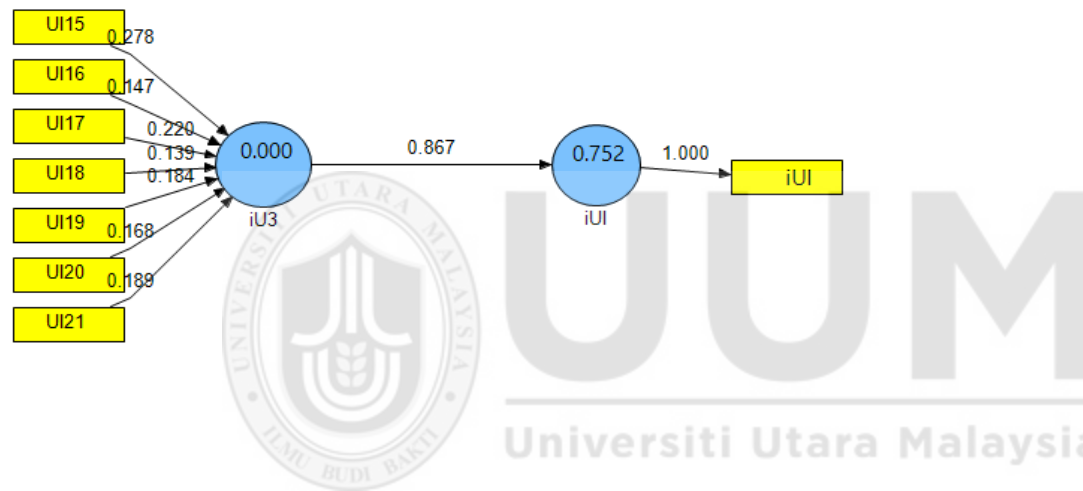


Figure 4.7  
 Convergent validity Assessment of *iUI3* –Formative Measurements Model



Next, indicator validity was checked by Variance Inflation Factor (VIF). VIF checks for collinearity between indicators in the first and second-order measurement model. The result of the VIF is presented in Table 4.9 (for first-order formative construct) and Table 4.10 (for second-order).

The values of VIF ranged from 1.83 to 3.04 for the first-order and 2.37 for the second-order. Each indicator of the latent variable was not more than 3.3 (Cenfetelli & Bassellier, 2009; Diamantopoulos & Sigauw, 2006). All values of the formative indicators were lower than the threshold VIF value of 3.3, indicating no collinearity. The collinearity test was carried out to ensure if there were any conceptual overlaps among the chosen indicators, which need to be removed (Cenfetelli & Bassellier, 2009).

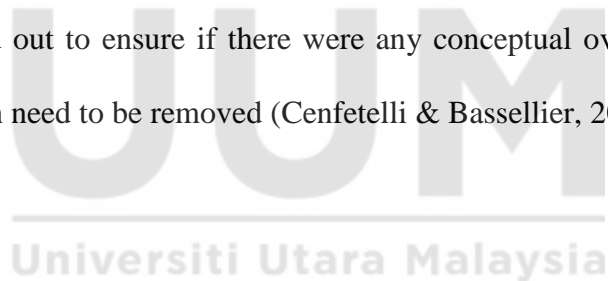
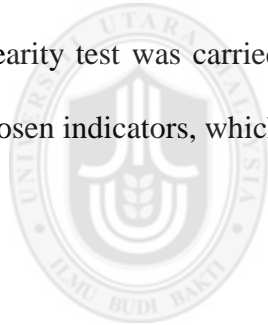


Table 4.9  
Formative-first order outer weight Significant Testing Result

Formative construct	Formative Indicators	Outer Weights(outer Loading)	t-value	VIF	
iU1	UI1	0.04 (0.67)	1.57 NS	3.043	
	UI2	0.13(0.70)	5.50***	2.924	
	UI3	0.05(0.71)	2.16**	2.705	
	UI4	0.19 (0.77)	8.71***	2.823	
	UI5	0.12 (0.77)	5.29***	2.918	
	UI9	0.17(0.78)	7.35***	2.763	
	UI10	0.12 (0.74)	5.01***	2.183	
	UI 11	0.18(0.74)	7.13***	2.354	
	UI12	0.16(0.74)	7.73***	2.604	
	UI13	0.08 (0.70)	3.79***	2.481	
	UI14	0.12(0.69)	6.21***	2.249	
	iU2	UI15	0.28(0.76)	6.06***	2.141
		UI16	0.15 (0.68)	3.10***	2.344
		UI17	0.22(0.75)	4.38***	2.305
UI18		0.14(0.71)	3.19***	2.141	
UI19		0.18(0.79)	3.23***	1.842	
UI20		0.17(0.75)	3.53***	2.175	
UI21		0.19(0.82)	3.74***	1.852	
iU3	UI6	0.36(0.84)	6.13***	2.533	
	UI7	0.35(0.84)	6.74***	2.104	
	UI8	0.47(0.87)	8.64***	2.697	

Note: NS not significant

a.Bootstrap confidence interval for 10% probability of error( $\alpha=.10$ )

\*  $p < .10$ , \*\*  $p < 0.05$ , \*\*\* $p < 0.01$

The last step in assessing construct validity is by testing the nomological validity of the outer weights of the significant and non-significant indicators. Table 4.10 shows the finding of the significant formative indicators for the construct of university image. Prior research and theory also provide support for the relevance of these indicators in capturing university image (Bennett & Ali-Choudhury, 2009; Duarte et al., 2010; Wymer & Alves, 2013). Thus, all indicators were retained to reflect the formative construct even though their outer weights were low. Furthermore, the indicator variables did not show

multicollinearity issue, suggesting that they were internally consistent with the measurements and represented the theoretical construct of university image.

Table 4.10

*Formative- second order outer weight Significant Testing Result*

<b>Formative construct</b>	<b>Formative indicators</b>	<b>Outer Weights</b>	<b>t-value</b>	<b>VIF</b>
<b>iUI</b>	NA	0.174	2.67*	2.37

Note: NS not significant

a.Bootstrap confidence interval for 10% probability of error( $\alpha=.10$ )

\* p<.10,\*\* p < 0.05,\*\*\*p<0.01

#### 4.9.2 Endogenous Variables

Figure 4.8 illustrates the initial measurement models of the reflective constructs of the endogenous variables. The models consist of 25 indicators measuring two endogenous variables, i.e. mEBA1, mEBA2, mEBA3, DBL1, and DBL 2. Next, the dimensionality of MEBA and DBL was tested using CFA. Each dimension of MEBA and DBL had a single construct. The first run of the CFA was satisfactory since for each construct the indicator variables loaded only onto one factor, with the variance extracted has exceeded 66.8% for all constructs. All indicators of MEBA and DBL were retained for further analysis.

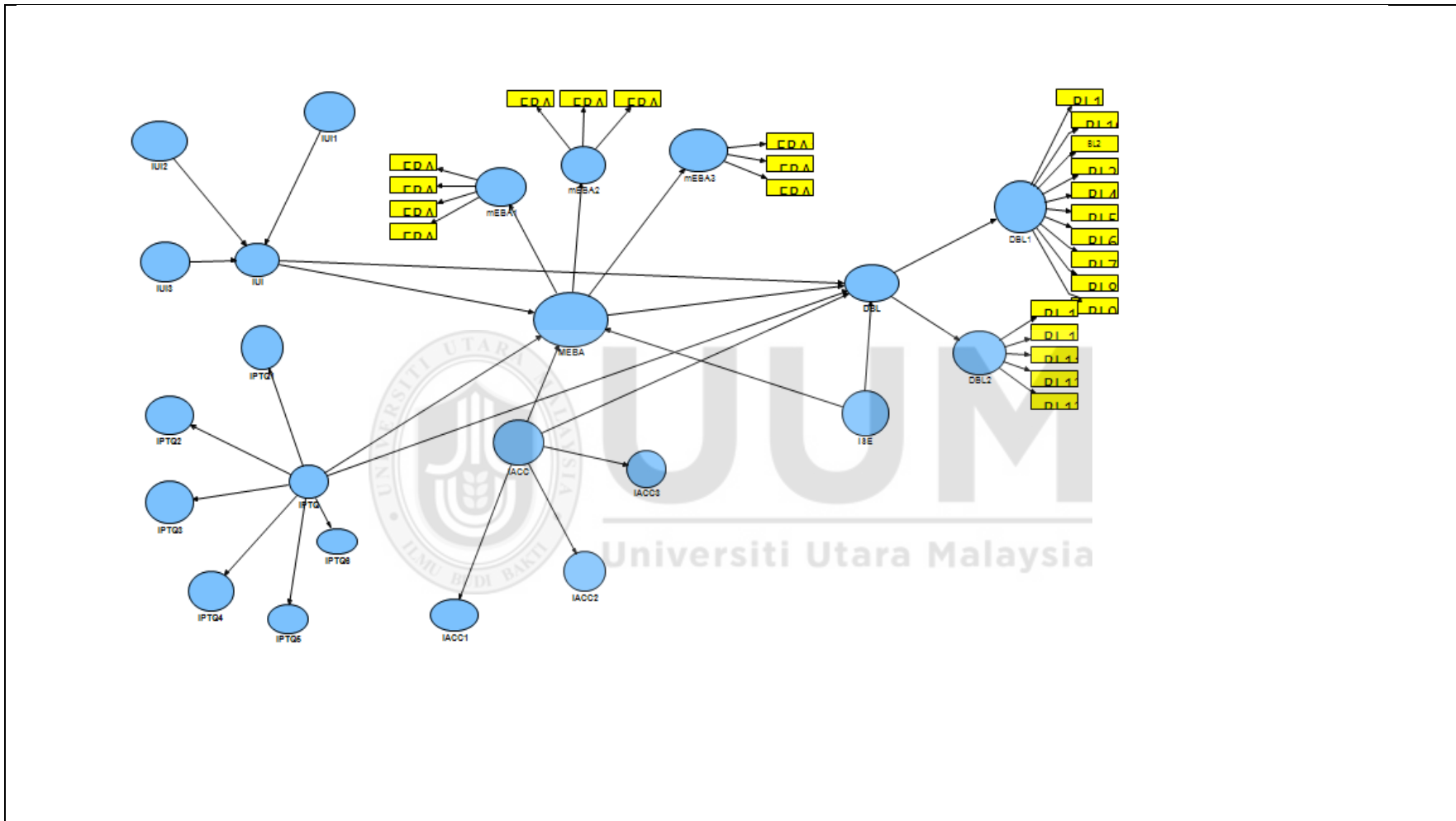


Figure 4.8  
Measurement model of Endogenous Variable

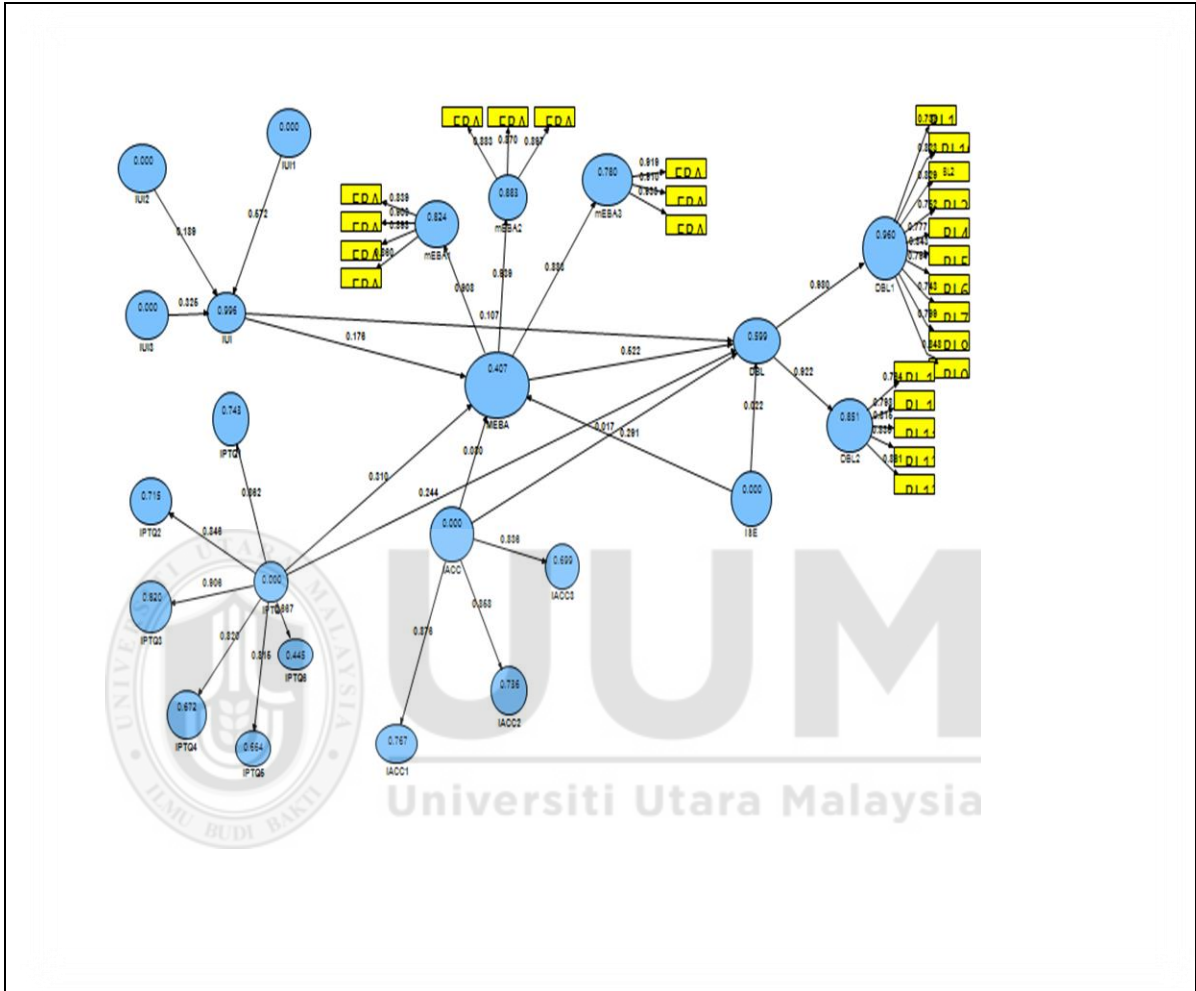


Figure 4.9  
*The result of Measurement model of MEBA and DBL*

Then, each measurement model of the endogenous variables was tested for indicator reliability, internal consistency reliability, and convergent validity. The findings are illustrated in Figure 4.9, and Table 4.11 shows that all factor loadings of each dimension of MEBA were greater than 0.8. The loadings ranged from 0.84 to 0.93, demonstrating higher indicator reliability. Table 4.12 shows that all factor loadings of DBL ranged from

0.74 to 0.85, which were well above the minimum threshold value of 0.5 (Hair, William C. Black, et al., 2010; Nunnally & Bernstein, 1978).

Table 4.11  
*Reliability of reflective constructs –first order constructs (Endogenous)*

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>	<b>Item deleted</b>
Affection(mEBA1)	EBA1	0.84	0.77	0.93	
	EBA2	0.91			
	EBA3	0.90			
	EBA4	0.86			
Connection(mEBA2)	EBA5	0.88	0.78	0.91	
	EBA6	0.87			
	EBA7	0.90			
Passion(mEBA3)	EBA8	0.91	0.85	0.94	
	EBA9	0.93			
	EBA10	0.92			
Attitude (DBL1)	BL1	0.74	0.63	0.95	
	BL2	0.83			
	BL3	0.75			
	BL4	0.78			
	BL5	0.84			
	BL6	0.79			
	BL7	0.74			
	BL8	0.80			
	BL9	0.85			
	BL10	0.82			
Behavioral (DBL2)	BL11	0.82	0.66	0.91	
	BL12	0.84			
	BL13	0.86			
	BL14	0.77			
	BL15	0.80			

To test for discriminant validity, the AVE of each endogenous construct (MEBA and DBL) was compared with inter-construct squared correlations associated with the construct. Table 4.8, shows that the discriminant validity for all constructs in the endogenous variables (MEBA and DBL) was confirmed since their AVEs were greater than the corresponding inter-construct squared correlations (Hair et al., 2014; Henseler, Ringle, & Sarstedt, 2014). Furthermore, to confirm the distinctiveness between constructs, the cross loadings were checked. The result of cross loadings analysis supported the discriminant validity of the endogenous variables of MEBA. By comparing the cross loadings across the columns (see Appendix VI), it was found that an indicator's loadings on its own construct were higher than all of its cross loadings with other constructs for all indicator variables. A similar result was also found in the DBL (see Table 4.8), providing support of discriminant validity for the DBL's measurement model.

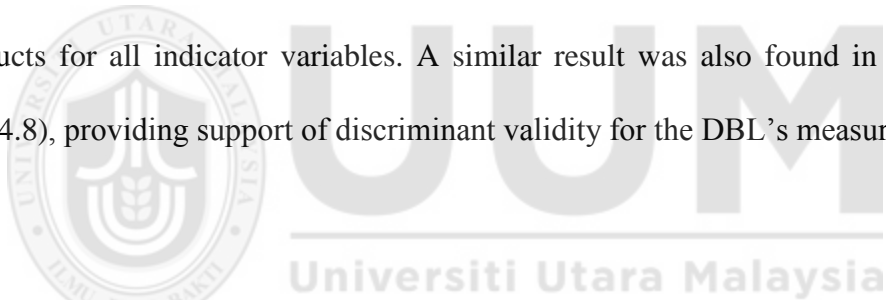


Table:4.12  
*Reliability of reflective constructs –second order constructs (Endogenous)*

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>AVE</b>	<b>CR</b>	<b>Item deleted</b>
Emotional brand attachment (MEBA)	mEBA1 mEBA2 mEBA3	0.90 0.94 0.88	0.66	0.95	
Brand Loyalty (DBL)	DBL1 DBL2	0.98 0.92	0.59	0.96	

Based on the findings above, the five forms of validation (i.e. unidimensionality, internal consistency reliability, indicator reliability, convergent validity and discriminant validity) showed that all sets of indicator variables for each construct of (MEBA and DBL) was

statistically good. This means that the indicators were internally consistent with the measurements and represented the theoretical constructs of MEBA and DBL. Therefore, the validated data set of MEBA and DBL, which contained 25 indicator variables in 405 cases, was acceptable for further statistical analysis.

#### **4.10 Structural Model**

The structural or inner model was assessed by evaluating the path coefficients between latent variables, effect size and predictive relevance of the constructs. First, the assessment of collinearity was made. There was one set of predictor constructs that measured the subparts of the proposed structural models. All predictors (iUI, iPTQ, iACC and iSE) jointly explained the three dimensions of MEBA (i.e. affect, connect, and passion): that is, iUI, iPTQ, iACC and iSE and the three dimensions of MEBA that act as predictors of brand loyalty.

Every set of predictor variables was tested for collinearity by using the collinearity diagnostics function. Table 4.13 shows the result, which indicates that all VIF values of these analyses ranged between 1.06 (Acculturation) and 2.37 (University image) were clearly below the threshold value of 5 (Haenlein & Kaplan, 2004; Hair, Hopkins, et al., 2014) (Haenlein & Kaplan, 2004; Hair, Hopkins, et al., 2014), illustrating that collinearity was not an issue.



Table 4.13  
*Collinearity Statistics*

<b>Variable</b>	<b>Tolerance</b>	<b>VIF<sup>a</sup></b>
iUI	0.423	2.37
iPTQ	0.428	2.34
iACC	0.941	1.06
SE	0.736	1.36
EBA	0.603	1.66

<sup>a</sup> Dependent variable BL

#### 4.10.1 Testing of Hypothesis University Image and Brand Loyalty

The PLS-SEM algorithm was run to test  $\beta$ -value of the path coefficient and  $R^2$ . Further analysis employed was a bootstrap re-sampling procedure (405 cases, 500 sub-samples, no sign change option) to generate the standard error and t-value, it reveals that ten out of the thirteen structural are significant ( $p < 0.01$  and  $p < 0.05$ ).

Hypothesis 1 proposed a significant relationship between university image and brand loyalty. The path coefficients of university images (IUI) on brand loyalty were non-significant ( $\beta = 0.106$ ,  $t = 1.51$ ,  $p > 0.1$ ). The result indicated non-significant relationship between university image and brand loyalty. Hence, Hypothesis 1 was not fully supported. Table 4.14, illustrates the result of the testing of H1.

Table 4.14  
*Summary of the result Hypothesis 1*  
*University image and Brand loyalty*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H1: there is a significant relationship between University image and brand loyalty iUI $\rightarrow$ DBL	0.106	1.51	Not Supported

$p > 0.1$

#### 4.10.2 Testing of Hypothesis Perceived Teaching Quality and Brand Loyalty

In Table 4.15, the findings illustrate the testing of H2, which proposes a significant relationship between perceived teaching quality (iPTQ) and brand loyalty. The total effect of iPTQ on brand loyalty (DBL) was significant ( $\beta = 0.243$ ,  $t = 3.392$ ,  $p < 0.01$ ), meaning that there was a significant relationship between perceived teaching quality and brand loyalty. Therefore, the hypothesis 2 was fully supported. Further, statistical tests have shown that additional findings of iPTQ relationship with the total effect of the DBL1 (attitudinal loyalty) dimension has a strong significance ( $\beta = 0.397$ ,  $t = 5.925$ ,  $p < 0.01$ ) if compared to other dimension such as DBL2 (behavioral loyalty) the result only moderate significance which is ( $\beta = 0.374$ ,  $t = 5.872$ ,  $p < 0.01$ ).

Table 4.15  
*Summary of the result Hypothesis 2*  
*Perceived teaching quality and Brand loyalty*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H2: there is a significant relationship between Perceived teaching quality and Brand loyalty			
iPTQ $\rightarrow$ DBL First- Order $\rightarrow$ Dependent	0.243	3.392	*** Support
iPTQ $\rightarrow$ DBL1	0.397	5.925	*** Support
iPTQ $\rightarrow$ DBL2	0.374	5.872	*** Support

\* $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

#### 4.10.3 Testing of Hypothesis Acculturation and Brand loyalty

Hypothesis 3 (H3) proposes a significant relationship between acculturation and brand loyalty. Table 4.16 shows the result, which indicates the path coefficient from acculturation to brand loyalty (DBL) is non- significant ( $\beta = 0.016$ ,  $t = 0.496$ ,  $p > 0.1$ ). The hypothesis H3 not supported. The result illustrates that, even though, acculturation with the host culture, the results seem to show they are not loyal to the university.

Table 4.16  
*Summary of the result Hypothesis 3*  
*Acculturation and Brand loyalty*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H3: there is a significant relationship between Acculturation and Brand loyalty			
iACC $\rightarrow$ DBL	0.016	0.496	Not supported

$p > 0.1$ ,

#### 4.10.4 Testing of Hypothesis Self-efficacy and Brand Loyalty

Table 4.17, shows the empirical result of hypothesis 4, which proposes a significant relationship between self-efficacy (iSE) and brand loyalty (DBL). The result showed that the path coefficient of self-efficacy on brand loyalty was not significant ( $\beta = 0.021$ ,  $t = 0.504$ ,  $p > 0.1$ ); hypothesis 4 was not supported. Table 4.17, also presents additional findings of the iSE construct.

Table 4.17  
*Summary of the result Hypothesis 4  
 Self-efficacy and Brand loyalty*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H4: there is a significant relationship between self-efficacy and Brand loyalty iSE $\rightarrow$ DBL	0.021	0.504	Not Support
<i>p &gt; 0.1</i>			

#### 4.10.5 Testing of Hypothesis University image and Emotional Brand Attachment

Hypothesis 5 proposes a significant relationship between university image and emotional brand attachment. The total effect of university image (iUI) on emotional brand attachment (MEBA) was significant ( $\beta = 0.175$ ,  $t = 2.569$ ,  $p < 0.01$ ). The result indicates a significant relationship between university image and emotional brand attachment. Hence, Hypothesis 5 was fully supported.

Based on Tables 4.18, it was also revealed that the additional findings of the total effect of university image dimensions (iUI1, iUI2, and iUI3) had a strong relationship with MEBA1 (affection), which is iUI1 ( $\beta = 0.091$ ,  $t = 2.606$ ,  $p < 0.01$ ), iUI2 ( $\beta = 0.030$ ,  $t = 2.548$ ,  $p < 0.05$ ) and iUI3 ( $\beta = 0.052$ ,  $t = 2.548$ ,  $p < 0.05$ ). This finding suggests that international students who perceived the university to have a good image are likely to be emotionally attached to the university. However, while the other dimensions such as connection and passion may have significant links with iUI1, iUI2 and iUI3, but not as strong a link as the affection dimension of emotional brand attachment.

Table 4.18  
*Summary of the result Hypothesis 5*  
*University image and Emotional brand attachment*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H5: there is a significant relationship between University image and emotional attachment			
iUI → MEBA	0.175	2.569	*** Support
First-order indicators → second-order constructs			
iU1 → iUI	0.571	38.033	*** Support
iU2 → iUI	0.189	15.367	*** Support
iU3 → iUI	0.325	23.079	*** Support
First-Order → intervening			
iUI1 → MEBA1	0.091	2.606	*** Support
iUI2 → MEBA1	0.030	2.548	** Support
iUI3 → MEBA1	0.052	2.548	** Support

\* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$

#### 4.10.6 Testing of Hypothesis Perceived Teaching Quality and Emotional Brand

##### Attachment

In Table 4.19, the findings illustrate the testing of H6, which proposes a significant relationship between perceived teaching quality (IPTQ) and emotional attachment. The total effect of IPTQ on emotional brand attachment (MEBA) was significant ( $\beta = 0.310$ ,  $t = 5.530$ ,  $p < 0.01$ ), meaning that there is a significant relationship between perceived teaching quality and emotional brand attachment. Therefore, the hypothesis 6 is fully supported.

Furthermore, the additional findings of this present study are illustrated in Table 4.19. The table also shows the IPTQ relationship with MEBA constructs. Interestingly, IPTQ had a higher significant relationship with the MEBA2 (connection) dimension of emotional brand attachment ( $\beta = 0.291$ ,  $t = 5.474$ ,  $p < 0.01$ ) than when compared to other dimensions such as MEBA1 and MEBA 3.

Table 4.19  
*Summary of the results (Hypothesis 6)*  
*Perceived Teaching Quality and Emotional brand attachment*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H6: there is a significant relationship between Perceived teaching quality and emotional attachment			
iPTQ $\rightarrow$ MEBA	0.310	5.530	*** Support
Second- Order $\rightarrow$ intervention			
iPTQ $\rightarrow$ MEBA1	0.281	5.398	*** Support
iPTQ $\rightarrow$ MEBA2	0.291	5.474	*** Support
iPTQ $\rightarrow$ MEBA3	0.274	5.453	*** Support

\* $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

#### 4.10.7 Testing of Hypothesis Acculturation and Emotional Brand Attachment

Hypothesis 7 proposes a significant relationship between acculturation and emotional attachment. Table 4.20 shows the result, which indicates that the path coefficient from acculturation to emotional brand attachment has significance ( $\beta = 0.080$ ,  $t = 2.033$ ,  $p > 0.05$ ). As a result, H7 is supported.

Equally important the additional findings are also illustrated in Table 4.20. It can be seen from the data in Table 4.20, that iAAC constructs have a strongly significant relationship with the dimension of MEBA2 (connection) ( $\beta=0.075$ ,  $t= 2.029$ ,  $p<0.05$ ) and MEBA3 (passion) ( $\beta=0.071$ ,  $t= 2.029$ ,  $p<0.05$ ). Additional findings indicate that when international students have acculturated with the host culture well, it results in a highly emotional connection with their places of study.

Table 4.20  
*Summary of the results (Hypothesis 7)*  
*Acculturation and Emotional brand attachment*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H7: there is a significant relationship between Acculturation and emotional attachment			
iACC → MEBA	0.080	2.033	** support
Second- Order → intervening			
iACC → MEBA1	0.073	2.023	**Support
iACC → MEBA2	0.075	2.029	**Support
iACC → MEBA3	0.071	2.029	**Support

\* $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

#### 4.10.8 Testing of Hypothesis Self-Efficacy and Emotional Brand Attachment

Table 4.21, shows the empirical result of hypothesis 8, which proposes a significant relationship between self-efficacy (iSE) and emotional brand attachment (MEBA). The result shows that the total effect of iSE on emotional brand attachment was significant ( $\beta = 0.291$ ,  $t = 4.413$ ,  $p < 0.01$ ), which therefore supports Hypothesis 8.

Table 4.21, also presents additional findings of the iSE construct. The table shows that in addition to having a significant relationship with the MEBA construct, it also has a significant relationship with the affection dimension (MEBA1) ( $\beta = 0.264$ ,  $t = 4.455$ ,  $p < 0.01$ ) and connection dimension ( $\beta = 0.273$ ,  $t = 4.455$ ,  $p < 0.01$ ).

Table 4.21  
*Summary of the result (hypothesis 8)*  
*Self-efficacy and Emotional brand attachment*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H8: there is a significant relationship between Self-efficacy and emotional attachment			
Second- Order $\rightarrow$ intervening			
iSE $\rightarrow$ MEBA	0.291	4.413	*** Support
iSE $\rightarrow$ MEBA1	0.264	4.455	*** Support
iSE $\rightarrow$ MEBA2	0.273	4.455	*** Support
iSE $\rightarrow$ MEBA3	0.257	4.401	*** Support

\* $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



#### 4.10.9 Testing of Hypothesis: Emotional Brand Attachment and Brand Loyalty

Hypothesis 9 proposes a significant relationship between emotional brand attachment and brand loyalty. Table 4.22 shows that the result of the relationship and predictive relevance between emotional brand attachment to brand loyalty. The total effect of MEBA on brand loyalty was significant ( $\beta = 0.522$ ,  $t = 10.992$ ,  $p < 0.01$ ), supporting H9.

Additionally, there was a significant effect of emotional brand attachment on the attitudinal dimension of brand loyalty ( $\beta = 0.511$ ,  $t = 10.871$ ,  $p < 0.01$ ). It was found that “willingness to recommend to someone else”, “still choosing the same university if faced a second choice”, and “encourage relative and friends to join this university” were key indicators of brand loyalty. This finding supports previous works (Vlachos et al., 2010; Vlachos & Vrechopoulos, 2012) that shows that emotional attachment affects re-patronage intentions.

Table 4.22  
*Summary of the result (hypothesis 9)*  
*Emotional brand attachment and Brand loyalty*

	Path coefficient ( $\beta$ )	t-value	Significance level/P value
H9: there is a significant relationship between emotional brand attachment and brand loyalty			
MEBA → DBL	0.522	10.992	*** Support
Constructs of intervening → consequences			
MEBA → DBL1	0.511	10.871	*** Support
MEBA → DBL2	0.481	10.686	*** Support

\* $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

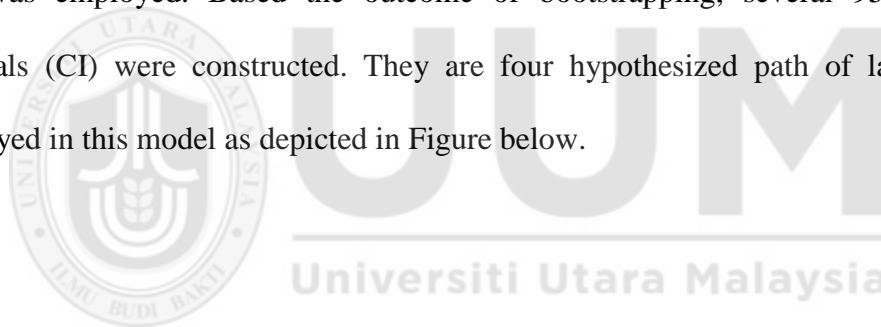
#### 4.10.10 Tests for Mediator

The present study applies a product of an indicator approach using variance Structural Equation Model also known as Partial Least Squares to test and estimate the mediating effect of emotional brand attachment on the relationship between university image, perceived teaching quality, acculturation, self-efficacy and brand loyalty (Fairchild & McQuillin, 2010; MacKinnon, David et al., 2004; MacKinnon et al., 2002).

Most of the research in consumer behavior literature takes either one of the two most used methods mediation analysis technique based on causal step approaches which are, the traditional Baron and Kenny, (1986) and the other one is bootstrapping method. The first method was introduced by prominent scholar (Baron & Kenny, 1986), this approach of the mediation effect requires estimation to achieve a significant path. When a certain path of significance is met, the ascertained variables are regarded as mediators. However, this approach has been heavily criticized on multiple grounds. The simulation study which uses this approach shows that the lower power (MacKinnon, David et al., 2004; Mackinnon et al., 2007). Eventhough, the most highlighted flaw is the fact that this approach is less likely to detect the impact introduced mediator on path c ( direct path) when compared with available methods for mediators testing. Another criticism of utilising this approach is that it does not quantify the effect being examined. Instead, inferences are based on the existence of the intervening effect by looking at the criterion of paths between independent variables and dependent variables.

Logically the mediator effect is the estimation of the total, direct and indirect effect of causal variable on the outcome variable through a proposed mediator variable (Hayes, 2009). Based on the contention among scholars, the researcher takes a percentile of bootstrapping confidence interval as a mediating analysis of this current research. Bootstrapping is able to generate an empirical representation of the distribution of the individual effect (Lockwood & MacKinnon, 1998). Besides, bootstrapping will also take into account the standard error.

Therefore, for the purpose of this study, the bootstrapping procedure with  $J = 500$  and  $n = 405$  was employed. Based the outcome of bootstrapping, several 95% confidence intervals (CI) were constructed. They are four hypothesized path of latent variables displayed in this model as depicted in Figure below.



***H10: Emotional brand attachment mediates the relationship between university image and brand loyalty.***

Hypothesis 10 postulates that emotional brand attachment mediates the relationship between university image and brand loyalty. Table 4.23 shows the findings of the mediating effect and Figures 4.10 illustrates the mediating path. In testing the mediating effect, bootstrapping was employed to examine the direct effect and indirect effect (Preacher & Hayes, 2004, 2008).

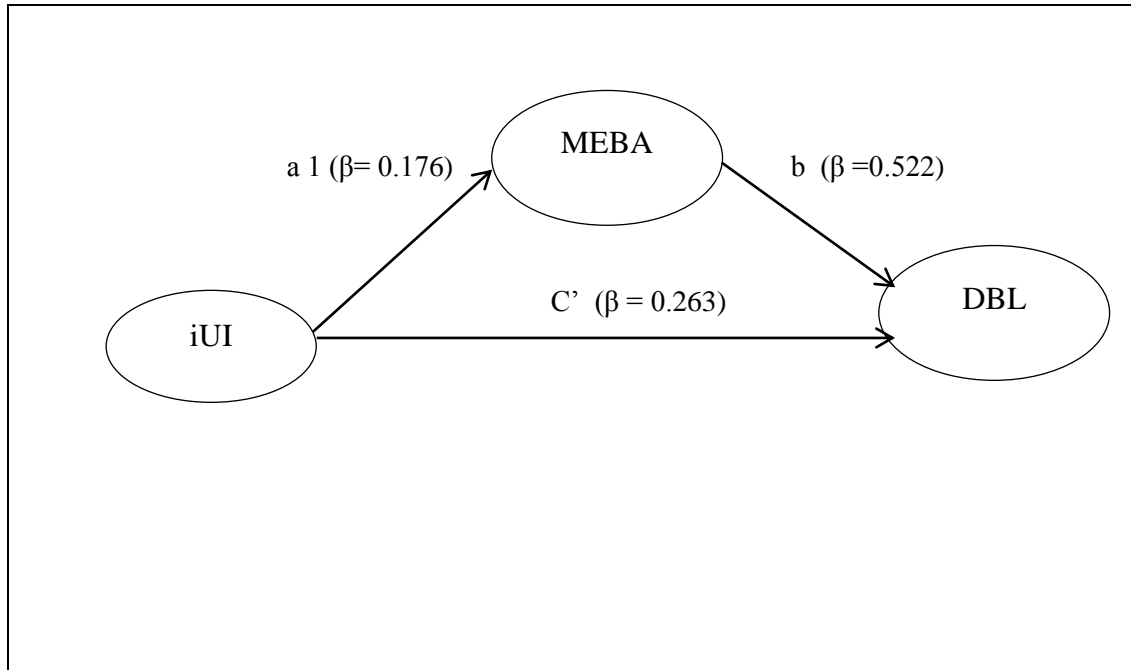


Figure 4.10  
 Mediating effects of emotional brand attachment (MEBA) on university image (iUI) and brand loyalty (DBL).

In testing mediation, the direct effect of path c should be significant without the inclusion of the mediator. However, according to Zhao, Lynch Jr., and Chen (2010), the direct effect condition is not necessary, but will help the mediator analysis be much easier to understand and interpret. The bootstrapping procedure was used to test the significant effect of university image on brand loyalty (path c). The total effect of path c was found to be significant ( $\beta = 0.573$ ,  $t = 13.525$ ,  $p < 0.01$ ). University image significantly predicted emotional brand attachment ( $a_1 = 0.176$ ,  $p < 0.05$ ) and when the university image was controlled, emotional brand attachment significantly predicted brand loyalty ( $b = 0.522$ ,  $p < 0.01$ ). The direct effect of university image on brand loyalty was significant with  $c'$  ( $\beta = 0.263$ ,  $t = 5.491$ ,  $p < 0.01$ ). The indirect effect ( $ab$ ) of university image on emotional brand attachment was ( $\beta = 0.092$ ,  $t = 1.767$ ,  $p < 0.1$ ). For 95%

bootstrapped confidential interval (CI), the indirect effect of university image on emotional brand attachment did not include zero and therefore the effect was statistically significant. Besides, the lower limit of 0.025 and the upper limit of 0.159 suggested that emotional brand attachment was a partial mediator (Hair, Hult, et al., 2014).

Table 4.23

*Summary of the result (hypothesis 10) Mediating effects of emotional brand attachment (MEBA) on the relationship between university image (iU1) and brand loyalty (DBL)*

<b>Hypothesis</b>	<b>Relationship</b>	<b>Std.Beta</b>	<b>Std.error</b>	<b>t-value</b>	<b>Decision</b>
H10	University image > emotional brand attachment > Brand loyalty	0.092	0.034	2.678**	Supported

\*\*p < 0.01, \*p < 0.05

***H11: Emotional brand attachment mediates the relationship between perceived teaching quality and brand loyalty***

H11 posits that emotional brand attachment mediates the causal link between perceived teaching quality and brand loyalty. Table 4.24 presents the mediating result and Figure 4.11 illustrates the mediating path. This hypothesis H11, which proposes that emotional brand attachment when elevated in this framework, will achieve brand loyalty. Various researchers have pointed out that MEBA variables are important to shape the behavior by deriving from an emotional state which is, positive and negative thinking will influence the thinking as the output information and it is processed as output in this

context as a formation of brand loyalty (Chua, Lee, Huffman, & Choi, 2015; Heesup & Jeong, 2013; Girish Prayag, Khoo-Lattimore, et al., 2015). The result is as shown in the Figure 4.8 and Table 4.24.

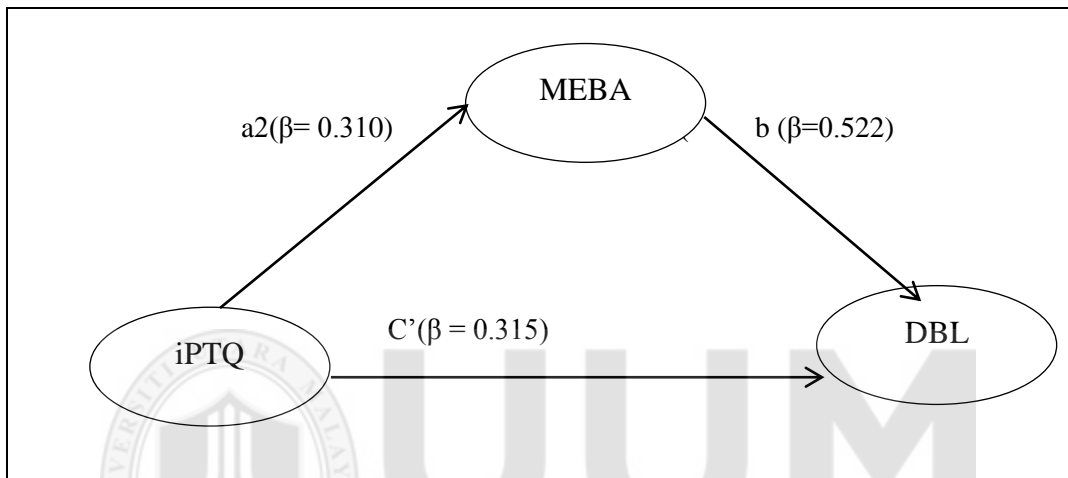


Figure 4.11  
 Mediating effects of emotional brand attachment (MEBA) on Perceived teaching quality (iPTQ) and brand loyalty (DBL)

The bootstrapping procedure was used to test the significant effect of perceived teaching quality and brand loyalty (path c). The total effect of path c was significant ( $\beta = 0.545$ ,  $t = 16.18$   $p < 0.01$ ). Perceived teaching quality significantly predicted emotional brand attachment ( $a_2 = 0.310$ ,  $p < 0.01$ ). When perceived teaching quality was controlled, emotional brand attachment significantly predicted brand loyalty ( $b = 0.522$ ,  $p < 0.01$ ). The direct effect of perceived teaching quality on brand loyalty was significant with  $c'$  ( $\beta = 0.315$ ,  $t = 6.58$ ,  $p < 0.01$ ). The bootstrapping analysis showed that the indirect effect

( $a \times b$ ) of perceived teaching quality on emotional brand attachment was significant ( $\beta = 0.162$ ,  $t = 3.604$ ,  $p < 0.01$ ). The 95% Boot CI: [LL = 0.098, UL = 0.226] also indicated that the indirect effect did not straddle a zero in between, indicating a mediating effect. These results provide further support for the hypothesis for the mediating effect of emotional attachment on the relationship between perceived teaching quality and brand loyalty.

Table 4.24

*Summary of the result (hypothesis 11) Mediating effects of emotional brand attachment (MEBA) on the relationship between Perceived teaching quality (IPTQ) and brand loyalty (DBL)*

<b>Hypothesis</b>	<b>Relationship</b>	<b>Std.Beta</b>	<b>Std.error</b>	<b>t-value</b>	<b>Decision</b>
H11	Perceived teaching quality > emotional brand attachment > brand loyalty	0.162	0.033	4.964**	Support

\*\* $p < 0.01$ , \* $p < 0.05$

***H12: Emotional brand attachment mediates the relationship between acculturation and brand loyalty***

Hypothesis 12 posits the mediating effect of emotional attachment on the relationship between acculturation and brand loyalty. Table 4.25 presents the mediating result and Figure 4.12 illustrates the mediating path.

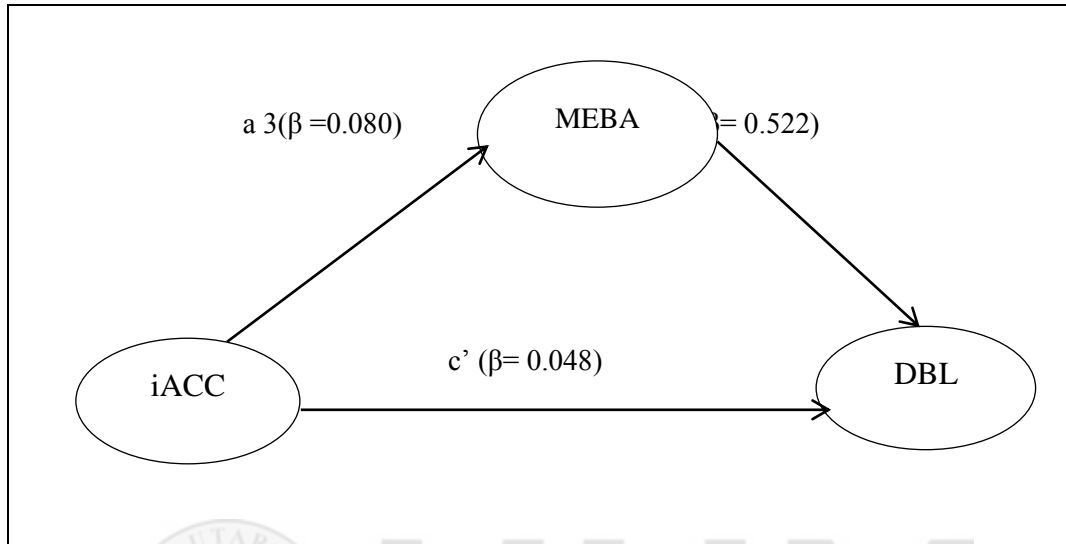


Figure 4.12  
*Mediating effects of emotional brand attachment (MEBA) on the relationship between Acculturation (iACC) and brand loyalty (DBL)*

The bootstrapping procedure was used to test the effect of acculturation on brand loyalty (path c). The total effect of path c was significant ( $\beta = 0.490$ ,  $t = 2.87$ ,  $p > 0.01$ ). Acculturation significantly predicted brand loyalty ( $a_3 = 0.080$ ,  $p > 0.05$ ). When acculturation was controlled, emotional brand attachment significantly predicted brand loyalty ( $b = 0.522$ ,  $p < 0.01$ ). The direct effect of acculturation on brand loyalty was non-significant with  $c'$  ( $\beta = 0.048$ ,  $t = 1.372$ ,  $p > 0.1$ ). The bootstrapping analysis showed that the indirect effect (ab) of acculturation on emotional brand attachment was significant ( $\beta = 0.042$ ,  $t = 2.08$ ,  $p < 0.05$ ). The 95% Boot CI: [LL = 0.001, UL = 0.083] indicated that the indirect effect did not straddle a zero in between, indicating there was a mediating effect.



These results provide further support for the hypothesis that there is a mediating effect of emotional attachment on the relationship between acculturation and brand loyalty.

This result indicates that emotional brand attachment much develop first in order to accomplish brand loyalty in HEIs in Malaysia context. While acknowledging that the importance of acculturation among international student and local students important in developing of emotional brand attachment on the dimension of affection, connection and passion. Therefore, the result, illustrates that the specific hypothesis of H12 suggests the significant mediation effect of emotional brand attachment between acculturation and brand loyalty is partially supported.

Table 4.25  
*Summary of the result (hypothesis 12) Mediating effects of emotional brand attachment (MEBA) on the relationship between Acculturation(iACC) and brand loyalty (DBL)*

<b>Hypothesis</b>	<b>Relationship</b>	<b>Std.Beta</b>	<b>Std.error</b>	<b>t-value</b>	<b>Decision</b>
H12	Acculturation > emotional brand attachment > brand loyalty	0.042	0.021	2.008**	Support

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1

***H13: Emotional brand attachment mediates the relationship between self-efficacy and brand loyalty***

H13 proposed that emotional brand attachment mediates the causal link between self-efficacy and brand loyalty. Table 4.26 presents the mediating result and Figure 4.13 illustrates the mediating path.

The bootstrapping procedure was used to test the effect of self-efficacy and brand loyalty (path c). The total effect of path c was significant ( $\beta = 0.378$ ,  $t = 6.526$ ,  $p < 0.01$ ). Self-efficacy significantly predicted emotional attachment ( $a_4 = 0.291$ ,  $p < 0.01$ ). When self-efficacy was controlled, emotional brand attachment significantly predicted brand loyalty ( $b = 0.522$ ,  $p < 0.01$ ).

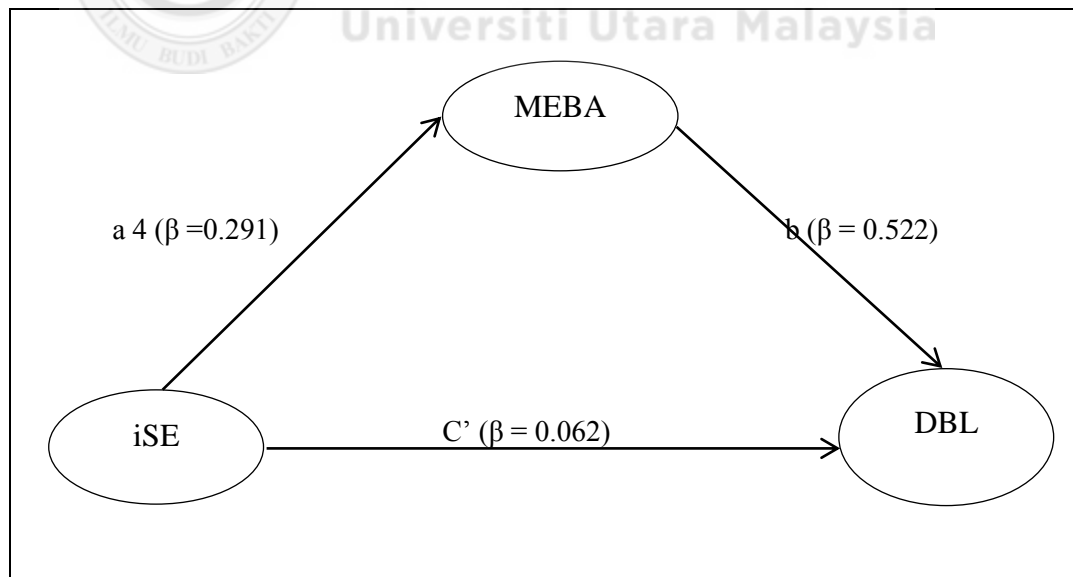


Figure 4.13  
*Mediating effects of emotional brand attachment (MEBA) on the relationship between Self-efficacy (iSE) and brand loyalty (DBL)*

The direct effect of self-efficacy on brand loyalty was non-significant with  $c'$  ( $\beta = 0.062$ ,  $t = 1.277$ ,  $p > 0.1$ ). The bootstrapping analysis shows that the indirect effect ( $ab$ ) of self-efficacy on emotional brand attachment was significant ( $\beta = 0.152$ ,  $t = 3.274$ ,  $p < 0.01$ ). The 95% Boot CI: [LL = 0.078, UL = 0.226] also indicates that the indirect effect did not straddle zero in between, indicating a mediating effect. These results provide further support for the hypothesis that emotional attachment mediates the relationship between self-efficacy and brand loyalty. The direct path shows statistically no significance from self-efficacy to brand loyalty ( $c'$ ), however, the indirect effect is statistically significant. Hence, the effects of self-efficacy on brand loyalty are only partially mediated by emotional brand attachment.

Table 4.26  
*Summary of the result (hypothesis 13) Mediating effects of emotional brand attachment (MEBA) on the relationship between Self-efficacy (iSE) and brand loyalty (DBL)*

<b>Hypothesis</b>	<b>Relationship</b>	<b>Std.Beta</b>	<b>Std.error</b>	<b>t-value</b>	<b>Decision</b>
H13	Self-efficacy > emotional brand attachment > brand loyalty	0.152	0.038	4.040**	Support

\*\* $p < 0.01$ , \* $p < 0.05$

#### 4.10.11 Assessment of Coefficient of Determination ( $R^2$ value)

These are the following criteria to assess the coefficient determination ( $R^2$ ). The  $R^2$  is the measure of the model predictive accuracy and also the quality of the model. The rule of thumb regarding acceptable  $R^2$  varies across different disciplines; with 0.75, 0.5, 0.25,

respectively, which describe substantial, moderate, or weak levels of predictive accuracy (Hair, Ringle, & Sarstedt, 2011; Henseler, Ringle, & Rudolf R. Sinkovics, 2009). In this study, the coefficients of the endogenous variables in the model are summarized in Table 4.27 as below:

Table 4.27  
*Endogenous Variable Coefficients of Determination*

<b>Latent Variable Path</b>	<b>Variance Explained (R<sup>2</sup>)</b>
Emotional Brand Attachment	0.407
Brand Loyalty	0.599

Sources: The Researcher

The findings found 40.7 % of the variance in emotional brand attachment is explained by university image, perceived teaching quality, acculturation and self-efficacy. Based on the rule of thumb, this value is considered weak. However, the impact of endogenous latent variable on brand loyalty shows that more than 50% of the variance on brand loyalty was from emotional brand attachment, suggesting that the tested model was more than moderate in its prediction. The R<sup>2</sup> value is closely associated with the number of predictors to a particular variable, thus the more predictors a variable has, the higher the R<sup>2</sup> value will be. However, in this study the R<sup>2</sup> value of emotional brand attachment is quite high where more than 40% is explained by (IUI, iPTQ, iACC, iSE) variables. Besides that, the objective of the current study was not to come up the predictive model, but rather the assessment of the impact of mediation on the relationship between predictors variable and brand loyalty. As a result, the research is generally well

understood for the population being studied, there is higher expectation of being able to explain most of the variance. Even though the predictive model did not achieve more than 70%, the researcher suggests that there is another variable that was not included in this study in order to achieve the substantial variance. However, this is not the emphasis and objective of this study. The point here is to identify if there is any significant impact among the variables, especially the mediation impact of emotional brand attachment. The result has statistically proven that there is a significant effect. Which means the objective was successfully met.

#### 4.10.12 Effect Sizes

The effect size ( $f^2$ ) is the complementary test to  $R^2$ , whereby changes in the  $R^2$  is observed with the omission of any selected exogenous variable from the model. To calculate the  $f^2$ , the researcher must estimate two PLS path models (with and without the latent variable inclusion). The rule of thumb is the value of effect sizes, the omitted construct for particular endogenous construct can be determined such as 0.02, 0.15 and 0.35 to illustrate small, medium, and large effects respectively (Cohen, 1988).

Table 4.28  
*Effect Size Calculation on latent variable Cohen's (1988) Recommendation for the Model*

<b>Latent Variable</b>	<b><math>R^2</math> included</b>	<b><math>R^2</math> Excluded</b>	<b><math>f^2</math></b>	<b>Effect Size</b>
Emotional Brand Attachment	0.599	0.438	0.402	Large
University Image	0.407	0.393	0.024	Small
Perceived Teaching Quality	0.407	0.362	0.076	Small
Acculturation	0.407	0.400	0.012	None
Self-efficacy	0.407	0.337	0.118	Small

Based on Cohen, as per Table 4.28 reveals, these current findings suggest that the effect size of university image, perceived teaching quality and self-efficacy were small effect sizes, and acculturation is a non effect size on emotional brand attachment were 0.402, 0.024, 0.076, 0.012 and 0.118. However, emotional brand attachment is a large effect size on brand loyalty.

#### 4.10.13 Predictive Relevance of Model ( $Q^2$ )

The  $Q^2$  statistics are used to evaluate the predictive relevance of the model. A Q-square greater than 0 means that the model has predictive relevance: Whereas Q-squares less than 0 mean that the model lack predictive relevance (Chin, 1998, 2010; Fornell, C., & Cha, 1984; Geisser, 1975). Moreover, in PLS, two types of Q-squares statistics are estimated, which is cross-validity communality ( $H^2$ ) and cross-validated redundancy ( $F^2$ ). However, (Hair et al., 2011) recommends using the cross-validated redundancy ( $F^2$ ). The cross-validated ( $F^2$ ) measure the capacity of the path model to predict the endogenous MVs indirectly from the prediction of their LV using related structural relations, by cross validation (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). The  $Q^2$  value obtained by using the blindfolding procedure is presented in Tables 4.29.

Table 4.29

*Predictive Relevance for dependent variable relationship Q square*

Construct	SSO	SSE	1-SSE/SSO
Emotional Brand attachment	6075	3937	0.352
Brand Loyalty	4050	2967	0.267

The results show that the values of cross –validated redundancy ( $F^2$ ) of the endogenous latent construct were found to be more than zero for emotional brand attachment and brand loyalty (i.e 0.352 and 0.267) . Since the endogenous construct’s (brand loyalty) cross-validated redundancy ( $F^2$ ) value is greater than zero, therefore, the exploratory latent construct exhibit predictive relevance. On the other hand, the model is able to adequately predict each endogenous latent variable’s indicator. Similarly, to the  $q^2$  predictive relevance compared mean to measure  $q^2$  effect size. The result demonstrates that ( $q^2 = 0.07$ ) of emotional brand attachment effect size on the brand loyalty. Besides, the  $q^2$  values ranges from 0.01 (small) to 0.07 (high), indicating small predictive relevance for the endogenous construct (Hair, Hult, et al., 2014). The Table 4.30 illustrates the results of the construct’s cross-validated redundancy.

Table 4.30  
*Construct Cross-Validated Redundancy*

Latent Variable	CVRed	CVRed	$q^2$	Effect Size
	included	Excluded		
Emotional Brand Attachment	0.352	0.257	0.147	Small
University Image	0.267	0.259	0.011	None
Perceived Teaching Quality	0.267	0.238	0.040	Small
Acculturation	0.267	0.263	0.005	None
Self-efficacy	0.267	0.221	0.063	Small

But, the findings in Table 4.30 indicate that university image and acculturation do not have predictive relevance for emotional brand attachment ( $q^2 = 0.01$ ) and ( $q^2 = 0.005$ ). The  $f^2$  of exogenous latent variable has relatively small and non to moderate effect sizes

(Chin, 2010). The effect sizes were reasonable since there were many factors that affect brand loyalty (Jain et al., 1987). The estimated model fit the data well.

#### 4.11 Summary of the findings

Having presented all the results, including main and mediating effects in preceding sections, Table 4.31 summarizes the results of all hypotheses tested.

Table 4.31  
Summary of hypothesis testing

Hypothesis	Statement	Findings
<b>H1:</b>	There is a significant relationship between university image and brand loyalty	Not Supported
<b>H2:</b>	There is a significant relationship between perceived teaching quality and brand loyalty	Supported
<b>H3:</b>	There is a significant relationship between acculturation and brand loyalty	Not Supported
<b>H4:</b>	There is a significant relationship between self-efficacy and brand loyalty	Not Supported
<b>H5:</b>	There is a significant relationship between university image and emotional brand attachment	Supported
<b>H6:</b>	There is a significant relationship between perceived teaching quality and emotional brand attachment	Supported
<b>H7:</b>	There is a significant relationship between acculturation and emotional brand attachment	Supported
<b>H8:</b>	There is a significant relationship between self-efficacy and emotional brand attachment	Supported
<b>H9:</b>	There is a significant relationship between emotional brand attachment and brand loyalty	Supported
<b>H10:</b>	Emotional brand attachment mediates the relationship between university image and brand loyalty	Supported
<b>H11:</b>	Emotional brand attachment mediates the relationship between perceived teaching quality and brand loyalty	Supported
<b>H12:</b>	Emotional brand attachment mediates the relationship between acculturation and brand loyalty	Supported
<b>H13:</b>	Emotional brand attachment mediates the relationship between self-efficacy and brand loyalty	Supported

Sources: The Researcher



#### 4.12 Chapter Summary

This chapter presents the result of this study. The characteristics of the responses from the respondents have been described. By utilizing PLS-SEM approach, the theoretical framework has been transformed into structural equation model and is empirically tested based on the two step process which is a measurement model and structural model assessing PLS-SEM model.

The findings also, show that ten out of thirteen the hypotheses are significant and besides that mediation role of emotional brand attachment statistically has mediation effect to all the hypotheses.

The results of this chapter will be discussed further in the following chapter. The implication of the findings for researchers and practitioners and possible directions for future research are also presented in chapter five.

## CHAPTER FIVE

### DISCUSSION OF RESULT AND CONCLUSIONS

#### 5.1 Introduction

This chapter discusses the results obtained in the previous chapter. It also presents theoretical and practical implications of the findings. Finally, the chapter concludes with the limitations of the study and suggestions for future research.

#### 5.2 Recapitulation of The Study's Findings

The present study was designed to determine the effect of university image, perceived teaching quality, acculturation, and self-efficacy on brand loyalty through the mediation of emotional brand attachment. The results of this study indicate that ten out of thirteen hypotheses are supported. That is, university image, perceived teaching quality, acculturation, and self-efficacy all have a significant relationship with emotional brand attachment, which in turn also has a significant association with brand loyalty. The mediating role of emotional brand attachment also received empirical support. The findings help us to understand that emotional brand attachment is a crucial construct in developing students' brand loyalty in Malaysian public higher education institutions.

### **5.3 Discussion**

This section discusses the research findings in light of relevant theories and findings of previous studies. The subheadings of each discussion section are structured according to the research questions.

#### **5.3.1 University Image, Perceived Teaching Quality, Acculturation, Self-Efficacy, and Brand Loyalty**

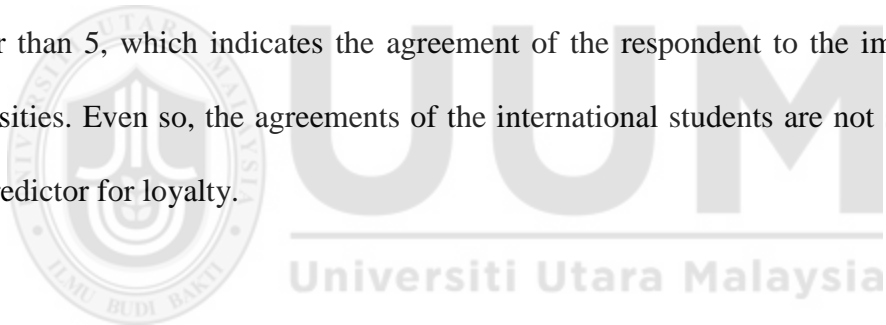
To answer the first research question, four hypotheses were proposed to test the relationships between a university's image, perceived teaching quality, acculturation, self-efficacy and brand loyalty. The following discusses the results of each hypothesis.

##### **5.3.1.1 Relationship Between University Image and Brand Loyalty**

The first hypothesis posited a significant association between university image and brand loyalty. Previous research findings confirm that a university's image has a direct effect on brand loyalty. Surprisingly, the empirical investigation on this research reveals that the path coefficient had not supported this hypothesis, as university image was found to have no effect on the brand loyalty construct. This research opposes what previous studies (i.e. Ali et al., 2016; Alves & Raposo, 2010; Belanger et al., 2002; Bennett & Ali-Choudhury, 2009; Dehghan et al., 2014; Oyvinh Helgesen & Nettet, 2007) confirm, that image is a

prominent determinant of brand loyalty. Although, the direct relationship between university image and loyalty is not supported in this study.

The findings that relate to the insignificance of a direct relationship between university image and loyalty, is contrary to previous studies that attempted to validate the model underpinned by the S-O-R theory (Jang & Namkung, 2009; Mehrabian & Russell, 1974). A possible explanation could be that in this current study, as opposed to the previous study, the exposure a conducive and study environment that they aware the image of the university. Even though, the results of the university image construct have a mean score greater than 5, which indicates the agreement of the respondent to the image of public universities. Even so, the agreements of the international students are not strong enough as a predictor for loyalty.



This study also reveal that the essential component of university image – such as covenant (promise of university attribute) not a crucial component of a university’s image in contributing the formation of loyalty among international students in this study. For an example of these component factors are future job prospect, worldwide degree recognition and university ranking, not contribute to the loyalty issue among international students. However, it is a possibility that a peaceful and safe country is their priority and will make international students’ loyal to the university. Besides, the cost of tuition fees and the cost of leaving are the main factors that contribute to loyalty among students.

Nonetheless, this research filled up the gaps in the marketing literature by examining the effect of image in nonprofit organizations, especially in higher learning institutions in the Malaysian setting.

### **5.3.1.2 Relationship Between Perceived Teaching Quality and Brand Loyalty**

The second hypothesis posited a significant association between perceived teaching quality and brand loyalty. Interestingly enough, the path coefficient of perceived teaching quality was found to have an influence on brand loyalty. This study provides evidence of the importance of perceived teaching quality to brand loyalty, and in this sense this research is consistent with previous similar studies within the service marketing literature, (Aggarwal Sharma, Rao, & Popli, 2013; Hameed, 2013; Hennig-Thurau et al., 2001; Pappu, Quester, & Cooksey, 2005) where perceived quality has a direct, significant effect on brand loyalty.

This study also points to perceived teaching quality as a key antecedent of brand loyalty. Perceived teaching quality within higher education institutions is likely to be an important factor of all types of services within the organization. Nonetheless, Chapleo, (2009;2015) pointed out that even though the trend toward a stronger market orientation and commercial focus, with higher learning institutions the process of university branding will likely remain inspiring.

This finding also contributes to the literature in terms of a significant link with brand loyalty. Most previous studies have findings that are more directed toward the effect of perceived quality on brand loyalty (Chao, 2011; Fujan et al., 2009; Hennig-Thurau et al., 2001; Sampaio, Perin, Simoes, & Kleinowski, 2012). This study helps us to understand perceived judgment about a service provider's overall excellence or superiority in teaching and learning. Perceived teaching quality represents the overall students' requirement for most kinds of educational services.

The findings illuminate the dimensions of perceived teaching quality (the teaching course, organization management, assessment and feedback, personal development, academic support and learning sources) as a basic requirement that is expected by international students from a HEIs . This finding also shows that the university needs to improve in the area of assessment and feedback.

This study also highlights the significance of teaching quality and the role of the academician that is qualified and knowledgeable in research and publication. A university professor should be producing quality research, which is impressive and excellent, particularly in certain areas. In addition to that, perceived teaching quality is considered a good way to promote brand loyalty and retention at public universities in Malaysia. With good quality teaching and learning, Malaysian higher education sector can compete with their competitors in the global higher education market.

This research model is also aligned with the S-O-R theory that guides this research, which says environmental stimuli such as academics of a university are expected to influence students' emotional value which will in turn become loyalty. This empirical finding contributes to the body of marketing literature for continuous use in the higher education sector branding services, which says perceived teaching quality is a key driver to students' brand loyalty in the future. Even though, this research is a cross-cultural study, the findings are not obviously different compared to previous research.

### **5.3.1.3 Relationship Between Acculturation and Brand Loyalty**

Thirdly, with regard to the hypothesis (H3), as predicted, the PLS path modeling result indicates that acculturation has a insignificant direct effect on brand loyalty. These findings are opposite to the previous study (Segev et al., 2014; Weber et al., 2014, 2015) of consumer behavior in immigrant students. The mean analysis shows that dimension of acculturation has a mean value of 3.83, which is less than 5. The mean score indicates the respondents' disagreement toward the process of acculturation. Also explain the difficulty international students may have in adjusting socially among local students at Malaysian public universities. The mean value score indicates that of all the dimensions of acculturation, the highest is integration strategy.

Nonetheless, the process of acculturation in adopting hosts' cultural beliefs, norms, attitudes and behavior have similarities in their home culture, but this does not influence

them to be loyal to a particular university during their time as students. Since the assimilation strategy has lower mean value compared to other strategies. This means that, the process of acculturation of international students into local culture is not promising in this research. From the findings it is shown that the effect of acculturation is an insignificant predictor of brand loyalty.

The result of this study also indicates that it is important for the university management or counselor to address perceived discrimination and other issues related to the international students. Many international students need an informal method of help such as, from social networks and university management in order to reduce the acculturation stress due to the process of adjusting to the adoption of a culture. The university management and counselor should develop support groups and workshops to give emotional support to international students in handling acculturation stress.

Finally, being part of a social support group may provide international students' with a secure base when steering through the university community. In addition to that, the university management should create and hold community services that involve integrating international students with the local community and students. By doing so, international students can learn and experience a host culture and have a sense of connectedness to the university, which can in turn create loyalty to the university in future. Moreover, a network of support may help international students with managing



their acculturation process. This current study also aligns with the S-O-R theory that explains the formation of brand loyalty influenced by environmental stimuli and organism.

#### **5.3.1.4 Relationship Between Self-Efficacy and Brand Loyalty**

Regarding the hypothesis (H5), the result of the study does not support that self-efficacy has a significant relationship to brand loyalty. This study was found not exerting the links between self-efficacy and brand loyalty. This finding is somewhat inconsistent with prior research done (Alarcon & Edwards, 2013; Beuningen et al., 2009; Luszczynska, Gibbons, Piko, & Tekozel, 2004; Pavlou & Fygenson, 2006). However, a plausible explanation for this inconsistent finding might be due to the fact that past research was done with perceived self-efficacy, and considered motivation and the capability of finding solutions to problems (Xinyuan Zhao, Mattila, & Tao, 2008) as an influence to behavioural intention. Although the relationship between self-efficacy and loyalty or behaviour is not directly supported in this study, the result was supported through a mediating effect on brand loyalty.

The descriptive data also reveal that undergraduate students contribute to a large number of international students who study in Malaysian PubHEIs, with an age range between 21 to 25, it is the adults, which lack the skill to handle problems and have a low level of perceived self-efficacy. When they are studying away from their family and friends, they

are unable to handle problems. The most common problem is too high a workload, personal difficulties, financial stress, and time management. Thus, the researcher can see that all these factors are very challenging and require emotional support from the university administration, social support and family in order to bring about the international students' loyalty to the university.

The findings reveal that the mean score of international students' perceived self-efficacy is around 5.24, which indicates that international students agree that they have the capability and motivation to manage problems and accomplish their goals. However, this finding shows that the level of self-efficacy is unable to make the respondents loyal to the university, at least not without being influenced by the element of affection. With regard to the findings of perceived self-efficacy, international students who lack self-confidence and have low perceived self-efficacy will be affected by their incapability in problem solving. However, proper activities in universities, like workshops and counselling sessions, can help these students develop and improve specific skills. For example, the most common reason for a lack of confidence in international students is identified as to big an academic workload and social cultural issues. Addressing this issue may require university management to ensure that international students develop stress and time management skills so that they better cope with a workload and social cultural issues that some students perceive as insignificant. These current findings contribute to the theory in the marketing literature which says self-efficacy does not have a direct effect on brand loyalty in the context of the Malaysian higher education setting.

### **5.3.2 University Image, Perceived Teaching Quality, Acculturation, Self-Efficacy, and Emotional Brand Attachment**

The second research question was whether university image, perceived teaching quality, acculturation, and self-efficacy influence emotional brand attachment. In line with this research question, the second objective of this study is to investigate the relationship between university image, perceived teaching quality, acculturation, self-efficacy and emotional brand attachment.

Four hypotheses (H5 to H8) were proposed to test the relationships between universities image, perceived teaching quality, acculturation, self-efficacy and emotional brand attachment. The following discusses the results of each hypothesis.

#### **5.3.2.1 Relationship Between University Image and Emotional Brand Attachment**

The fifth hypothesis posited a significant association between the image of the university and emotional brand attachment. The hypothesis was supported as university image was found to have a significant and direct influence on emotional brand attachment. The result aligns with previous findings (Perna, 2005; Veasna, Wu, & Huang, 2013; Wilkins & Huisman, 2013). The finding further revealed that three dimensions of university

image (i.e. covenant, symbolic and external representation, and quiddity) were significant in influencing emotional brand attachment of international students.

A positive image of a university will enhance students' perception towards that university. According to several researchers, a good image of a university reflects the image of the higher education learning in the country (Bennett & Ali-Choudhury, 2009; Siti Falindah Padlee, Abdul Razak Kamaruddin, & Rohaizat Baharun, 2010). Emotional brand attachment towards the university increases when international students perceive that the image of the university has met their expectations. Therefore, the university management has to concentrate on developing a good image of the university, such as mission and vision, symbolic and external representation, learning and social environment, and other distinctive features of the university.

This finding explained that international students who perceived the university to have a good image of mission and vision, and also learning, and good in a social environment are likely to be loyal to the university. By recommending the university to their friends and family, and sharing good education experience during their time of study. These students will also say positive things about the university and plan to continue their postgraduate there in the future. However, although the rest of the dimensions such as attitudinal loyalty also have significant links with (covenant, symbolic and external representation, and quiddity) they are not strong as the behavior dimension of brand loyalty.

Image is considered an effective factor in the building of students' attitudes and expectations, especially when they have had little direct experience with the organization or the service provider. A university that is characterized by being in a safe location, having a physically attractive campus, and being easily accessible makes international students feel much more comfortable thus, creating an emotional bond towards the place of study. It was also discovered that another perception international students have of university image is whether the graduates are likely to be employed and have good career prospects.

In other words, international students prefer to study and remain loyal to an institution that is widely recognized. Good global rankings indicate the quality of teaching and student satisfaction. It also reflects the quality of research conducted by the faculty members. Thus, a good ranking boosts the image and reputation of the university in the higher education market. Studies found that a good ranking was significant in forming positive images of the university among potential students (Amsler & Bolsmann, 2012; Sin & Kim, 2013). Other scholars also share the same view, where a university's image is important as a predictor to student brand loyalty, and allowing it to be more competitive (Aarinen, 2012; Spake et al., 2010).

In short, the finding implies that universities need to use promotional tools effectively to attract potential students as well as to retain the existing or loyal students. In addition to a good ranking, the name and logo of a university were found to determine students' emotional attachment at particular universities. This present study also revealed that a

university with excellent library services, information technology infrastructure, and learning facilities are important in developing the emotional relationships between students and university. This study contributes to the marketing literature by examining the direct effect of university image and emotional brand attachment in order to fill the theoretical gap between these two variables.

This study is aligned with the S-O-R theory which is that an environmental stimulus (university image) is expected to influence students' emotions and responses to the loyalty. With regard to the findings, it can also be concluded that emotional brand attachment depends on international students' perception towards the image of the university.

#### **5.3.2.2 Relationship between Perceived Teaching Quality (PTQ) and Emotional Brand Attachment**

The six hypotheses posited a significant relationship between perceived teaching quality and emotional brand attachment. As expected, perceived teaching quality was found to have a significant influence on emotional brand attachment. Such findings are consistent with previous studies (Abdullah, Wasiuzzaman, & Musa, 2014; Aznur, Hajar, Wasiuzzaman, & Musa, 2015; Gracia, Bakker, & Grau, 2011; Sultan & Wong, 2010). International students are emotionally attached to universities when they have a positive perception of the quality and the level of teaching and learning. According to Woodall, Hiller, and Resnick (2012), a student's experience is an important tool for measuring

perceived service quality. Thus, universities need to improve the quality of teaching to ensure that students meet the expectations set. Improving the quality of teaching is also important to enhance the employability of graduates (Støren & Aamodt, 2010).

It was also discovered that in one dimension of PTQ, teaching a course, showed that university teachers were able to make a subject interesting. A variety of creative ways can be used to make students enjoy learning. This includes using appropriate technology, and good teaching material that will make them enjoy the lesson (Cox et al., 2004; Howard et al., 2015), and directly foster the emotional brand attachment at the particular university for the long run. Other scholars also recommended using different pedagogical approaches, and information and communications technology (ICT) to enhance the students' learning experience.

A good pedagogical approach will help international students enjoy being taught and learning in class (Croteau, Venkatesh, Beaudry, & Rabah, 2015; Rogers & Finlayson, 2004). All the above are elements of perceived teaching quality as a strong predictor to emotional brand attachment to university. Indeed, it was observed that the sample of students were concerned with their experience in learning, they perceived the importance of quality teaching to enable them to improve their understanding of the subject. For this reason, students expect to get proper advice and support during their studies. Therefore, the service provider must consider factors such as lectures, assessment methods, and academic support, to highlight the quality of teaching provided to make international students more connected with the institutions. Thomson et al., (2005) has conceptualized

that emotional brand attachment is a strong connector between a consumer, a product, and the brand, in marketing literature it is explained as consumer behavior.

Therefore, this finding has been utilized and conceptualized from emotional brand attachment in a different setting, especially in higher education, in a Malaysian context. Of some significance, therefore, was the findings that this relationship was consistent across three types of university categories; research, focus and comprehensive university. With alignment to the findings, the result of this hypothesis confirmed that perceived teaching quality is a key predictor to the emotional brand attachment as well as helps to nurture the students' brand loyalty in higher education institutions. Besides, the findings also fill the gap in the marketing literature by examining the relationship between these two variables, and whether it has a significant relationship and is consistent with the theory of Stimuli –Organism- Response by (Jang & Namkung, 2009; Mehrabian & Rusell, 1974), this results in understanding that perceived teaching quality influences individual state. In this empirical evidence, we see that students foster their attachment towards their current university because of the quality of the teaching and learning.

### **5.3.2.3 Relationship Between Acculturation and Emotional Brand Attachment**

Hypothesis 7 posited a significant association between acculturation and emotional brand attachment. The result supports the hypothesis, as expected. The finding is consistent



with previous studies (Chai et al., 2012; Segev, Ruvio, & Shoham, 2015; Sunhee Seo et al., 2012; Weber et al., 2014; White, 2011; Yu & Shu, 2011).

Contrary to Berry's (1997) work, acculturation produced three dimensions only. They were assimilation, separation, and integration. This finding suggests that the sampled international students adjust to the intercultural situation by integrating their own culture in order to survive and reduce culture shock and psychological stress. In other words, it appears that the international students are not isolated and are able to reconcile the value of both cultures.

The significant relationship between acculturation and emotional brand attachment suggests that the sampled international students have the ability to maintain their home culture and adapt to the dominant or host culture. Their previous stay in Malaysia could have helped them to acculturate and assimilate better when they come again to study in this country. The familiarity of the host culture and the university's learning environment enables them to develop an emotional bond to the university. The finding is parallel with previous works (Eshel & Rosenthal-Sokolov, 2000; Sam & Berry, 2010; Yu & Shu, 2011) which demonstrate the significant influence of acculturation on the lives of sojourns, immigrants, and long term residents in the host countries. Eshel and Rosenthal-Sokolov (2000) revealed that the immigrants they studied realized that they had to change their cultural attitudes towards their new host culture to cope.

The present study also revealed that the international students still maintain a relationship with their ethnic group while at the same time interacting with the host culture group. This acculturation strategy as integration will help international student interact and socialise with local students while they maintain relationships among themselves. This strategy allows international students to have an emotional attachment to the university culture and environment as well as thinking of staying on at this university.

Extensive literature on acculturation indicates a low level of interaction between international and domestic students, as the former prefers to interact with their own ethnic group and perceives a greater distance with the host culture or different ethnic groups (Berry et al., 2006; Weber et al., 2014, 2015; Yu & Shu, 2011).

The same finding was obtained from preliminary research that foreign students were found to socialize and communicate with their own group or ethnicities as compared to the local students. Although they learn about the host culture, language, and participate in local societies, they spend most of their time with their own ethnic groups. Such behaviour reflects a separation strategy, where they resist the new culture in order to maintain their own cultural heritage. However, the means analysis shows separation strategy has a value less than 3, and was classified as not agreeing to the acculturation. Therefore, this strategy does not influence the level of attachment to the university cultural, but assimilation and integration strategy has been fostered at the level of emotional brand attachment to the university.

The finding suggests the need for the university's administrators to minimize intercultural problems as well as culture shocks among international students. If Malaysia wants to increase the number of international students, then programs that help them to adapt to the new environment should be implemented. HEIs should think of offering classes in both English and Malay languages to allow the international students to adjust well.

With alignment to the findings, the result of this hypothesis confirmed that acculturation is a small predictor to emotional brand attachment as well as nurtures the students' brand loyalty in higher education institutions. Also, the findings also fill the research gap in the marketing literature by examining the relationship these two variables, and confirming that the significant relationship is consistent with the theory of Stimuli –Organism-Response by (Jang & Namkung, 2009; Mehrabian & Russell, 1974), this result understands and generates acculturation among international students while influencing their individual state. In this empirical evidence students foster their attachment towards their current university due to coping with the sociocultural adjustments in the host culture.

#### **5.3.2.4 Relationship between Self-Efficacy and Emotional Brand Attachment**

The eighth hypothesis posited a significant link between self-efficacy and emotional brand attachment. As expected, self-efficacy was found to predict emotional brand attachment. Students with high self-efficacy are capable of initiating social contact and

developing new friendships (Gecas, 1989). In this study, it was found that international students with high self-efficacy tended to be emotionally attached and loyal to the university. This finding is consistent with previous studies (Ben-Ami, Hornik, Eden, & Kaplan, 2014; Bilgin & Dincer, 2011; John & Park, 2016; Kulviwat C, Jame, & Neelankavil, 2014). Hackett and Betz (1989) and Pajares (1996) found that self-efficacy among university students was a good predictor of motivation, effort, performance, determination, perseverance, retention and future enrollment in the same program or course.

Self-efficacy and emotional brand attachment were found to be related because the sampled international students had the capabilities and motivation to cope with a new place. They are able to deal with the unfamiliar study environment, language differences, cultural differences, and financial issues. They enjoy the university experience, having done well academically earlier on, thus maintaining their relationship with the institutions. It was reported that when students are satisfied with the services provided by the institution, they will be emotionally attached to the university concerned (Kokkonen, Cheston, Dallos, & Smart, 2013). Even though their self-efficacy is quite high, the university's management also need to take care of their needs by offering counseling on matters important to the country, such as political issues.

### **5.3.3 Emotional Brand Attachment and Brand Loyalty**

To answer the third research question, one hypothesis was formulated and tested using the PLS path modelling (i.e H9). H9 states that emotional brand attachment was affected by student's brand loyalty.

#### **5.3.3.1 Relationships between Emotional Brand Attachment and Brand Loyalty**

Hypothesis nine proposes that emotional brand attachment has a direct effect on brand loyalty. The result supported the hypothesis. Findings reveal that emotional brand attachment is influenced by students' perceived university image, teaching quality, acculturation and self-efficacy regarding their higher education institutions. This result is in line with the findings by (Heesup & Jeong, 2013; Girish Prayag, Hosany, Muskat, & Chiappa, 2015), showing that emotional brand attachment is an antecedent of brand loyalty. However, past research found that emotional brand attachment plays a dominant role on brand loyalty. For example, in findings from Loureiro et al., (2012) and Japutra et al.,(2014), emotional brand attachment was the most influential factor on brand loyalty. Similarly with Jani & Han, (2015), found in Korea that emotional state is a strong determinant of loyalty.

The result supports the notion of psychological bonds, which refer to passionate love (Casidy, 2013). In fact, the sampled international students scored higher on items such as

*“I never get bored of going to this university”, “I find myself always thinking about staying at this university,”* and *“My feelings towards the university can be characterized by passion,”* indicating the element of passion towards their university. The findings also support previous research (Theng So et al., 2013; Thompson et al., 2006; Yim et al., 2008). Moreover, this research discovered that international students with a higher emotional attachment to the university were more likely to recommend the university to others.

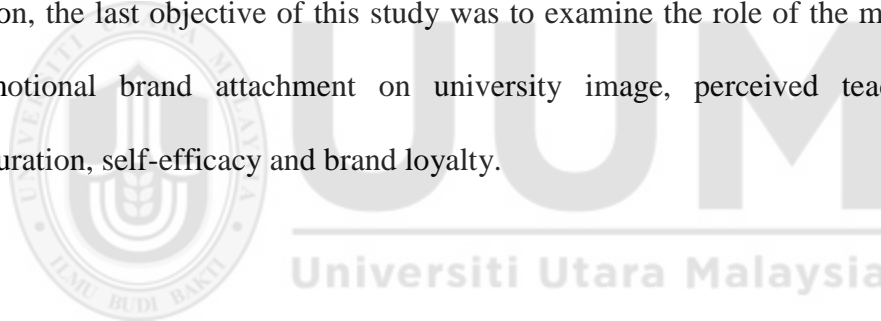
Theoretically, when customers have a strong association with a brand or a product, they tend to be loyal to the brand and will be less susceptible to participate in marketing activities (Naina Mohamed & Borhan, 2014). In the context of this study, as international students become more emotionally attached to the Malaysian public higher education institution, they tend to be more loyal to the institution by recommending the university to family and friends, enroll in a higher degree at the same university and will always say good things about the university.

This is also reflected in the descriptive analysis, it shows that recommendations from family and friends contribute 52.8 percent of the source information regarding the university. Thus, the findings also reveal how crucial a multidimensional approach in explaining the level of brand loyalty. This current study also empirically fills the gaps by considering the attitudinal and behavioural aspect in explaining the student brand loyalty. According to Stimuli-Organism-Response which says an emotional brand attachment reaction will lead to brand loyalty. This finding also indicates that emotional element

needs to be given more attention, especially by university management in implementing students' activities and promotion activities.

#### **5.3.4 The Mediating Effect of Emotional Brand Attachment on a University's Image, Perceived Teaching Quality, Acculturation, Self-Efficacy and Brand Loyalty**

To answer the last research question, four hypotheses were formulated and tested by using the PLS path modeling (i.e H10, H11, H12, and H13). In line with this research question, the last objective of this study was to examine the role of the mediating effect of emotional brand attachment on university image, perceived teaching quality, acculturation, self-efficacy and brand loyalty.



##### **5.3.4.1 Emotional Brand Attachment Mediates the Relationship Between University Image and Brand Loyalty.**

Hypothesis ten proposes the role of the mediating effect of emotional brand attachment on the relationship between university image and brand loyalty. The finding of the current study showed an insignificant affect of university image on brand loyalty through emotional brand attachment only partial mediation was found. As such, the finding is consistent with previous studies (Bianchi & Pike, 2011; Japutra, Ekinici, & Simkin, 2014;

Kandampully & Suhartanto, 2000; Vlachos, Theotokis, Pramataris, & Vrechopoulos, 2010; Vlachos & Vrechopoulos, 2012). Alves and Raposo (2010) found that a positive image of a college or university can attract new students to study at the university, thus it is seen to affect student loyalty and student retention (Brown Robert & Mazzarol, 2009; Casidy, 2013; Theng So et al., 2013).

The result of this study is in line with previous research, that says university image is considered to be a more influential and significant factor for affecting for customer attitude (of international students) and perception when students have had some direct experience with the university (Deem, Mok, & Lucas, 2008; Jiménez-Castillo et al., 2013). This means that the image is important when put in perspective of HEIs setting a clear and good perception so that students may develop an emotional bond or passion toward the university (Moghisi, Mokhtari, & Heidari, 2015) thus leading to student retention and loyalty.

This relationship implies that the more favourable the university image is, the more likely international students are emotionally attached to the place or destination which will result in their loyalty with a specific university (Veasna, Wu, & Huang, 2013; Wilkins & Huisman, 2013). However, Thompson (2006) pointed out that a disparaging image is a warning sign that students' emotions may be affected and lose their sense of loyalty.

According to Thompson et al., (2006), communicating and telling stories of inspiration will lead students to develop affection, passion, and connection with institutions, leading



to brand loyalty. International students must be persuaded that the university can help towards fulfilling their future goals. Thus, emotional brand attachment helps students to develop brand loyalty.

#### **5.3.4.2 Emotional Brand Attachment Mediates The Relationship Between Perceived Teaching Quality and Brand Loyalty.**

The eleventh hypothesis proposes the mediating effect of emotional brand attachment on the relationship between perceived teaching quality and brand loyalty. The result provides empirical support for the hypothesis. As such, the finding is similar to previous findings (Abdullah et al., 2014; Aznur, Hajar et al., 2015; Giuliani, Zambaldi, & Ponchio, 2012; Sultan & Wong, 2010; Vinicius & Bergamo, 2011; Yim et al., 2008; Yu & Dean, 2001; La & Choi, 2012; García de Leaniz & Rodríguez Del Bosque Rodríguez, 2014). Emotional brand attachment partially mediates between perceived teaching quality and brand loyalty. The result implies that students have a sense of belonging to the institution if they have a good learning experience.

The findings indicate that, perceived teaching quality differentiates itself as being the construct with highest explanatory power in relation to emotional brand attachment. Perceived teaching quality shows its importance to public higher education institutions as they attempt to meet their consumers' expectations and foster a sense of emotional attachment at their places of study. The indirect effect between perceived teaching quality and brand loyalty through emotional brand attachment (H11) has also been verified. The

result from current studies, like a previous study by (Perin et al., 2012), acknowledge that student loyalty to higher education institutions is an indirect influence of perceived quality.

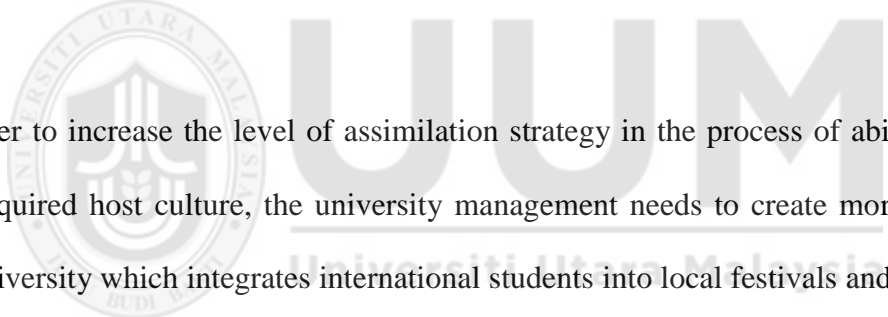
This result is in line with previous literature in which perceived teaching quality is a stable predictor to emotional attachment (Aznur et al., 2015; Heesup & Jeong, 2013; Girish Prayag, Khoo-Lattimore, et al., 2015), as well as to generate student brand loyalty. Based on the result found, the specific hypothesis of H11 suggests the significant mediation effect of emotional brand attachment the links perceived teaching quality and brand loyalty is partially supported.

Higher education institutions, especially public universities, should focus on students' expectation and what is needed to satisfy them. When the students have a positive perception about the quality of teaching offered, they are likely to recommend the institution to others, and come back to it themselves.

#### **5.3.4.3 Emotional brand attachment mediates the relationship between acculturation and brand loyalty.**

Hypothesis 12 proposes the mediating effect of emotional brand attachment on the relationship between acculturation and brand loyalty. As expected, empirical support was observed for the hypothesis. It was found that emotional brand attachment mediated the link between acculturation and brand loyalty, there was a partial mediation. This finding

supports previous results ( Segev et al., 2015; Uslu et al., 2013; White, 2011; Weber et al., 2014). Prior research identified acculturation as an intervening variable to form brand loyalty (Jensen, 2011; Parameswaran & Pisharodi, 2002; Podoshen, 2008; Y. Wu, 2011). However, these findings oppose previous studies that claim acculturation as a intervening variable. Thus, this empirical evidence contributed to the marketing literature with acculturation as a predictor to brand loyalty through the mediating effect of emotional brand attachment. The researcher conducted this empirical study also with the aim of generating more empirical evidence for utilising of the S-O-R theory on the international student population that studies in Malaysia.



In order to increase the level of assimilation strategy in the process of ability to fit into the acquired host culture, the university management needs to create more activities in the university which integrates international students into local festivals and culture. With hope, such activities can teach international students more of Malaysia's norms, values and beliefs. This strategy can trigger their emotional attachment towards the university, as well as lead to loyalty to the university in the future, which can lead to a positive recommendation to their family and friends.

Another possibility as suggested by Segev, Aviv, and Velan (2014) asserted that advertising and promotional tools should integrate cultural experience with a global brand in order to generate an emotional bond between the brand and customer. Furthermore, past studies found that consumer acculturation affects consumer

consumption behavior and decision making (Chai et al., 2012; Perez, 2011; Podoshen, 2006; Sunhee Seo et al., 2012). This finding contributes further to the marketing literature, especially in the higher education industry by integrating acculturation and brand loyalty through the role of emotional brand attachment as a mediator in the theory of Stimulus–Organism-Response. To the best of the researcher’s knowledge, previous studies focus mainly on the acculturation process for Hispanic/Latino and Chinese students that study in Western countries, but very few studies have been carried out in Asian countries like Malaysia. These findings give a tremendous amount of empirical evidence in understanding the reality of the level of acculturation process among international students currently studying in Malaysia. This finding helps university managements to improve services not just related to learning and teaching, but also in the cultural aspect, in order to retain existing international students at their universities. By doing so, the university can face the competition, and increase in the number of international students enrolled by improving the managerial, and cultural aspect among international students.

In higher education, developing strong relationships with students is important because of the intangible and often the interpersonal nature of the service delivery process (Tran, 2012; Williams Jr et al., 2012). Nevertheless, sustaining long term relationships require deep understanding of student expectations that inspires bonding, commitment and loyalty (Chai et al., 2012).

#### **5.3.4.4 Emotional Brand Attachment Mediates The Relationship Between Self-Efficacy and Brand Loyalty.**

The final hypothesis states that the mediation effect of emotional brand attachment on self-efficacy and brand loyalty. Empirical support was found for the hypothesis. It was demonstrated that emotional brand attachment mediated between self-efficacy and brand loyalty, partial mediation was found. The result adds to the literature by providing additional support to previous studies (Ilies, Judge, & Wagner, 2010; Klanecky, Woolman, & Becker, 2015; Qualter et al., 2014; Wright, Perrone, McGovern, Boo, & White, 2014; Yi & Gong, 2008).

Some scholars postulate that self-efficacy is a proxy of perceived behavioural control that highly predicts behavioral intention and actual behavior (Ajzen & Fishbein, 1977; Armitage & Conner, 2001). Bandura (1997) pointed out in his work that students' belief in their efficacy to manage academic problems, academic goals, unforeseen situations, and social relationships, influence them emotionally. Also, based on the social cognitive theory, self-efficacy affects cognition and emotion among people (Pajares, 1996).

This finding demonstrates the importance of adding personality (i.e. self-efficacy) to explain brand loyalty or student retention. As such, the finding is similar to the findings reported earlier, where self-efficacy directly or indirectly affects brand loyalty (Alalwan et al., 2015; Ben-Ami, Dov, & Kaplan, 2014; McKee, Simmers, & Licata, 2006; van de Ridder, Peters, Stokking, de Ru, & Ten Cate, 2014).

#### **5.4 Theoretical Contributions**

From the theoretical perspective, this study expands the literature on brand loyalty and the role of emotional brand attachment as mediating and understanding the complexities of international students' perceptions towards Malaysia public higher education institutions. First, the study theoretically affirms the utility of the S-O-R theory within branding in higher education settings (Giannopoulou & Tsakonas, 2015; Jang & Namkung, 2009; Mehrabian & Russell, 1974). Previous literature found that emotional brand attachment was a mediator in the S-O-R model (Liu & Jang, 2009).

Secondly, the contribution is the inclusion of various factors postulated to affect brand loyalty namely: acculturation, university image, perceived teaching quality, and self-efficacy in Malaysia's public higher education institutions. The research model fills the gap formation of brand loyalty via emotional brand attachment. Besides, this study also confirms the mediating effect of emotional brand attachment on affection, connection, and passion in the S-O-R model theory. Therefore, this study fills the gap by integrating emotional brand attachment as a mediating variable with respect to the relationship between the predictors and brand loyalty. This study also seems to confirm the indirect effect of university image, acculturation and self-efficacy on the brand loyalty. Contrary to that, perceived teaching quality has a significant direct relationship on brand loyalty in the Malaysian HEIs context. Such a relationship has already been addressed and confirmed other settings. In the higher education sector, attempts carried out in Malaysia thus far have found something surprising in testing the model, it seems that

measurements used were most adequate. In this study, the scales applied previously is validated in the Malaysian education context, and combined with the construct examined by previous studies, especially in brand loyalty. This confirms the influence of emotional brand attachment on brand loyalty. Moreover, the study also examines perceived teaching quality, university image, acculturation, and self-efficacy as antecedents of emotional brand attachment. Emotional brand attachment is an important factor in any HEI's branding success.

Thirdly, the findings reveal that acculturation has three dimensions, namely: assimilation, integration, and separation, this indicates that the cultural adoption among international students is manageable. This finding also suggests that the university management should provide counseling, workshops and support groups by creating more cultural activities with the hope of reducing acculturation stress among the international students, as well as to improve problem solving skills.

Fourthly, this study exhibits the importance of using the S-O-R theory in consumer behavior. It explains the significance of stimuli of the service providers in order to predict behavioural response. Additionally, this study is one of the firsts to assess the external validity of the effect on the international student's perception within the context of the actual university experience. Emotional brand attachment is an affective process in which international students make a choice in selecting a place of study, whereas brand loyalty the outcome of that decision-making process. Besides, regarding that highly attached students are more likely to spread positive word of mouth. University students

who are emotionally attached to a university brand are more likely to leave positive online reviews because their sense of attachment initiates such supportive behaviour. This finding suggests that university management and marketers can make use of this knowledge and encourage such behavior by asking highly attached students to serve as university's brand ambassadors. Because highly attached students are more likely to be involved with the university on social media, offering incentives or rewards to "Like" or "Share" the university's pages could be particularly effective with groups of future students. Overall, this study suggests that, as physical environment stimuli (academic and nonacademic) serve to enhance emotional attachment to a university brand and lead to brand loyalty, university managers should allocate sufficient resources to improve the academic and nonacademic sectors of the university environment in order to retain existing students, while at the same time driving the revenue.

Lastly, many brand loyalty studies have either examined the individual dimensions of the construct separately or integrated all dimensions and measured them as a single dimension. In the first instance, scholars either considered only the dimension of behavioural loyalty to measure brand loyalty (Hun & Woods, 2014; Jani & Han, 2014; Martos-Partal & Gonzalez-Benito, 2011) or just attitudinal loyalty (Perin et al., 2012; Rojas-Mendez et al., 2009; Söderlund, 2006; Timbol & Caballero, 2014). In the second instance, some studies measured brand loyalty as a single construct or dimension (Wu, Lin, & Hsu, 2011; Zheng, MK, Cheung, & Liang, 2015). In the present study, the construct of brand loyalty was measured by examining the attitudinal and behavioural



dimensions. This study also empirically contributes to the body of knowledge by affirming the multidimensionality of the brand loyalty scale.

### **5.5 Practical and Managerial Implications**

The study has several practical and managerial implications. As noted by several scholars, retaining and sustaining students (i.e. brand loyalty) is the single and most important driver for long-term survival of a higher education institution (Paswan & Ganesh, 2009; Thomson et al., 2005; Vander Schee, 2010). Thus, knowledge of factors influencing brand loyalty is useful to the university's management. In this context, it was found that university image, perceived teaching quality, acculturation, self-efficacy, and emotional brand attachment play important roles in influencing brand loyalty. The result offers some solutions for the university management to the development of student loyalty.

As it was illustrated that emotional brand attachment significantly mediated the effect of university image, perceived teaching quality, acculturation, and self-efficacy on brand loyalty, the university management should take relevant measures to develop student affection, connection, and passion with the university. In order to achieve this, the university management has to look into developing a good university image and reputation. While, the university ranking and accreditation is a crucial to higher education institutions, more attention is needed in order to increase perceptions among international come study in Malaysia higher education institutions. Revisiting the university's vision

and mission in delivering education services to students may be needed. Teaching quality needs to be continuously improved to meet the international standards and students' expectations towards the university's services. Also, revising the curricula to meet the market demands and forces of internationalization is important to enable students to have the necessary skills, knowledge, and abilities to survive after graduation. A conducive learning environment in the classroom also needs to be fostered so that students and teachers can interact better during course delivery to enable the former to gain from such academic interaction.

As students' loyalty depends on the learning experience inside and outside the classroom, the university management has to create programs to develop long-term relationships with students so that they will come back for future studies (Tang, 2012). For instance, an orientation week is organized so that students are familiar with the university's surrounding, including academic resources, extracurricular activities, and opportunities to socialize with others. The orientation week should also be organized to help international students be familiar with local customs and traditions. By doing so, they will assimilate and integrate better into a new environment, which may help them become loyal to the institution. The university management may also want to implement a loyalty program with international students by organizing an alumni event. This type of program helps to maintain existing contacts with former students, who can be used as a marketing tool to promote the university as a place of study.

These findings are important in developing brand loyalty through the self-efficacy personality of international students. Perceived self-efficacy has been found to play an important role in motivating students to be attached to and loyal to the university (Pajares, 1996; Hackett & Betz, 1989). Furthermore, it is widely recognized that attachment breeds attachment (Hong, Fang, Yang, & Phua, 2013). For an example, when international students believe they have sufficient resources and support from the university, they are likely to be more self-efficacious, resulting in enhanced attachment and subsequent loyalty towards the university.

The finding also suggests a possibility for the university management to collaborate with the Ministry of Higher Education to enhance the quality of authorized agents who handle the promotion and recruitment of international students. In order to promote the university, the agents should market based on how the university will be able to meet the expectations of the international students through the provision of various educational and non-educational facilities.

The finding suggests the importance of branding in education. Branding in higher education is the best strategy that policymakers should adopt to attract international students to choose Malaysia as their study destination. In branding Malaysia's higher education, efforts to integrate non-academic components, such as culture, with academic elements, such as high-quality teaching and learning experience, should be made to differentiate the educational experience in Malaysia from that in other countries.

## 5.6 Limitations and Future Research

This study has made several contributions to the marketing literature, especially to the higher education institutions in Malaysia. Despite the contributions, the findings must be interpreted cautiously. Firstly, the sample was taken from only six public universities in Malaysia. Future research should expand the sample by including all public universities and private universities to reach a meaningful conclusion regarding the links between university image, acculturation, perceived teaching quality, self-efficacy, emotional brand attachment, and brand loyalty.

Secondly, university image, perceived teaching quality, acculturation, self-efficacy, and emotional brand attachment were examined cross-sectionally. Future studies may want to consider a longitudinal approach where changes in behavior can be ascertained. Data can be collected several times to see the influence of the acculturation variable on brand loyalty. Also, a mixed methodology which combines both quantitative and qualitative approaches should be considered to obtain a more holistic understanding of the brand loyalty phenomenon among international students.

Thirdly, university image, perceived teaching quality, acculturation, self-efficacy, and emotional brand attachment accounted for approximately 59.9% of the variance in brand loyalty. Other variables that may affect brand loyalty should be considered in the future,

such as anxiety, perceived risk, and ethnic identity. Future research may also want to consider examining moderator variables, such as country of origin and involvement.

## **5.7 Conclusion**

The purpose of the this study was to shed some light on the relationship between international students' perception of the university's services with a special interest in brand loyalty or student retention. Also, the present study attempted to understand factors that affect emotional brand attachment and brand loyalty in the context of Malaysian public higher education institutions. In particular, it sought to examine the influence of university image, perceived teaching quality, acculturation, and self-efficacy. The study found that these factors significantly explained international students' loyal to the current university. The study also demonstrated that emotional brand attachment was a key predictor of brand loyalty and served as an important mediator that links the antecedents and brand loyalty. The findings suggest that in order to maintain brand loyalty, it is essential for higher education institutions to look into the emotional bonding of international students to the university's brand by implementing measures to improve the university image, acculturation, teaching quality, and self-efficacy of international students.

## REFERENCES

- Aaker., & Keller, K. L. (1990). Consumer Evaluations of Brand Extensions. *Journal of Marketing*, 54(1), 27. <http://doi.org/10.2307/1252171>
- Aaker, D. (1992). The value of brand equity. *Journal of Business Strategy*, 13(4), 27–32. Retrieved from <http://www.emeraldinsight.com/journals.htm?articleid=1706628&show=abstract>
- Aaker, D. A. (1991). The free press equity managing brand. *New York*, 206. Journal Article.
- Aarinen, A. (2012). *University web sites as facilitators of international students*. Aalto University.
- Abdul Manaf, N. H., Ahmad, K., & Ahmad, S. (2013). Critical factors of service quality in a graduate school of Malaysia. *International Journal of Quality and Service Sciences*, 5(4), 415–431.
- Abdullah, F., & Zamhari, U. A. (2013). Managing critical factors affecting service quality for the public Sector. In *Proceedings of 23rd International Business Research Conference* (pp. 1–17). Marriott Hotel, Melbourne, Australia.
- Abdullah, K., Jan, M. T., Hazilah, N., & Manaf, A. (2012). A structural equation modelling approach to validate the dimensions of SERVPERF in airline industry of Malaysia. *International Journal of Engineering and Management Sciences*, 3(2), 134–141.
- Aggarwal Sharma, A., Rao, V. R., & Popli, S. (2013). Measuring consumer-based brand equity for Indian business schools. *Journal of Marketing for Higher Education*, 23(2), 175–203. Journal Article.
- Aghaz, A., Hashemi, A., & Atashgah, M. S. S. (2015). Factors contributing to university image : The postgraduate students ' points of view. *Journal of Marketing for Higher Education*, 25(1), 104–126.
- Aghaza, A., Hashemia, A., & Atashgaha, M. S. S. (2015). Factors contributing to university image: the postgraduate students' points of view. *Journal of Marketing for Higher Education*, 25(1), 104–126.
- Aguirre-Rodriguez, A., Bosnjak, M., & Sirgy, M. J. (2012). Moderators of the self-congruity effect on consumer decision-making: A meta-analysis. *Journal of Business Research*, 65(8), 1179–1188. <http://doi.org/10.1016/j.jbusres.2011.07.031>

- Ahmad, A., Soon, N. K., & Ting, N. P. (2015). Income generation activities among academic staffs at Malaysian public universities. *International Education Studies*, 8(6), 194–203. <http://doi.org/10.5539/ies.v8n6p194>
- Ahmed, S., & Masud, M. M. (2014). Measuring service quality of a higher educational institute towards Student Satisfaction. *American Journal of Education Research*, 2(7), 447–455. <http://doi.org/10.12691/education-2-7-3>
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918. <http://doi.org/10.1037//0033-2909.84.5.888>
- Akter, S., D'Ambra, J., & Ray, P. (2011). An evaluation of PLS based complex models: The roles of power analysis, predictive relevance and GoF index. In *Proceedings of the 17th Americas Conference on Information Systems (AMCIS2011)* (pp. 1–7).
- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., Lal, B., & Williams, M. D. (2015). Consumer adoption of internet banking in Jordan: Examining the role of hedonic motivation, habit, self-efficacy and trust. *Journal of Financial Services Marketing*, 20(2), 145–157. <http://doi.org/10.1057/fsm.2015.5>
- Alarcon, G. M., & Edwards, J. M. (2013). Ability and motivation: Assessing individual factors that contribute to university retention. *Journal of Educational Psychology*, 105(1), 129. Journal Article.
- Ali, F., Zhou, Y., Hussain, K., Kumar, P. N., & Ragavan, N. A. (2016). Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysia public universities. *Quality Assurance in Education*, 24(1), 251–267. <http://doi.org/http://dx.doi.org/10.1108/QAE-11-2012-0046>
- Ali-Choudhury, R., Bennett, R., & Savani, S. (2009). University marketing directors' views on the components of a university brand. *International Review on Public and Nonprofit Marketing*, 6(1), 11–33.
- Allison, P. D. (2003). Missing data techniques for structural equation modeling. *Journal of Abnormal Psychology*, 112(4), 545–557. <http://doi.org/10.1037/0021-843X.112.4.545>
- Alok, K. R., & Srivastava, M. (2013). The antecedents of customer loyalty: An empirical investigation in Life insurance context. *Journal of Competitiveness*, 5(2), 139–163. <http://doi.org/10.7441/joc.2013.02.10>
- Alves, H., & Raposo, M. (2010). The influence of university image on student behaviour. *International Journal of Educational Management*, 24(1), 73–85.

- Alwin, D. . (1991). Research on survey quality. *Sociological Methods & Research*, 20(1), 3–29.
- Alwin, D. F. (1997). Feeling Thermometers Versus 7-Point Scales: Which are Better. *Sociological Methods & Research*, 25(3), 318–340.  
<http://doi.org/10.1177/0049124197025003003>
- Amsler, S., & Bolsmann, C. (2012). University ranking as social exclusion. *British Journal of Sociology of Education*, 33(2), 283–301.  
<http://doi.org/10.1080/01425692.2011.649835>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <http://doi.org/10.1037/0033-2909.103.3.411>
- Andersson, L. M., & Bateman, T. S. (1997). Cynicism in the workplace: Some causes and effects. *Journal of Organizational Behavior*, 18(5), 449–469.  
[http://doi.org/10.1002/\(SICI\)1099-1379\(199709\)18:5<449::AID-JOB808>3.0.CO;2-O](http://doi.org/10.1002/(SICI)1099-1379(199709)18:5<449::AID-JOB808>3.0.CO;2-O)
- Andrew, F., & SB Withey. (1976). *Social indicators of well being*. New York and London: Plenum.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *The British Journal of Social Psychology / the British Psychological Society*, 40(4), 471–99. Retrieved from  
<http://www.ncbi.nlm.nih.gov/pubmed/11795063>
- Arora, R. (1982). Validation of an S-O-R model for situation, enduring, response components of involvement. *American Marketing Association*, 19(4), 505–516.
- Arpan, L. M., Raney, A. A., & Zivnuska, S. (2003). A cognitive approach to understanding university image. *Corporate Communications: An International Journal*, 8(2), 97–113. Journal Article.
- Ashby, A., Richardson, J. T. E., & Woodley, A. (2011). National student feedback surveys in distance education : An investigation at the UK Open University. *Open Learning: The Journal of Open Distance and E-Learning*, 26(1), 5–25.  
<http://doi.org/10.1080/02680513.2011.538560>
- Ashraf, M. G. (2014). Include the position of islamic banking, service, quality, satisfaction, trust and loyalty in the context of integrated model for islamic finance. *European Journal of Business and Management*, 6(17), 156–169.



- Askegaard, S., & Özçaglar-Toulouse, N. (2011). Still crossing borders: Migration, consumption, and markets. *Consumption Markets & Culture*, 14(3), 217–222. <http://doi.org/10.1080/10253866.2011.574823>
- Aspara, J., Aula, H.-M., Tienari, J., & Tikkanen, H. (2014). Struggles in organizational attempts to adopt new branding logics: The case of a marketizing university. *Consumption Markets & Culture*, 17(6), 522–552. <http://doi.org/10.1080/10253866.2013.876347>
- Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions : The case of university education. *European Journal of Marketing*, 31(7), 528–540.
- Atrostic, B. K., Bates, N., Burt, G., & Silberstein, A. (2001). Nonresponse in US . government household surveys : Consistent measures, recent trends , and new insights. *Journal of Official Statistics*, 17(2), 209–226.
- Aula, H.-M., Tienari, J., & Wæraas, A. (2015). The University branding game. *International Studies of Management & Organization*, 45(2), 164–179. <http://doi.org/10.1080/00208825.2015.1006015>
- Aurier, P., & Lanauze, G. S. De. (2012). Impacts of perceived brand relationship orientation on attitudinal loyalty: An application to strong brands in the packaged goods sector. *European Journal of Marketing*, 46(11/12), 1602–1627. <http://doi.org/10.1108/03090561211260004>
- Aydin, S., & Ozer, G. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *European Journal of Marketing*, 39(7/8), 910–925.
- Aznur, H. A., Wasiuzzaman, S., & Musa, R. (2014). The effects of university quality on emotional attachment: A case from a private higher education institution. *Procedia - Social and Behavioral Sciences*, 130, 282–292. <http://doi.org/10.1016/j.sbspro.2014.04.033>
- Aznur, H. A., Wasiuzzaman, S., & Musa, R. (2015). University quality and emotional attachment of undergraduate students in a private higher education in Malaysia: The mediating role of total experience. *International Journal of Social Economics*, 42(7), 644–665.
- Babbie, E. (2007). *The practice of social research* (Internatio). Thomson Learning.
- Bagozzi, R. P. (1986). Attitude formation under the theory of reasoned action and a purposeful behaviour reformulation. *British Journal of Social Psychology*, 25(2), 95–107.

- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184–206. Journal Article.
- Baharun, R., Awang, Z., & Padlee, S. F. (2011). International students choice criteria for selection of higher learning in Malaysian private universities. *African Journal of Business Management*, 5(12), 4704–4714. Journal Article.
- Bajpai, S., & Bajpai, R. (2014). Goodness of measurement: reliability and validity. *International Journal of Medical Science and Public Health*, 3(1), 114–115. Journal Article.
- Baldwin, G. (1994). The student as customer: the discourse of quality in higher education. *Journal of Tertiary Education Administration*, 16(1), 125–133. Journal Article.
- Baloglu, S. (2002). Dimensions of customer loyalty: Separating friends from well wishers. *The Cornell Hotel and Restaurant Administration Quarterly*, 43(47), 47–59. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0010880402800088>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191. Journal Article.
- Bandura, A. (1986). *Social foundations of thought and action. The health psychology reader*. Journal Article.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148. Journal Article.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Book, Macmillan.
- Bandyopadhyay, S., & Martell, M. (2007). Does attitudinal loyalty, influence behavioral loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services*, 14(1), 35–44. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0969698906000208>
- Barich, H., & Kotler, P. (1991). A framework for marketing image management. *Sloan Management Review*, 32(2), 94. Journal Article.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <http://doi.org/10.1177/014920639101700108>

- Baron, R. M., & Kenny, A. D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <http://doi.org/10.1016/j.addbeh.2015.07.009>
- Batra, R., Ramaswamy, V., Alden, D., Steenkamp, J., & Ramachander, S. (2000). Effects of brand local and nonlocal origin on consumer attitudes in developing countries. *Journal of Consumer Psychology*, 9(2), 83–95. [http://doi.org/10.1207/S15327663JCP0902\\_3](http://doi.org/10.1207/S15327663JCP0902_3)
- Baxter, K., & Glendinning, C. (2013). The role of emotions in the process of making choices about welfare Services: The experiences of disabled people in England. *Social Policy and Society*, 12(3), 439–450. <http://doi.org/10.1017/S1474746413000055>
- Bay, D., & Daniel, H. (2008). The student is not the customer an alternative perspective. *Journal of Marketing for Higher Education*, 11(1), 1–19. Journal Article.
- Bechara, A. (2004). The role of emotion in decision-making: Evidence from neurological patients with orbitofrontal damage. *Brain and Cognition*, 55(1), 30–40. <http://doi.org/10.1016/j.bandc.2003.04.001>
- Becker, J., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM : Guidelines for using reflective-formative type models. *Long Range Planning*, 45(5–6), 359–394. <http://doi.org/10.1016/j.lrp.2012.10.001>
- Bekhet, H. A., Alak, B. a. Al, & Refae, G. A. El. (2014). Developing student satisfaction, perception model for public and private universities in Malaysia. *International Journal of Economics and Business Research*, 7(4), 404. <http://doi.org/10.1504/IJEBR.2014.062896>
- Belanger, C., Mount, J., & Wilson, M. (2002). Institutional image and retention. *Tertiary Education and Management*, 8(3), 217–230. Journal Article.
- Belanger, Syed, S., & Mount, J. (2007). The make up of institutional branding: Who, what, how? *Tertiary Education and Management*, 13(3), 169–185. Journal Article.
- Belk, R. (1988). *Possessions and Self*. Book, Wiley Online Library.
- Ben-Ami, M., Dov, J. H., & Kaplan, E. O. (2014). Boosting consumers' self-efficacy by repositioning the self. *European Journal of Marketing*, 48(11/12), 1914–1938.
- Ben-Ami, M., Hornik, J., Eden, D., & Kaplan, O. (2014). Boosting consumers' self-efficacy by repositioning the self. *European Journal of Marketing*, 48(11/12), 1914–1938. <http://doi.org/10.1108/EJM-09-2010-0502>

- Bennett, R., & Ali-Choudhury, R. (2009). Prospective students' perceptions of university brands: An empirical study. *Journal of Marketing for Higher Education*, 19(1), 85–107. Journal Article.
- Bennett, R., & Kane, S. (2014). Students' interpretations of the meanings of questionnaire items in the National Student Survey. *Quality in Higher Education*, 20(2), 129–164. <http://doi.org/10.1080/13538322.2014.924786>
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In *Acculturation: Theory, models and some new findings*. (In. A Padi, pp. 9–25). Journal Article, Colorado: Westview Press.
- Berry, J. W. (1997). Lead Article - immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5–34. <http://doi.org/10.1080/026999497378467>
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 29(6), 697–712. Journal Article. <http://doi.org/10.1016/j.ijintrel.2005.07.013>
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 491–511. Journal Article.
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant Youth: Acculturation, identity, and adaptation. *Applied Psychology: An International Review*, 55(3), 303–332. <http://doi.org/10.1111/j.1464-0597.2006.00256.x>
- Berry, J. W., Trimble, J. E., & Olmedo, E. L. (1986). *Assessment of acculturation*. Journal Article, Sage Publications, Inc.
- Beuningen, J. van, de Ruyter, K., Wetzels, M., & Streukens, S. (2009). Customer self-efficacy in technology based self-service assessing between and within person differences. *Journal of Service Research*, 11(4), 407–428. Journal Article.
- Bianchi, C., Drennan, J., & Proud, B. (2014). Antecedents of consumer brand loyalty in the Australian wine industry. *Journal of Wine Research*, 25(2), 91–104. Journal Article.
- Bianchi, C., & Pike, S. (2011). Antecedents of destination brand loyalty for a long-haul market: Australia's destination loyalty among Chilean travelers. *Journal of Travel & Tourism Marketing*, 28(7), 736–750. <http://doi.org/10.1080/10548408.2011.611742>
- Biemer, P. ., & Lyberg, L. (2003). *Introduction to survey quality* (1st ed.). New Jersey: John Wiley & Sons Publication.

- Bigné, J. E., Mattila, A. S., & Andreu, L. (2008). The impact of experiential consumption cognitions and emotions on behavioral intentions. *Journal of Services Marketing*, 22(4), 303–315. <http://doi.org/10.1108/08876040810881704>
- Bilgin, M., & Dincer, S. (2011). Relations among proposed predictors and outcomes of social self-efficacy in Turkish late adolescents. *Cukurova University Faculty of Education Journal*, 40(1), 1–18. Journal Article.
- Bitner, A. H. (1994). Encounter satisfaction versus overall satisfaction versus quality. *New Directions in Theory and Practice*, (34), 72–94.
- Bjertnaes, O. a, Garratt, A., & Botten, G. (2008). Nonresponse bias and cost-effectiveness in a Norwegian survey of family physicians. *Evaluation & the Health Professions*, 31(1), 65–80. <http://doi.org/10.1177/0163278707311874>
- Blanco Ramírez, G. (2016). Many choices, one destination: Multimodal university brand construction in an urban public transportation system. *International Journal of Qualitative Studies in Education*, 29(2), 186–204. <http://doi.org/10.1080/09518398.2015.1023233>
- Bollen, K. a, & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology*, 20, 115–140. <http://doi.org/10.2307/271084>
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, 30(1), 7–27. Journal Article.
- Boulding, W., & Kirmani, A. (1993). A Consumer-side experimental examination of signaling theory: Do consumers perceive warranties as signals of quality? *Journal of Consumer Research*, 20(1), 111–123. <http://doi.org/10.1086/209337>
- Bowlby, J. (1982). Attachment and loss:Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664. Journal Article.
- Brandy, M. ., & Joseph, J. C. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *American Marketing Association*, 65(July), 34–49. Retrieved from <http://www.jstor.org/stable/3203465> \n[http://www.iei.liu.se/program/ekprog/civilek\\_internt/ar\\_3/722g60/gruppernas\\_artiklar\\_och\\_presentationer/1.149935/Artikeltillseminarie2gruppB2.pdf](http://www.iei.liu.se/program/ekprog/civilek_internt/ar_3/722g60/gruppernas_artiklar_och_presentationer/1.149935/Artikeltillseminarie2gruppB2.pdf)

- Brochado, A. (2009). Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in Education*, 17(2), 174–190. <http://doi.org/10.1108/09684880910951381>
- Brown, R. . (1994). Efficacy of the indirect approach for estimating structural equation models with missing data: A comparison of five methods. *Structural Equation Modeling*, 1(4), 287–316.
- Brown Robert, M., & Mazzarol, T. W. (2009). The importance of institutional image to student satisfaction and loyalty within higher education. *Higher Education*, 58(1), 81–95. Journal Article.
- Bryan, S. K. K., & Omizo, M. M. (2005). Asian and European American cultural values, collective self-esteem, acculturative stress, cognitive flexibility, and general self-efficacy among Asian American college students. *Journal of Counseling Psychology*, 52(3), 412. Journal Article.
- Bryman, A., & Bell, E. (2011). *Business Research Methods* (3rd edition). Oxford University Press.
- Burton-jones, A. (2009). Minimizing method bias through programmatic research. *Mis Quarterly*, 33(3), 1–7.
- Bush, A., & Hair. (1985). An assessment of the mall intercept as a data collection method. *American Marketing Association*, 22(2), 158–167.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, application, and programing* (2nd edition). New York: Routledge Academy.
- Cabassa, L. J. (2003). Measuring acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences*, 25(2), 127–146. Journal Article.
- Calabuig Moreno, F., Prado-Gascó, V., Crespo Hervás, J., Núñez-Pomar, J., & Añó Sanz, V. (2015). Spectator emotions: Effects on quality, satisfaction, value, and future intentions. *Journal of Business Research*, 68(7), 1445–1449. <http://doi.org/10.1016/j.jbusres.2015.01.031>
- Callister, W., Blevins, K., Kier, R., & Pettway, I. (2015). Branding in education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 58–65.
- Calvo-Porrá, C., Lévy-Mangin, J.-P., & Novo-Corti, I. (2013). Perceived quality in higher education: An empirical study. *Marketing Intelligence & Planning*, 31(6), 601–619. <http://doi.org/10.1108/MIP-11-2012-0136>

- Canning, J. (2015). A new measurement and ranking system for the UK National Student Survey. *Perspectives: Policy and Practice in Higher Education*, 19(2), 56–65. <http://doi.org/10.1080/13603108.2015.1021401>
- Care, E. (2009). Issues in identifying student perceptions of teaching quality. *Bulletin of Education and Research*, 31 (1), 27–45. Retrieved from [http://pu.edu.pk/images/journal/ier/bulletin-pdf/2\\_Student perceptions revised\\_Esther Care\\_Vol30\\_o9.pdf](http://pu.edu.pk/images/journal/ier/bulletin-pdf/2_Student%20perceptions%20revised_Esther%20Care_Vol30_o9.pdf)
- Carnevale, J. J., Inbar, Y., & Lerner, J. S. (2011). Individual differences in need for cognition and decision-making competence among leaders. *Personality and Individual Differences*, 51(3), 274–278. <http://doi.org/10.1016/j.paid.2010.07.002>
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79–89. Journal Article.
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7), 811–828. <http://doi.org/10.1108/03090560210430818>
- Carvalho, S. W., & de Oliveira Mota, M. (2010). The role of trust in creating value and student loyalty in relational exchanges between higher education institutions and their students. *Journal of Marketing for Higher Education*, 20 (1), 145–165. Journal Article.
- Casidy, R. (2013). The role of brand orientation in the higher education sector: A student-perceived paradigm. *Asia Pacific Journal of Marketing and Logistics*, 25(5), 803–820. Journal Article.
- Casidy, R., & Walter Wymer. (2015). The impact of brand strength on satisfaction, loyalty and WOM: An empirical examination in the higher education sector. *Journal of Brand Management*, 22(2), 117–135.
- Cedwyn, F., & Meraj, K. R. M. (2013). Sector, understanding student satisfaction and loyalty in the UAE. *International Journal of Educational Management*, 27(6), 613–630.
- Cenfetelli, R. T., & Bassellier, G. (2009). Interpretation of formative measurement in information systems research. *MIS Quarterly*, 33(4), 689–707. <http://doi.org/10.1057/ejis.2011.7>
- Chai, J. C. Y., Deans, K. R., & Biggemann, S. (2012). The influence of acculturation on consumer relational bonding in banking relationships. *Journal of Strategic Marketing*, 20(5), 393–410. Journal Article.

- Chang, H. H., Jeng, D. J. F., & Hamid, M. R. A. (2013). Conceptualising consumers' word-of-mouth behaviour intention: Evidence from a university education services in Malaysia. *Service Business*, 7(1), 17–35. <http://doi.org/10.1007/s11628-012-0142-1>
- Chao, C. W. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873–4882. <http://doi.org/10.5897/AJBM10.1347>
- Chapleo, C. (2009). External perceptions of successful university brands. *International Journal of Educational Advancement*, 8, 126–135. Journal Article.
- Chapleo, C. (2015). Brands in higher education. *International Studies of Management & Organization*, 45(2), 150–163. <http://doi.org/10.1080/00208825.2015.1006014>
- Chapleo, C., Duran, M. V. C., & Castillo Díaz, A. (2011). Do UK universities communicate their brands effectively through their websites? *Journal of Marketing for Higher Education*, 21(1), 25–46. <http://doi.org/10.1080/08841241.2011.569589>
- Chapleo, C., Molesworth, M., R., S., & Nixon, E. (2010). Branding a university: Adding real value or smoke and mirrors. *The Marketisation of Higher Education and the Student as Consumer*, 101–114. Journal Article.
- Charlotte, S., & Hovmand, B. S. (2013). Preparing business students for the global workplace through study abroad: A case study of Danish Institute for study abroad. *Journal of International Education in Business*, 6(2), 107–121.
- Chaudhuri, A., & Holbrook, M. (2001). The chain of effects from brand trust and brand affects to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81–93. Retrieved from <http://journals.ama.org/doi/abs/10.1509/jmkg.65.2.81.18255>
- Chavda, H., Haley, M., & Dunn, C. (2006). Adolescents' influence on family decision-making. *Young Consumer*, 6(3), 68–78.
- Chen, C.-F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, 31(1), 29–35. <http://doi.org/10.1016/j.tourman.2009.02.008>
- Chen, H., Mallinckrodt, B., & Mobley, M. (2002). Attachment patterns of East Asian international students and sources of perceived social support as moderators of the impact of US racism and cultural distress. *Asian Journal of Counselling*, 9(1 & 2), 27–48.



- Chen, P. A., Heatherton, T. F., & Freeman, J. B. (2015). Brain-as predictor approach: An alternative way to explore the acculturation process. In D. L. JE Warnick (Ed.), *International and culture Psychology* (pp. 143–170). New York: Springer Science + Business Media. <http://doi.org/10.1007/978-1-4939-2260-4>
- Chen, T. L., & Ling, S. H. (2012). The rationale of international students in choosing the Private Higher Education Institution in Malaysia. In *ICIMTR 2012 - 2012 International Conference on Innovation, Management and Technology Research* (pp. 383–388). <http://doi.org/10.1109/ICIMTR.2012.6236423>
- Chen, Y.-S., & Chang, C.-H. (2013). Towards green trust: The influences of green perceived quality, green perceived risk, and green satisfaction. *Management Decision*, *51*(1), 63–82. <http://doi.org/10.1108/00251741311291319>
- Chen Wen, J., & Chen, M.-L. (2014). Factors Affecting the Hotel's Service Quality: Relationship Marketing and Corporate Image. *Journal of Hospitality Marketing & Management*, *23* (1), 77–96. <http://doi.org/10.1080/19368623.2013.766581>
- Chernick, M. R. (2008). *Bootstrap methods: A guide for practitioners and researchers*. Wiley series in probability and statistics (2nd edition). Newtown, PA: United BioSources Corporation. <http://doi.org/9780471756217>
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336. <http://doi.org/10.1016/j.aap.2008.12.010>
- Chin, W. W. (2010). How to write up and report pls analyses. In *Handbook of Partial Least Squares* (p. 671). Springer-Verlag Berlin Heidelberg. <http://doi.org/10.1007/978-3-540-32827-8>
- Chinomona, R., & Sandada, M. (2013). Service quality level as the determinant of consumer emotional loyalty and fantasy in South Africa's pick & pay chain stores. *Mediterranean Journal of Social Sciences*, *4*(3), 579–586. <http://doi.org/10.5901/mjss.2013.v4n3p579>
- Chong, Y. S., & Ahmed, P. (2014). A phenomenology of university service quality experience: Uncovering the essence of meaning among business undergraduates in Malaysia. *International Journal of Educational Management*, *28*(1), 36–52. Journal Article.
- Chopik, W. J. (2015). Relational attachment and ethical workplace decisions: The mediating role of emotional burnout. *Personality and Individual Differences*, *75*, 160–164. <http://doi.org/10.1016/j.paid.2014.11.007>

- Chua, B., Lee, S., Huffman, L., & Choi, H. (2015). The role of physical environment in leisure service consumption : Evidence from a ski resort setting. *International Journal of Hospitality & Tourism Administration*, 16(4), 375–407. <http://doi.org/10.1080/15256480.2015.1090258>
- Chun, R. (2005). Corporate reputation: Meaning and measurement. *International Journal of Management Reviews*, 7(2), 91–109. Journal Article.
- Cleveland, M., Laroche, M., & Takahashi, I. (2015). The intersection of global consumer culture and national identity and the Effect on Japanese consumer behavior. *Journal of International Consumer Marketing*, 27(5), 364–387. <http://doi.org/10.1080/08961530.2015.1014281>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). Hillsdale, Lawrence Erlbaum Associates, NJ.
- Cox, M., Webb, M., Beauchamp, T., & Rhodes, V. (2004). A review of the research literature relating to ICT and attainment. *A Review of the Research Literature Relating to ICT and Attainment*, 1, 1–58.
- Cresswell, J. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative Research* (Fourth). Book, Pearson.
- Creswell, J. W. (2003). *Research design qualitative quantitative and mixed methods approaches*. (C. Deborah Laughton, Ed.) *Sage Publication* (2nd editio). California, London, New Delhi. <http://doi.org/10.3109/08941939.2012.723954>
- Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(2), 230–240. Journal Article.
- Cronbach Lee, J., & Meehl, P. . (1955). Construct validity in psychological test. *Psychological Bulletin*, 52(4), 281–302.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *The Journal of Marketing*, 55–68. Journal Article.
- Croteau, A.-M., Venkatesh, V., Beaudry, A., & Rabah, J. (2015). The role of information and communication technologies in university students' learning experience: The instructors' perspective. In *2015 48th Hawaii International Conference on System Sciences* (pp. 111–120). <http://doi.org/10.1109/HICSS.2015.23>

- Das, G. (2015). Linkages between self-congruity , brand familiarity , perceived quality and purchase intention : A study of fashion retail brands. *Journal of Global Fashion Marketing: Bridging Fashion and Marketing*, 6(3), 180–193. <http://doi.org/10.1080/20932685.2015.1032316>
- Daud, S., & Sapuan, N. M. (2012). Expectation-perception gap in private higher education institutions in Malaysia. *International Journal Management in Education*, 6(1), 22–36. Journal Article.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research*, 51(1). Journal Article.
- Dawes, J., Meyer-Waarden, L., & Driesener, C. (2015). Has brand loyalty declined? A longitudinal analysis of repeat purchase behavior in the UK and the USA. *Journal of Business Research*, 68(2), 425–432. <http://doi.org/10.1016/j.jbusres.2014.06.006>
- de Macedo Bergamo, F. V., Giuliani, A. C., Zambaldi, F., & Ponchio, M. C. (2012). Student loyalty based on relationship quality: An analysis on higher. *Brazilian Business Review*, 9(2), 26–46. Journal Article.
- Deem, R., Mok, K. H., & Lucas, L. (2008). Transforming higher education in whose image? Exploring the concept of the “world-class” university in Europe and Asia. *Higher Education Policy*, 21(1), 83–97. <http://doi.org/10.1057/palgrave.hep.8300179>
- Dehghan, A., Dugger, J., Dobrzykowski, D., & Balazs, A. (2014). The antecedents of student loyalty in online programs. *International Journal of Educational Management*, 28(1), 15–35. Journal Article.
- Dennis, C., S, P., E, A., & M, B. (2016). The role of brand attachment strength in higher education. *Journal of Business Research*, 1–9. <http://doi.org/10.1016/j.jbusres.2016.01.020>
- DeVillis, R. F. (2012). *Scale development: Theory and application*. (L. B. and D. J.Rog, Ed.) (3rd ed.). Sage Publication Inc.
- Dholakia, R. R., & Acciardo, L. a. (2014). Branding a state university: Doing it right. *Journal of Marketing for Higher Education*, 24(1), 144–163. <http://doi.org/10.1080/08841241.2014.916775>

- Diamantopoulos, A., & Siguaw, J. a. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263–282. <http://doi.org/10.1111/j.1467-8551.2006.00500.x>
- Dichter, E. (2001). Commentary what's in an image. *Journal of Consumer Marketing*, 2(1), 75–81.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99–113. Journal Article.
- Dijkstra, T. K. (2010). Latent variables and indices: Herman Wold's basic design and partial least squares. In W. W. Chin & Bauer (Eds.), *Handbook of Partial Least Squares: Concepts, methods and application* (pp. 23–46). New York: Springer. <http://doi.org/10.1007/978-3-642-16345-6>.
- Direction, S. (2015). Dimensions of corporate branding. *Strategic Direction*, 31(4), 28–30. <http://doi.org/10.1108/SD-02-2015-0032>.
- Dohrenwend, B. P., & J. Smith, R. (1962). Towards a theory of acculturation. *Southwestern Journal of Anthropology*, 18(1), 30–39.
- Dotchin, J. A., & Oakland, J. S. (1994). Total quality management in services part 3 : Distinguishing perceptions of service quality. *International Journal of Quality & Reliability Management*, 11(4), 6–28.
- Douglas, J., Douglas, A., & Barnes, B. (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), 251–267. <http://doi.org/10.1108/09684880610678568>
- Douglas, Mills, J. E., & Phelan, K. V. (2010). Smooth sailing?: Passengers' assessment of cruise brand equity. *Journal of Travel & Tourism Marketing*, 27(7), 649–675. Journal Article.
- Doyle, P. (1989). Building successful brands: The strategic options. *Journal of Marketing Management*, 5(1), 77–95. <http://doi.org/10.1108/EUM0000000002572>
- Drori, G., Delmestri, G., & Oberg, A. (2013). Branding the university: Relational strategy of identity construction in a competitive field. *Trust in Higher Education Institutions*, 134–147.
- Duarte, P. O., Alves, H. B., & Raposo, M. B. (2010). Understanding university image: A structural equation model approach. *International Review on Public and Nonprofit Marketing*, 7(1), 21–36. <http://doi.org/10.1007/s12208-009-0042-9>

- Durkin, M., McKenna, S., & Cummins, D. (2012). Emotional connections in higher education marketing. *International Journal of Educational Management*, 26(2), 153–161. <http://doi.org/10.1108/09513541211201960>
- Edvardsson, B. (2005). Guru's review service quality : Beyond cognitive assessment. *Managing Service Quality*, 15(2), 127–131. <http://doi.org/10.1108/09604520510585316>
- Ekinci, Y. (2015). *Designing research questionnaires for business and management Students*. (S. and N. Lee, Ed.) (1st ed.). London: Sage Publication Ltd.
- Enders, K. C., & Deborah L. Bandalos. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(3), 470–489. <http://doi.org/10.1207/S15328007SEM0803>
- Enrique Bigné, J., Mattila, A. S., & Andreu, L. (2008). The impact of experiential consumption cognitions and emotions on behavioral intentions. *Journal of Services Marketing*, 22(4), 303–315. <http://doi.org/10.1108/08876040810881704>
- Eshel, Y., & Rosenthal-Sokolov, M. (2000). Acculturation attitudes and sociocultural adjustment of sojourner youth in Israel. *The Journal of Social Psychology*, 140(6), 677–691. <http://doi.org/10.1080/00224540009600509>
- Eurico, S., Oom do Valle, P., & Albino Silva, J. (2013). Satisfaction in tourism-related higher education: The graduates' perspective. *International Journal of Academic Research*, 5(4B), 35–49. Journal Article.
- Fairchild, A. J., & McQuillin, S. D. (2010). Evaluating mediation and moderation effects in school psychology: A presentation of methods and a review of current practice. *Journal of School Psychology*, 48(1), 53–84. <http://doi.org/10.1016/j.jsp.2009.09.001>
- Fass, M. E., & Tubman, J. G. (2002). The influence of parental and peer attachment on college students' academic achievement. *Psychology in the Schools*, 39(5), 561–573. Journal Article.
- Fedorikhin, A., Park, C. W., & Thomson, M. (2008). Beyond fit and attitude: The effect of emotional attachment on consumer responses to brand extensions. *Journal of Consumer Psychology*, 18(4), 281–291. <http://doi.org/10.1016/j.jcps.2008.09.006>
- Firdaus Abdullah. (2006). Measuring service quality in higher education: HEDPERF versus SERVPERF. *Marketing Intelligence & Planning*, 24(1), 31–47. <http://doi.org/10.1108/02634500610641543>

- Fornell, C., & Cha, J. (1984). Partial least squares. *Advanced Methods of Marketing Research*, 407, 52–78.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobserved variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343–353.  
<http://doi.org/10.1086/209515>
- Fowler, F. J. (2014). *Survey research methods* (5th ed.). California, London, New Delhi: Sage Publications Ltd.
- Fox, R. S., Merz, E. L., Solorzano, M. T., & Roesch, S. C. (2013). Further examining Berry's model the applicability of latent profile analysis to acculturation. *Measurement and Evaluation in Counseling and Development*, 46(4), 270–288. Journal Article.
- Fraenkel, J., & Wallen, N. (1993). *How to design and evaluate research in education*. New York: McGraw-Hill Education.
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4(2), 132. Journal Article.
- Frank, B., Herbas Torrico, B., Enkawa, T., & Schvaneveldt, S. J. (2014). Affect versus cognition in the chain from perceived quality to customer Loyalty: The roles of product beliefs and experience. *Journal of Retailing*, 90(4), 567–585.  
<http://doi.org/10.1016/j.jretai.2014.08.001>
- Freling, T. H., Crosno, J. L., & Henard, D. H. (2011). Brand personality appeal: Conceptualization and empirical validation. *Journal of the Academy of Marketing Science*, 39, 392–406. <http://doi.org/10.1007/s11747-010-0208-3>
- Fujan, L., Griffin, M., & Babin, B. J. (2009). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *Journal of Business Research*, 62(10), 980–986.  
<http://doi.org/10.1016/j.jbusres.2008.10.015>

- Fullerton, G., & Fullerton, G. (2009). When does commitment lead to loyalty? *Journal of Service Research*, 5(4), 333–344. <http://doi.org/10.1177/1094670503251134>
- Gabriel, R. M., Leichtling, G. J., Bolan, M., & Becker, L. G. (2013). Using community surveys to inform the planning and implementation of environmental change strategies: Participatory research in 12 Washington communities. *American Journal of Community Psychology*, 51(1), 243–253. <http://doi.org/10.1007/s10464-012-9543-5>
- Garbarino, E., & Johnson, M. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *The Journal of Marketing*, 63(2), 70–87. Retrieved from <http://www.jstor.org/stable/1251946>
- García de Leaniz, P. M., & Rodríguez Del Bosque Rodríguez, I. (2014). Exploring the antecedents of hotel customer loyalty: A social identity perspective. *Journal of Hospitality Marketing & Management*, 24(1), 1–23. <http://doi.org/10.1080/19368623.2014.891961>
- Gardner, D. G., & Pierce, J. L. (1998). Self-esteem and self-efficacy within the organizational context an empirical examination. *Group & Organization Management*, 23(1), 48–70. Journal Article.
- Garvin, D. a. (1987). Competing on the 8 dimensions of quality. *Harvard Business Review*, 65(6), 101–109. Retrieved from file:///C:/Users/Yunes/Downloads/art 4 Competing on the Eight Dimensions of Quality.pdf
- Gbadamosi, A. (2012). Acculturation: An exploratory study of clothing consumption among black African women in London (UK). *Journal of Fashion Marketing and Management*, 16(1), 5–20.
- Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology*, 15, 291–316. [http://doi.org/10.1016/0021-9924\(72\)90022-6](http://doi.org/10.1016/0021-9924(72)90022-6)
- Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(1), 7. <http://doi.org/10.1.1.25.781>
- Geisser, S. (1975). The Predictive Sample Reuse Method with Applications. *Journal of the American Statistical Association*, 70(350), 320–328.
- Georgia, I. A., Georgios, L., & Ko, K. M. (2015). The impact of brand authenticity on brand attachment in the food industry. *British Food Journal*, 117(7–21).

- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25(2), 186–192.
- Giannopoulou, A., & Tsakonas, G. (2015). Affective relationships between users and libraries in times of economic stress. *Library Management*, 36(3), 248–257. <http://doi.org/10.1108/LM-10-2014-0119>
- Gibson, J. W., Gibson, J. W., Duncan, W. J., & Humphreys, J. (2013). The impact of quality and emotions in customer satisfaction. *The Journal of Applied Management and Entrepreneurship*, 18 (1), 1077–1158.
- Giled Chen, Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62–83. Journal Article.
- Ginns, P., Prosser, M., & Barrie, S. (2007). Students’ perceptions of teaching quality in higher education: the perspective of currently enrolled students. *Studies in Higher Education*, 32(5), 603–615. <http://doi.org/10.1080/03075070701573773>
- Giovanis, A. N., Zondiros, D., & Tomaras, P. (2014). The antecedents of customer loyalty for broadband services: The role of service quality, emotional satisfaction and corporate image. *Procedia - Social and Behavioral Sciences*, 148, 236–244. <http://doi.org/10.1016/j.sbspro.2014.07.039>
- Gist. (1989). The influence of training method on self-efficacy and idea generation among managers. *Personnel Psychology*, 42, 787–805. <http://doi.org/10.1111/j.1744-6570.1989.tb00675.x>
- Gist, M. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review*, 12(3), 472–485. <http://doi.org/10.5465/AMR.1987.4306562>
- Giuliani, A. C., Zambaldi, F., & Ponchio, M. C. (2012). Student loyalty based on relationship quality : an analysis on higher education institutions, (11), 26–46.
- Giuliani, & Feldman, R. (1993). Place attachment in a developmental and cultural context. *Journal of Environmental Psychology*, 13(3), 267–274.
- Goi, M. T., Goi, C. L., & Wong, D. (2014). Constructing a brand identity scale for higher education institutions. *Journal of Marketing for Higher Education*, 24(1), 59–74. <http://doi.org/10.1080/08841241.2014.906017>
- Gorney, C. (2007). How do you say “Got Milk” en Español? *The New York Times Magazine*, pp. 11–14.



- Gracia, E., Bakker, a. B., & Grau, R. M. (2011). Positive emotions: The connection between customer quality evaluations and loyalty. *Cornell Hospitality Quarterly*, 52(4), 458–465. <http://doi.org/10.1177/1938965510395379>
- Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). Current Trends in Malaysian Higher Education and the Effect on Education Policy and Practice: An Overview. *International Journal of Higher Education*, 3(1), p85. Journal Article.
- Graves, T. D. (1967). Psychological acculturation in a tri-ethnic community. *Southwestern Journal of Anthropology*, 337–350. Journal Article.
- Gray, L., & Diehl, P. (1992). *Research methods for business and management*. Macmillan Coll Division.
- Gregory, J. (2012). University Branding Via Securitization. *TOPIA: Canadian Journal of Culture Studies*, 1(28), 65–86.
- Grisaffe, D. B., & Nguyen, H. P. (2011). Antecedents of emotional attachment to brands. *Journal of Business Research*, 64(10), 1052–1059. <http://doi.org/10.1016/j.jbusres.2010.11.002>
- Gromark, J. (2013). From market orientation to brand orientation in the public sector. *Journal of Marketing Management*, 29(9–10), 1099–1123. <http://doi.org/10.1080/0267257X.2013.812134>
- Grönroos, C. (2007). *Service management and marketing: Customer management in service competition* (3rd ed.). West Sussex: John Wiley & Sons, Ltd.
- Groves, R. M., & Peytcheva, E. (2008). The impact of nonresponse rates on nonresponse bias: A meta-analysis. *Public Opinion Quarterly*, 72(2), 167–189. <http://doi.org/10.1093/poq/nfn011>
- Guest, L. (1944). A study of brand loyalty. *Journal of Applied Psychology*, 28(1), 16. Journal Article.
- Gupta, N. (2011). Globalization does lead to change in consumer behavior: An empirical evidence of impact of globalization on changing materialistic values in Indian consumers and its aftereffects. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 251–269. <http://doi.org/10.1108/13555851111143204>
- Hackett, G., & Betz, N. E. (1989). An exploration of the mathematics self-efficacy/mathematics performance correspondence. *Journal for Research in Mathematics Education*, 20(3), 261–273. <http://doi.org/10.2307/749515>

- Hadden, B. W., Smith, C. V., & Webster, G. D. (2014). Relationship duration moderates associations between attachment and relationship quality: Meta-analytic support for the temporal adult romantic attachment model. *Personality and Social Psychology Review, 18*, 42–58. <http://doi.org/10.1177/1088868313501885>
- Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis. *Understanding Statistics, 3*(4), 283–297. [http://doi.org/10.1207/s15328031us0304\\_4](http://doi.org/10.1207/s15328031us0304_4)
- Haesun Park Leslie Stoel. (2006). A model of socially responsible buying / sourcing decision making process. *International Journal of Retailing & Distribution Management, 33*(4), 235–248.
- Hagger, M. S., Chatzisarantis, N., & Biddle, S. J. H. (2001). The influence of self-efficacy and past behaviour on the physical activity intentions of young people. *Journal of Sports Sciences, 19*(9), 711–725. Journal Article.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis*. Upper Saddle River: Pearson Prentice Hall.
- Hair, J., Hopkins, L., Georgia, M., & College, S. (2014). Partial least squares structural equation modeling ( PLS-SEM ) An emerging tool in business research. *European Journal of Business Review, 26*(2), 2014. <http://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on partial Least squares structural equation modelling (PLS-SEM)*. Sage Publication Inc.
- Hair, J., Sarstedt, M., Ringle, C., & Mena, J. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science, 40*(3), 414–433. Retrieved from <http://link.springer.com/sci-hub.org/article/10.1007/s11747-011-0261-6>
- Hair Joseph. Jr F, H.Money, A., Samouel, P., & Page, M. (2007). *Research Methods for business* (2nd ed). Book, John Wiley & Sons,Ltd.
- Hair, Money, A. H., Samouel, P., & Page, M. (2007). *Research methods for business*. West Sussex: John Wiley & Sons,Ltd.
- Hair, Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice, 19*(2), 139–152. <http://doi.org/10.2753/MTP1069-6679190202>

- Hair, Ringle, C., & Sarstedt, M. (2013). Editorial-partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12. Retrieved from [http://papers.ssrn.com.sci-hub.org/Sol3/papers.cfm?abstract\\_id=2233795](http://papers.ssrn.com.sci-hub.org/Sol3/papers.cfm?abstract_id=2233795)
- Hair, Sarstedt, M., Pieper, T., & Ringle, C. (2012). The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning*, 45(5), 320–340. Retrieved from <http://www.sciencedirect.com.sci-hub.org/science/article/pii/S0024630112000568>
- Hair, William C. Black, J.Babin, B., & Anderson, R. E. (2010). *Multivariate data analysis* (seventh Ed). Book, Prentice-Hall Englewood Cliffs, NJ.
- Haltigan, J. D., Leerkes, E. M., Wong, M. S., Fortuna, K., Roisman, G. I., & Supple, A. J. (2014). Adult attachment states of mind: Measurement invariance across ethnicity and associations with maternal sensitivity. *Child Development*, 85(3), 1019–1035. <http://doi.org/10.1111/cdev.12180>
- Hameed, F. (2013). The effect of advertising spending on brand loyalty mediated by store image , perceived quality and customer satisfaction : A case of hypermarkets. *Asian Journal of Business Management*, 5(1), 181–192.
- Han, J.-W., & H.Kwon, H. (2009). The mediating effect of perceived quality between extrinsic cues and perceived value in ski products. *International Journal of Sport Marketingarketing*, 10(4), 287–302.
- Hanssen, T. S., & Solvoll, G. (2015). The importance of university facilities for students satisfaction at a Norwegian University. *Facilities*, 33(13/14), 744–759.
- Harrison-Walker, L. J. (2010). Customer prioritization in higher education: Targeting “right” students for long-term profitability. *Journal of Marketing for Higher Education*, 20(2), 191–208. <http://doi.org/10.1080/08841241.2010.526355>
- Hatch, M. J., & Schultz, M. (1999). Relationships between organisation culture, identity and image. *Int J Logistics Management*, 31(5/6), 356–365.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(July 2013), 408–420. <http://doi.org/10.1080/03637750903310360>
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5(1), 68–79. <http://doi.org/10.1207/s15327965pli0501>

- Hedges, M. R., & Webber, D. J. (2014). Using student evaluations to improve individual and department teaching qualities. *Research in Post-Compulsory Education, 19*(3), 323–339. <http://doi.org/10.1080/13596748.2014.920584>
- Heesup, H., Back, K. J., & Barrett, B. (2009). Influencing factors on restaurant customers' revisit intention: The roles of emotions and switching barriers. *International Journal of Hospitality Management, 28*(4), 563–572. <http://doi.org/10.1016/j.ijhm.2009.03.005>
- Heesup, H., & Jeong, C. (2013). Multi-dimensions of patrons' emotional experiences in upscale restaurants and their role in loyalty formation: Emotion scale improvement. *International Journal of Hospitality Management, 32*(1), 59–70. <http://doi.org/10.1016/j.ijhm.2012.04.004>
- Helgesen, O., & Nettet, E. (2007). Images, satisfaction and antecedents: drivers of student loyalty? A case study of a Norwegian university college. *Corporate Reputation Review, 10*(1), 38–59. Journal Article.
- Helgesen, O., & Nettet, E. (2007). What accounts for students' loyalty? Some field study evidence. *International Journal of Educational Management, 21*(2), 126–143. <http://doi.org/10.1108/09513540710729926>
- Hemsley-Brown, J. (2012). The best education in the world: Reality, repetition or cliché? International students' reasons for choosing an English university. *Studies in Higher Education, 37*(8), 1–43. <http://doi.org/10.1080/03075079.2011.562286>
- Hemsley-Brown, J., & Goonawardana, S. (2007). Brand harmonization in the international higher education market. *Journal of Business Research, 60*(September 2006), 942–948. <http://doi.org/10.1016/j.jbusres.2007.01.019>
- Hemsley-Brown, J., & Oplatka, I. (2006). Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing. *International Journal of Public Sector Management, 19*(4), 316–338. <http://doi.org/10.1108/09513550610669176>
- Hemsley-Brown, J., & Oplatka, I. (2015). University choices: What do we know, what don't we know and what do we still need to find out. *International Journal of Educational Management, 29*(3), 254–274.
- Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty an approach based on the concept of relationship quality. *Journal of Service Research, 3*(4), 331–344. Journal Article.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academic Marketing Sciences*, 43 (1), 115–135. <http://doi.org/10.1007/s11747-014-0403-8>
- Henseler, Ringle, C. M., & Rudolf R. Sinkovics. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(2009), 177–191. [http://doi.org/10.1016/0167-8116\(92\)90003-4](http://doi.org/10.1016/0167-8116(92)90003-4)
- Hibbert, S., & Horne, S. (2006). Giving to charity : Questioning the donor decision process. *Journal of Consumer Marketing*, 13(2), 4–13.
- Hill, F. (1995). Managing service quality in higher education: The role of the student as primary consumer. *Quality Assurance in Education*, 3(3), 10–21. Retrieved from <http://www.emeraldinsight.com/doi/pdfplus/10.1108/09684889510093497>
- Hong, Y. -y., Fang, Y., Yang, Y., & Phua, D. Y. (2013). Cultural attachment: A new theory and method to understand cross-cultural competence. *Journal of Cross-Cultural Psychology*, 44(6), 1024–1044. <http://doi.org/10.1177/0022022113480039>
- Hongwei He Weichun Zhu, Gouran, D., & Kolo, O. (2016). Moral identity centrality and cause-related marketing: The moderating effects of brand social responsibility image and emotional brand attachment. *European Journal of Marketing*, 50(1/2), 236–259. <http://doi.org/http://dx.doi.org/10.1108/09564230910978511>
- Hornik, J., & Ellis, S. (1988). Strategies to secure compliance for a mall intercept interview. *The Public Opinion Quarterly*, 52(1982), 539–551. <http://doi.org/10.1086/269129>
- Hosany, S., Prayag, G., Deesilatham, S., Cau evic, S., & Odeh, K. (2014). Measuring tourists' emotional experiences: Further validation of the destination emotion scale. *Journal of Travel Research*, 54(4), 482–495. <http://doi.org/10.1177/0047287514522878>
- Hosseini, M. H., & Nahad, R. F. (2012). Investigating antecedents and consequences of open university brand image. *International Journal of Academic Research*, 4(4), 68–77. Journal Article.
- Howard, S. K., Chan, A., & Caputi, P. (2015). More than beliefs: Subject areas and teachers' integration of laptops in secondary teaching. *British Journal of Educational Technology*, 46(2), 360–370. <http://doi.org/10.1111/bjet.12139>
- Hoyt, J. E., & Howell, S. L. (2011). Beyond customer satisfaction: Reexamining customer loyalty to evaluate continuing education programs. *The Journal of Continuing Higher Education*, 59(1), 21–33. Journal Article.

- Huang, C.-C., Fang, S.-C., Huang, S.-M., Shao-Chi, C., & Fang, S.-R. (2014). The impact of relational bonds on brand loyalty: The mediating effect of brand relationship quality. *Managing Service Quality*, 24(2), 184–204. Journal Article.
- Hudson, S., Roth, M. S., Madden, T. J., & Hudson, R. (2015). The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees. *Tourism Management*, 47, 68–76.  
<http://doi.org/10.1016/j.tourman.2014.09.001>
- Hume, M., & Sullivan Mort, G. (2010). The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the performing arts. *Journal of Services Marketing*, 24(2), 170–182.  
<http://doi.org/10.1108/08876041011031136>
- Hun, H., Kim, Y., & Kim, E.-K. (2011). Cognitive, affective, conative, and action loyalty: Testing the impact of inertia. *International Journal of Hospitality Management*, 30(4), 1008–1019. <http://doi.org/10.1016/j.ijhm.2011.03.006>
- Hun, H., & Woods, D. P. (2014). Attitudinal and behavioral aspects of loyalty in the screen-golf industry. *Journal of Quality Assurance in Hospitality & Tourism*, 15(2), 175–189. Journal Article.
- Hur, W.-M., Ahn, K.-H., & Kim, M. (2011). Building brand loyalty through managing brand community commitment. *Management Decision*, 49, 1194–1213.  
<http://doi.org/10.1108/00251741111151217>
- Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioral intentions among golf travelers. *Tourism Management*, 30(2), 298–308. <http://doi.org/10.1016/j.tourman.2008.07.010>
- Hye Young, K., & Lee, M.-Y. (2010). Emotional loyalty and share of wallet: A contingency approach. *Journal of Retailing and Consumer Services*, 17(5), 333–339.  
<http://doi.org/10.1016/j.jretconser.2010.03.014>
- Hyun, S. S., Kim, W., & Lee, M. J. (2011). The impact of advertising on patrons' emotional responses, perceived value, and behavioral intentions in the chain restaurant industry: The moderating role of advertising-induced arousal. *International Journal of Hospitality Management*, 30(3), 689–700.  
<http://doi.org/10.1016/j.ijhm.2010.10.008>
- Idris, M. Z., & Whitfield, T. W. A. (2014). Swayed by the logo and name: Does university branding work? *Journal of Marketing for Higher Education*, 24(1), 41–58. <http://doi.org/10.1080/08841241.2014.919979>

- Ilies, R., Judge, T. a., & Wagner, D. T. (2010). The influence of cognitive and affective reactions to feedback on the subsequent goals, role of behavioral inhibition / activation. *European Psychologist, 15*(2), 121–131. <http://doi.org/10.1027/1016-9040/a0000011>
- Ingen, E. V., Stoop, I., & Breedveld, K. (2009). Nonresponse in the Dutch time use survey: Strategies for response enhancement and bias reduction. *Field Methods, 21*(1), 69–90. <http://doi.org/10.1177/1525822X08323099>
- Ismail, M., Aziz, A., & Abdullah, D. (2014). Finding the next “ wave ” in the internationalization of higher education: Focus on Malaysia. *Asia Pacific Education Review, 15*, 493–502. <http://doi.org/10.1007/s12564-014-9336-7>
- Ivy, J. (2001). Higher education institution image: A correspondence analysis approach. *International Journal of Educational Management, 15*(6), 276–282. <http://doi.org/10.1108/09513540110401484>
- Jack, T. L. (2014). Education hubs and talent development: Policy making and implementation challenges. *Higher Education, 68*(6), 807–823. <http://doi.org/10.1007/s10734-014-9745-x>
- Jacoby, J., & Chestnut, R. W. (1978). Brand loyalty: Measurement and management. Journal Article, Wiley New York.
- Jacoby, J., & Kyner, B. D. (1973a). Repeat Purchasing. *Journal of Marketing, 10*(1), 1–9.
- Jacoby, & Kyner, D. (1973b). Brand loyalty vs. repeat purchasing behavior. *Journal of Marketing Research, 10*(1), 1–9. Retrieved from <http://www.jstor.org/stable/3149402>
- Jain, A., Pinson, C., & Malhotra, N. K. (1987). Customer loyalty as a construct in the marketing of banking services. *International Journal of Bank Marketing, 5*, 49–72.
- Jamal, A., & Shukor, S. A. (2014). Antecedents and outcomes of interpersonal influences and the role of acculturation: The case of young British-Muslims. *Journal of Business Research, 67*(3), 237–245. <http://doi.org/10.1016/j.jbusres.2013.05.009>
- Jamshidi, L., Arasteh, H., NavehEbrahim, A., Zeinabadi, H., & Rasmussen, P. D. (2012). Developmental patterns of privatization in higher education: a comparative study. *Higher Education, 64*(6), 789–803. Journal Article.
- Jang, S. (Shawn), & Namkung, Y. (2009). Perceived quality, emotions, and behavioral intentions: Application of an extended Mehrabian–Russell model to restaurants. *Journal of Business Research, 62*(4), 451–460. <http://doi.org/10.1016/j.jbusres.2008.01.038>

- Jani, D., & Han, H. (2014). Personality, satisfaction, image, ambience, and loyalty: Testing their relationships in the hotel industry. *International Journal of Hospitality Management*, 37, 11–20. Journal Article.
- Jani, D., & Han, H. (2015). Influence of environmental stimuli on hotel customer emotional loyalty response: Testing the moderating effect of the big five personality factors. *International Journal of Hospitality Management*, 44, 48–57. <http://doi.org/10.1016/j.ijhm.2014.10.006>
- Japutra, A., Ekinici, Y., & Simkin, L. (2014). Exploring brand attachment, its determinants and outcomes. *Journal of Strategic Marketing*, 22(7), 616–630. <http://doi.org/10.1080/0965254X.2014.914062>
- Jarvis, L. P., & Wilcox, J. B. (1976). Repeat purchasing behavior and attitudinal brand loyalty: Additional evidence. *Marketing*, 151–152. Journal Article.
- Jawahar, P. D., & Maheswari, R. (2009). Service perception: Emotional attachment as a mediator of the relationship between service performance and emotional brand. *The IUP Journal of Marketing Management*, 8(2), 7–22. Journal Article.
- Jensen, U. (2011). Factors influencing student retention in higher education. *Kamehameha Schools Research & Evaluation Division*, 2–5.
- Ji Kyung, P., & John, D. R. (2014). I think i can,i think i can:Brand use,self-efficacy, and performance. *Journal of Marketing Research*, 51(2), 233–247.
- Jiang, Y., Song, J., Lee, M., & Bong, M. (2014). Self-efficacy and achievement goals as motivational links between perceived contexts and achievement. *Educational Psychology*, 34(1), 92–117. Journal Article.
- Jillapalli, R., & Jillapalli, R. (2014). Do professors have customer-based brand equity? *Journal of Marketing for Higher Education*, 24(1), 22–40. <http://doi.org/10.1080/08841241.2014.909556>
- Jimenez, F. R., & Voss, K. E. (2014). An Alternative Approach to the Measurement of Emotional Attachment. *Psychology & Marketing*, 31(5), 360–370. Journal Article.
- Jiménez-Castillo, D., Sánchez-Fernández, R., & Iniesta-Bonillo, M. Á. (2013). Segmenting university graduates on the basis of perceived value, image and identification. *International Review on Public and Nonprofit Marketing*, 10(3), 235–252. <http://doi.org/10.1007/s12208-013-0102-z>



- John, D. R., & Park, J. K. (2016). Mindsets matter: Implications for branding research and practice. *Journal of Consumer Psychology*, 26(1), 153–160. <http://doi.org/10.1016/j.jcps.2015.06.010>
- Johnson, M. D., Herrmann, A., & Huber, F. (2006). The evolution of loyalty intentions. *Journal of Marketing*, 70(2), 122–132. <http://doi.org/10.1509/jmkg.70.2.122>
- Jong, P. de, Schnusenberg, O., & Goel, L. (2009). Marketing study abroad programs effectively: what do American business students think? *Journal of International Education in Business*, 3(1/2), 34–52.
- Joseph, M., Mullen, E. W., & Spake, D. (2012). University branding: Understanding students' choice of an educational institution. *Journal of Brand Management*, 20(1), 1–12. <http://doi.org/10.1057/bm.2012.13>
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology*, 83(3), 693. Journal Article.
- Jun, J. W., Ham, C.-D., & Park, J. H. (2014). Exploring the impact of acculturation and ethnic identity on Korean US resident consumption behaviors of utilitarian versus hedonic products. *Journal of International Consumer Marketing*, 26(1), 2–13. Journal Article.
- Jung, H. J., Lee, Y., Kim, H., & Yang, H. (2014). Impacts of country images on luxury fashion brand: facilitating with the brand resonance model. *Journal of Fashion Marketing and Management*, 18(2), 187–205. Journal Article.
- Kahn, J. H., & Nauta, M. M. (2001). Social-cognitive predictors of first-year college persistence: The importance of proximal assessment. *Research in Higher Education*, 42(6), 633–652. Journal Article.
- Kandampully, J., & Suhartanto, D. (2000). Customer loyalty in the hotel industry: The role of customer satisfaction and image. *International Journal of Contemporary Hospitality Management*, 12(6), 346–351. <http://doi.org/10.1108/09596110010342559>
- Kashif, M., & Ting, H. (2014). Service-orientation and teaching quality: Business degree students' expectations of effective teaching. *Asian Education and Development Studies*, 3(2), 163–180. <http://doi.org/10.1108/AEDS-06-2013-0038>
- Kawasaki, R. (2013). How language use indicates acculturation and enculturation processes of native Japanese and Japanese Americans examples from the 1946 issues of Hokubei Hochi. *Language and Adaptation Processes I*.

- Kazoleas, D., Kim, Y., & Moffitt, M. A. (2001). Institutional image: A case study. *Corporate Communications: An International Journal*, 6(4), 205–216. Journal Article.
- Kellerman, S. E., & Herold, J. (2001). Physician response to surveys: A review of the literature. *American Journal of Preventive Medicine*, 20(1), 61–67. [http://doi.org/10.1016/S0749-3797\(00\)00258-0](http://doi.org/10.1016/S0749-3797(00)00258-0)
- Khairani, A. Z., & Razak, N. bin A. (2013). Assessing Factors Influencing Students Choice of Malaysian Public University: A Rasch Model Analysis. *International Journal of Applied Psychology*, 3(1), 19–24. Journal Article.
- Khan, B. M. (2009). Consumers and their brands: deciphering dimensions of loyalty. *International Journal of Business Insights & Transformation*, 2(1), 84–92.
- Khare, A. (2015). Antecedents to green buying behaviour: A study on consumers in an emerging economy. *Marketing Intelligence & Planning*, 33(3), 309–329. <http://doi.org/10.1108/MIP-05-2014-0083>
- Kim, J., Morris, J. D., & Swait, J. (2008). Antecedents of true brand loyalty. *Journal of Advertising*, 37(2), 99–117. <http://doi.org/10.2753/JOA0091-3367370208>
- Kim, & Zhao, M. (2014). Chinese consumer brand loyalty for consumer product: Importance of brand personality as major antecedent of brand loyalty. *Asian Academy of Management Journal*, 19(1), 1–15.
- Kipnis, E., Broderick, A. J., & Demangeot, C. (2014). Consumer multiculturalization: Consequences of multi-cultural identification for brand knowledge. *Consumption Markets & Culture*, 17(3), 231–253. <http://doi.org/10.1080/10253866.2013.778199>
- Klanecky, A. K., Woolman, E. O., & Becker, M. M. (2015). Child abuse exposure, emotion regulation, and drinking refusal self-efficacy: An analysis of problem drinking in college students. *The American Journal of Drug and Alcohol Abuse*, 41(2), 188–196. <http://doi.org/10.3109/00952990.2014.998365>
- Klcinc, S. S., & Baker, S. M. (2004). An integrative review of material possession attachment. *Academy of Marketing Science Review*, 2004(1), 1–35. Journal Article.
- Knight, & Morshidi, S. (2011). The complexities and challenges of regional education hubs: Focus on Malaysia. *Higher Education*, 62(5), 593–606. <http://doi.org/10.1007/s10734-011-9467-2>

- Kokkonen, T.-M., Cheston, R. I. L., Dallos, R., & Smart, C. A. (2013). Attachment and coping of dementia care staff: The role of staff attachment style, geriatric nursing self-efficacy, and approaches to dementia in burnout. *Dementia (London, England)*, *13*(4), 544–568. <http://doi.org/10.1177/1471301213479469>
- Koksal, M. S., Ertekin, P., & Colakoglu, O. M. (2014). How differences among data collectors are reflected in the reliability and validity of data collected by likert- type scales? *Educational Sciences: Theory & Practice*, *14*(6), 2206–2213. <http://doi.org/10.12738/estp.2014.6.2028>
- Kotler, P., & Fox, K. F. A. (1995). *Strategic marketing for educational institutions*. Journal Article, Prentice-Hall Englewood Cliffs, NJ.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas*. Journal Article.
- Krosnick, J. A. (1999). Survey research. *Annu.Rev.Psychol*, *50*, 537–567.
- Kulviwat C, S. G., Jame, B. Il, & Neelankavil, P. (2014). Self-Efficacy as an antecedent of cognition and affect in technology acceptance. *Journal of Consumer Marketing*, *31*(3), 190–199. <http://doi.org/10.1108/JCM-10-2013-0727>
- Kuo, B. C. H. (2014). Coping, acculturation, and psychological adaptation among migrants: a theoretical and empirical review and synthesis of the literature. *Health Psychology and Behavioral Medicine: An Open Access Journal*, *2*(1), 16–33. Journal Article.
- Kuusik, A. (2007). Affecting customer loyalty: Do different factors have various influences in different loyalty levels? *SSRN Electronic Journal*, *1*(58), 3–30. <http://doi.org/10.2139/ssrn.1025989>
- La, S., & Choi, B. (2012). The role of customer affection and trust in loyalty rebuilding after service failure and recovery. *The Service Industries Journal*, *32*(1), 105–125. <http://doi.org/10.1080/02642069.2011.529438>
- Ladhari, R., Souiden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction and image. *Journal of Financial Services Marketing*, *16*(2), 111–124. <http://doi.org/10.1057/fsm.2011.10>
- Lai, I. K. W. (2014). The role of service quality, perceived value, and relationship quality in enhancing customer loyalty in the travel agency sector. *Journal of Travel & Tourism Marketing*, *31*(3), 417–442. <http://doi.org/10.1080/10548408.2014.883346>

- Lambooy, J. V. (2011). *Implications of branding initiatives in higher education among trademarked institutions in California*. *Higher Education*. University of San Francisco.
- Landrum, R. E., Turrisi, R., & Harless, C. (1998). University image: The benefits of assessment and modelling. *Journal of Marketing for Higher Education*, 9(1), 53–68. <http://doi.org/10.1300/J050v09n01>
- Langan, A., Dunleavy, P., & Fielding, A. (2013). Applying models to national surveys of undergraduate science students: What affects ratings of satisfaction? *Education Sciences*, 3(2), 193–207. <http://doi.org/10.3390/educsci3020193>
- LaTour, M., & Rotfeld, H. J. (1997). There are threats and (maybe) fear-caused arousal: Theory and confusions of appeals to fear and fear arousal itself. *Journal of Advertising*, 26(3), 45–59. <http://doi.org/10.1080/00913367.1997.10673528>
- Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, 1–21. <http://doi.org/10.1080/0267257X.2015.1131735>
- Lee, D., Moon, J., Kim, Y. J., & Yi, M. Y. (2015). Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. *Information and Management*, 52(3), 295–304. <http://doi.org/10.1016/j.im.2014.12.001>
- Lee, & Lee, K. (2015). Economic nationalism and globalization in South Korea : A critical insight. *Asian Perspective*, 39, 125–151.
- Leeuw, E. D. De, & Hox, J. J. (1988). The effects of response-stimulating factors on response rates and data quality in mail survey: A test of Dillman's total design method. *Journal of Official Statistics*, 4(3), 241–249.
- Leganger, A., Kraft, P., & Roysamb, E. (2000). Perceived self-efficacy in health behaviour research: Conceptualisation, measurement and correlates. *Psychology and Health*, 15(1), 51–69. Journal Article.
- Lehtinen, U., & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *Service Industries Journal*, 11(3), 287–303. <http://doi.org/10.1080/02642069100000047>
- Lemmink, J., Schuijf, A., & Streukens, S. (2003). The role of corporate image and company employment image in explaining application intentions. *Journal of Economic Psychology*, 24(1), 1–15. Journal Article.

- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Psychology, 66*, 799–823. <http://doi.org/10.1146/annurev-psych-010213-115043>
- Levy, S., & Hino, H. (2015). Emotional brand attachment: a factor in customer-bank relationships. *International Journal of Bank Marketing, 11*(6), 1–21. <http://doi.org/10.1108/EUM0000000001122>
- Levy, S., & Hino, H. (2016). Emotional brand attachment: A factor in customer bank-relationships. *International Journal of Banking, 34*(2), 136–150. <http://doi.org/http://dx.doi.org/10.1108/09564230910978511>
- Li, N., Robson, A., & Coates, N. (2014). Luxury brand commitment: A study of Chinese consumers. *Marketing Intelligence & Planning, 32*(7), 769–793. <http://doi.org/10.1108/MIP-03-2013-0040>
- Lim, P. J., & Williams, G. (2016). Time to reform public universities. *Penang Monthly, 1*–11.
- Lin, C.-H., Morais, D. B., Kerstetter, D. L., & Hou, J.-S. (2007). Examining the role of cognitive and affective image in predicting choice across natural, developed, and theme-park destinations. *Journal of Travel Research, 46*(2), 183–194. <http://doi.org/10.1177/0047287506304049>
- Lindley, J., McCall, L., & Abu-Arab, A. (2013). Visitor or inhabitant? Addressing the needs of undergraduate transnational medical students. *Journal of Studies in International Education, 17*(1), 79–96. <http://doi.org/10.1177/1028315311431894>
- Liu, Y., & Jang, S. (Shawn). (2009). The effects of dining atmospherics: An extended Mehrabian–Russell model. *International Journal of Hospitality Management, 28*(4), 494–503. <http://doi.org/10.1016/j.ijhm.2009.01.002>
- Liu-thompkins, Y., & Tam, L. (2013). Not all repeat customers are the same : Designing effective cross- selling promotion on the basis of attitudinal loyalty and habit. *Journal of Marketing, 77*(5), 21–36.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior, 23*(1), 825–841. <http://doi.org/10.1016/j.chb.2004.11.012>
- Lockwood, C. M., & MacKinnon, D. P. (1998). Bootstrapping the standard error of the mediated effect. In *Proceedings of the 23rd annual meeting of SAS Users Group International* (pp. 997–1002). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.122.5447&rep=rep1&type=pdf>

- Louis, D., & Lombart, C. (2010). Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand). *Journal of Product & Brand Management*, 19(2), 114–130. Journal Article.
- Loureiro, S. M. C. (2014). The effect of perceived benefits, trust, quality, brand awareness/associations and brand loyalty on internet banking brand equity. *International Journal of Electronic Commerce Studies*, 4(2), 139–158. Journal Article.
- Loureiro, S. M. C., Ruediger, K. H., & Demetris, V. (2012). Brand emotional connection and loyalty. *Journal of Brand Management*, 20(1), 13–27.  
<http://doi.org/10.1057/bm.2012.3>
- Low, G. S., & Lamb Jr, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 9(6), 350–370. Journal Article.
- Lowrie, A. (2007). Branding higher education: Equivalence and difference in developing identity. *Journal of Business Research*, 60(9), 990–999.  
<http://doi.org/10.1016/j.jbusres.2007.01.024>
- Luiz, J. H., & Matos, C. A. de. (2015). The influence of personal values and demographic variables on customer loyalty in the banking industry. *International Journal of Bank Marketing*, 11(6), 8–10. <http://doi.org/10.1108/EUM0000000001122>
- Lunsford, T. R., & Lunsford, B. R. (1995). The research sample, part I: sampling. *JPO: Journal of Prosthetics and Orthotics*, 7(3), 17A. Journal Article.
- Luszczynska, A., Gibbons, F. X., Piko, B. F., & Tekozel, M. (2004). Self-regulatory cognitions, social comparison, and perceived peers behaviors as predictors of nutrition and physical activity: A comparison among adolescents in Hungary, Poland, Turkey, and USA. *Psychology & Health*, 19(5), 577–593. Journal Article.
- Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The general self-efficacy scale: multicultural validation studies. *The Journal of Psychology*, 139(5), 439–457. Journal Article.
- Lymar, V., & Mohajerani, K. (2013). *Brand image of umeå university: A quantitative study of the effects on students' attachment and commitment*. Retrieved from <http://www.diva-portal.org/smash/record.jsf?pid=diva2:633927>
- Lysonski, S., & Durvasula, S. (2013). Nigeria in transition: Acculturation to global consumer culture. *Journal of Consumer Marketing*, 30(6), 493–508.  
<http://doi.org/10.1108/JCM-07-2013-062>

- MacKenzie, S. B., Podsakoff, P. M., & Jarvis, C. B. (2005). The problem of measurement model misspecification in behavioral and organizational research and some recommended solutions. *Journal of Applied Psychology, 90*(4), 710–730. <http://doi.org/10.1037/0021-9010.90.4.710>
- MacKinnon, David, P., Lockwood, C. M., & Williams, J. (2004). Comparison of approaches in estimating interaction and quadratic effects of latent variables. *Multivariate Behavioral Research, 39*(1), 37–67. <http://doi.org/10.1207/s15327906mbr3901>
- MacKinnon, D. P., & Cox, M. C. (2012). Commentary on mediation analysis and categorical variables: The final frontier • by Dawn Iacobucci. *Journal of Consumer Psychology: The Official Journal of the Society for Consumer Psychology, 22*(4), 600. Journal Article.
- Mackinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation Analysis. *Annu Rev Psychology, 58*, 593–615. <http://doi.org/10.1146/annurev.psych.58.110405.085542.Mediation>
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*(1), 83–104. <http://doi.org/10.1037/1082-989X.7.1.83>
- MacMillan, K., Money, K., Downing, S., & Hillenbrand, C. (2005). Reputation in relationships: measuring experiences, emotions and behaviors. *Corporate Reputation Review, 8*(3), 214–232. Journal Article.
- Mainardes, E. W., Alves, H., Raposo, M., & de Souza Domingues, M. J. C. (2011). Marketing in higher education: A comparative analysis of the Brazil and Portuguese cases. *International Review on Public and Nonprofit Marketing, 9*(1), 43–63. <http://doi.org/10.1007/s12208-011-0077-6>
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand Personality: The relative importance of the actual and the ideal self. *Journal of Marketing, 75*(4), 35–52. <http://doi.org/10.1509/jmkg.75.4.35>
- Malcolm, W. (2000). Interpretivism and generalisation. *Sociology, 34*(2), 209–224. <http://doi.org/10.1177/S0038038500000146>
- Maldonado, R., & Tansuhaj, P. (2002). Segmenting a local Latino market using Berry's acculturation taxonomy. *Advances in Consumer Research, 29*(1). Journal Article.

- Malhotra, N. K. (1999). *Marketing research: An applied orientation*. (W. Blake & Natalie Anderson, Eds.) (3rd ed.). Upper Saddle River, New Jersey: Prentice Hall International.
- Mampaey, J., Huisman, J., & Seeber, M. (2015). Branding of Flemish higher education institutions: A strategic balance perspective. *Higher Education Research & Development*, 36(6), 1178–1191. <http://doi.org/10.1080/07294360.2015.1024634>
- Mara, K. O., Cassill, A., & Chapell, B. (2014). The value of a study abroad experience for the Cayman islands : Connecting and reflecting. *International Journal of Business and Social Science*, 5(8), 15–24.
- Maringe, F., & Gibbs, P. (2009). *Marketing higher education: Theory and practice*. Book, Open University Press.
- Markovic, S., Iglesias, O., Singh, J. J., & Sierra, V. (2015). How does the perceived ethicality of corporate services brands influence loyalty and positive word-of-mouth? Analyzing the roles of empathy, affective commitment, and perceived quality. *Journal of Business Ethics*, 1–20. <http://doi.org/10.1007/s10551-015-2985-6>
- Markwick, N., & Fill, C. (1997). Towards a framework for managing corporate identity. *International Journal of Retail & Distribution Management*, 31(5/6), 396–409. <http://doi.org/10.1108/02656710210415703>
- Martenson, R. (2007). Corporate brand image, satisfaction and store loyalty: A study of the store as a brand, store brands and manufacturer brands. *International Journal of Retail & Distribution Management*, 35(7), 544–555. Journal Article.
- Martos-Partal, M., & Gonzalez-Benito, O. (2011). Store brand and store loyalty: The moderating role of store brand positioning. *Marketing Letters*, 22(3), 297–313. Journal Article.
- Matsudaira, T. (2006). Measures of psychological acculturation: a review. *Transcultural Psychiatry*, 43(September), 462–487. <http://doi.org/10.1177/1363461506066989>
- Mazursky, D., & Jacoby, J. (1986). Exploring the development of store images. *Journal of Retailing*, 62(2), 145–165.
- McKee, D., Simmers, C. S., & Licata, J. (2006). Customer self-efficacy and response to service. *Journal of Service Research*, 8(3), 207–220. Journal Article.
- Mehrabian, A., & Russell, J. (1974). *An approach environmental psychology*. Cambridge, MA, US: The MIT Press.



- Mellens, M., & Dekimpe, M. (1996). A review of brand loyalty measures in marketing. *Economic En Management*, 507–533. Retrieved from [http://lirias.kuleuven.be/bitstream/123456789/119352/1/TEM1996-4\\_507-533p.pdf](http://lirias.kuleuven.be/bitstream/123456789/119352/1/TEM1996-4_507-533p.pdf)
- Mendoza, H. R. (1989). An empirical scale to measure type and degree of acculturation in Mexican-American adolescents and adults. *Journal of Cross-Cultural Psychology*, 20(4), 372–385. <http://doi.org/0803973233>
- Mercedes Marzo-Navarro, Pedraja-Iglesias, M., & Rivera-Torres, M. P. (2005). Measuring customer satisfaction in summer courses. *Quality Assurance in Education*, 13(1), 53–65. Journal Article.
- Mick, D. G. (1986). Consumer research and semiotics: Exploring the morphology of signs, symbols and significance. *The Journal of Consumer Research*, 13(2), 196–213.
- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *The Psychological Review*, 63(1), 81–97.
- Miller, G. A., & Miller, G. A. (1994). The Magical Number Seven , Plus or Minus Two : Some Limits on Our Capacity for Processing Information, *101(2)*, 343–352.
- Miller, Wilder, L. B., Stillman, F. a, & Becker, D. M. (1997). The feasibility of a street-intercept survey method in an African-American community. *American Journal of Public Health*, 87(4), 655–658. <http://doi.org/10.2105/AJPH.87.4.655>
- Miranda, A. O., & Matheny, K. B. (2000). Socio-psychological predictors of acculturative stress among Latino adults. *Journal of Mental Health Counseling*, 22(4), 306–317. Journal Article.
- Moghisi, R., Mokhtari, S., & Heidari, A. A. (2015). Place attachment in university students. Case study: Shiraz university. *Procedia - Social and Behavioral Sciences*, 170, 187–196. <http://doi.org/10.1016/j.sbspro.2015.01.028>
- Mohamad, M., & Awang, Z. (2009). Building corporate image and securing student loyalty in the Malaysian higher learning industry. *Journal of International Management Studies*, 4(1), 30–40. Journal Article.
- MOHE. (2015). *Malaysia education blueprint 2013-2025*. Ministry of Higher Education (Vol. 1). Retrieved from <http://medcontent.metapress.com/index/A65RM03P4874243N.pdf>
- MOHE. (2016). *Statistic international students enrollment*. Retrieved from <http://www.mohe.gov.my/>

- Morgan, R. ., & Hunt, S. . (1994). The commitment trust theory of relationship marketing. *Journal of Marketing*, 58, 20–38.
- Morley, L. (2001). Producing new workers: Quality, equality and employability in higher education. *Quality in Higher Education*, 7(2), 131–138. Journal Article.
- Morshidi, S. (2008). The impact of September 11 on international student flow into Malaysia: Lessons learned. *Ijaps*, 4(1), 80–95. Retrieved from [http://ijaps.usm.my/?page\\_id=268](http://ijaps.usm.my/?page_id=268)
- Mosbah, A., & Saleh, A. A. K. M. (2014). A review of tourism development in Malaysia. *European Journal of Business and Management*, 6(5), 1–9. Journal Article.
- Mosca, A. (2000). A review essay on Antonio Damasio's the feeling of what happens : Body and emotion in the Making of consciousness. *Psyche*, 6(10), 386–401.
- Mourad, M. (2013). Branding Islamic studies: Exploratory study in the Middle East. *Journal of Islamic Marketing*, 4(2), 150–162. <http://doi.org/10.1108/17590831311329287>
- Mourad, M., Ennew, C., & Kortam, W. (2011). Brand equity in higher education. *Marketing Intelligence & Planning*, 29(4), 403–420. Journal Article.
- Muehling, D. D., Sprott, D. E., & Sultan, A. J. (2014). Exploring the boundaries of nostalgic advertising effects: A consideration of childhood brand exposure and attachment on consumers' responses to nostalgia-themed advertisements. *Journal of Advertising*, 43(1), 73–84. <http://doi.org/10.1080/00913367.2013.815110>
- Müge Çelik Örucü, A. D. (2011). Psychometric evaluation of the college adjustment self-efficacy scale for Turkish university students. *European Journal of Psychological Assessment*, 27(3), 153–156. Journal Article.
- Munteanu, C., Ceobanu, C., Bobâlca, C., & Anton, O. (2010). An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management*, 23, 124–140. <http://doi.org/10.1108/09513551011022483>
- Nadiri, H., & Mayboudi, S. M. A. (2010). Diagnosing university students zone of tolerance from university library services. *Malaysian Journal of Library & Information Science*, 15(1), 1–21. Retrieved from <Go\nto\nISI>://WOS:000276715400001
- Naina Mohamed, R., & Borhan, H. (2014). Exploring customer attachment behaviour to sustain the retail industry in Malaysia. *World Journal of Entrepreneurship, Management and Sustainable Development*, 10(1), 69–76. <http://doi.org/10.1108/WJEMSD-08-2013-0044>

- Nam, J., Ekinci, Y., & Whyatt, G. (2011). Brand equity, brand loyalty and consumer satisfaction. *Annals of Tourism Research*, 38(3), 1009–1030. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0160738311000211>
- Namkung, Y., & Jang, S. C. S. (2010). Effects of perceived service fairness on emotions, and behavioral intentions in restaurants. *European Journal of Marketing*, 44(9/10), 1233–1259. Journal Article.
- Nejati, M., & Nejati, M. (2008). Services quality at university of Tehran Central Library. *Library Management*, 29(67), 571–582.
- Nelson, K. A., & Infante, M. (2014). Integrating the best of both worlds: Details from Mexican-origin college students about their bicultural identities and adjustment experiences. *RIMCIS-International and Multidisciplinary Journal of Social Sciences*, 3(1), 36–60. Journal Article.
- Nesset, E., & Helgesen, Å. (2014). Effects of switching costs on customer attitude loyalty to an airport in a multi-airport region. *Transportation Research Part A: Policy and Practice*, 67, 240–253. Journal Article.
- Nesset, E., Nervik, B., & Helgesen, Ø. (2011). Satisfaction and image as mediators of store loyalty drivers in grocery retailing. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 267–292. <http://doi.org/10.1080/09593969.2011.588716>
- Nguyen, N., & Leblanc, G. (2001). Corporate image and corporate reputation in customers retention decisions in services. *Journal of Retailing and Consumer Services*, 8(4), 227–236. Journal Article.
- Nguyen, N., & LeBlanc, G. (2001). Image and reputation of higher education institutions in student retention decisions. *International Journal of Educational Management*, 15(6), 303–311. Journal Article.
- Nguyen, N., Leclerc, A., & LeBlanc, G. (2013). The Mediating Role of Customer Trust on Customer Loyalty. *Journal of Service Science and Management*, 6, 96–109. Retrieved from <http://www.scirp.org/journal/PaperInformation.aspx?paperID=28959>
- Nguyen, Smith, C., Reynolds, G. L., & Freshman, B. (2014). The effect of acculturation on obesity among foreign-born Asians residing in the United States. *Journal of Immigrant and Minority Health*, 17(2), 389–399. Journal Article.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill INC.

- Nunnally, J., & Bernstein, I. (1978). *Psychometric theory*. New York: McGraw-Hill Education.
- O'Malley, & Lisa. (1998). Can loyalty schemes really build loyalty? *Marketing Intelligence & Planning*, 16(1), 47–55. <http://doi.org/10.1108/02634509810199535>
- Oakley, R., & Palvia, P. (2012). A study of the impact of mobile self-efficacy and emotional attachment on mobile device infusion. In *Proceedings of the Eighteenth Americas Conference on Information Systems, Seattle, Washington, August 9-12, 2012*. (pp. 1–9). Journal Article.
- Ogden, T. D., Ogden, R. J., & Schau, H. J. (2004). Exploring the impact of culture and acculturation on consumer purchase decisions: Toward a microcultural perspective. *Academic of Marketing Science Review*, 1, 1–26. Journal Article.
- Oliver. (1999). Whence consumer loyalty? *The Journal of Marketing*, 63, 33–44. Retrieved from <http://www.jstor.org/stable/1252099>
- Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: Foundations, findings, and managerial insight. *Journal of Retailing*, 73(3), 311–336. Journal Article.
- Olmedo-Cifuentes, I., Martinez-Leon, I. M., & Davies, G. (2014). Managing internal stakeholders' views of corporate reputation. *Service Business*, 8(1), 83–111. Journal Article.
- Opoku, R. a., Hultman, M., & Saheli-Sangari, E. (2008). Positioning in market space: The evaluation of Swedish universities' online brand personalities. *Journal of Marketing for Higher Education*, 18(1), 124–144. <http://doi.org/10.1080/08841240802100386>
- Organ, D. W., & Greene, C. N. (1981). The effects of formalization on professional involvement : A compensatory process approach. *Administrative Science Quarterly*, 26(2), 237–252.
- Orth, U. R., Limon, Y., & Rose, G. (2010). Store-evoked affect, personalities, and consumer emotional attachments to brands. *Journal of Business Research*, 63(11), 1202–1208. Journal Article.
- Özbek, E., Bongers, I. L., Lobbestael, J., & van Nieuwenhuizen, C. (2015). Turkish and Moroccan young adults in the Netherlands: The relationship between acculturation and psychological problems. *Journal of Immigrant and Minority Health*, 17(6), 1687–1696. <http://doi.org/10.1007/s10903-015-0203-3>

- Padgett, B. C., Kim, H., Goh, B. K., & Huffman, L. (2013). The usefulness of the theory of planned behavior: Understanding U.S. fast food consumption of generation Y chinese consumers. *Journal of Foodservice Business Research*, 16(5), 486–505. <http://doi.org/10.1080/15378020.2013.850382>
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578. <http://doi.org/10.3102/00346543066004543>
- Palacio, A. B., Meneses, G. D., & Perez, P. J. P. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration*, 40(5), 486–505. Journal Article.
- Pallant, J. (2013). *SPSS survival manual a step by step guide to data analysis using IBM SPSS* (1st ed.). McGraw-Hill Education.
- Palumbo, F., & Teich, I. (2004). Market segmentation based on level of acculturation. *Marketing Intelligence & Planning*, 22(4), 472–484.
- Pampaloni, A. M. (2010). *The influence of organizational image on college selection: What students seek in institutions of higher education. Journal of Marketing for Higher Education* (Vol. 20). <http://doi.org/10.1080/08841241003788037>
- Pan, J.-Y. (2011). A resilience-based and meaning-oriented model of acculturation: A sample of mainland Chinese postgraduate students in Hong Kong. *International Journal of Intercultural Relations*, 35(5), 592–603. <http://doi.org/10.1016/j.ijintrel.2011.02.009>
- Pan, Sheng, S., & Xie, F. T. (2012). Antecedents of customer loyalty: An empirical synthesis and reexamination. *Journal of Retailing and Consumer Services*, 19(1), 150–158. <http://doi.org/10.1016/j.jretconser.2011.11.004>
- Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). Consumer-based brand equity: Improving the measurement empirical evidence. *Journal of Product & Brand Management*, 14(3), 143–154. Journal Article.
- Parameswaran, R., & Pisharodi, R. M. (2002). Assimilation effects in country image research. *International Marketing Review*, 19(3), 259–278. <http://doi.org/10.1108/02651330210430695>
- Parasuraman, Zeithaml, V. a, & Berry, L. L. (1988). SERVQUAL : A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40. [http://doi.org/10.1016/S0148-2963\(99\)00084-3](http://doi.org/10.1016/S0148-2963(99)00084-3)

- Park, C. W., MacInnis, D. J., & Priester, J. (2008). *Brand attachment: Construct, consequences and causes*. Now Publishers Inc. Retrieved from [http://books.google.com/books?hl=en&lr=&id=EtMXhB\\_rOE0C&pgis=1](http://books.google.com/books?hl=en&lr=&id=EtMXhB_rOE0C&pgis=1)
- Park, J., & John, D. R. (2014). I think i can, i think i can: Brand use, self-efficacy, and performance. *Journal of Marketing Research*, 51(2), 233–247. Journal Article.
- Park, W., Jaworski, B. J., & MacInnis, D. J. (1986). Strategic brand concept - image management. *Journal of Marketing*, 50, 135–145. <http://doi.org/10.2307/1251291>
- Park, Macinnis, D. J., Priester, J., & Eisingerich, A. B. (2010). Brand attachment and brand attitude strength : Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(November), 1–17.
- Parsa, N., Yaacob, S. N., Redzuan, M., Parsa, P., & Esmaili, N. S. (2014). Parental attachment, inter-parental conflict and late adolescent's self-efficacy. *Asian Social Science*, 10(8), 123–131. <http://doi.org/10.5539/ass.v10n8p123>
- Paswan, A. K., & Ganesh, G. (2009). Higher education institutions: Satisfaction and loyalty among international students. *Journal of Marketing for Higher Education*, 19(1), 65–84. <http://doi.org/10.1080/08841240902904869>
- Patwardhan, H., & Balasubramanian, S. K. (2011). Brand romance: A complementary approach to explain emotional attachment toward brands. *Journal of Product & Brand Management*, 20(4), 297–308. <http://doi.org/10.1108/10610421111148315>
- Paulssen, M., & Fournier, S. (2007). Attachment security and strength of commercial relationships: A longitudinal study. *Humboldt-Univ., Wirtschaftswiss. Fak.*
- Pavlou, P. A., & Fygenon, M. (2006). Understanding and predicting electronic commerce adoption: an Extension of the theory of planned behavior. *MIS Quarterly*, 30(1), 115–143. <http://doi.org/10.2307/25148720>
- Penaloza, L. (1994). Atravesando fronteras/ border crossings : A critical ethnographic exploration consumer acculturation of Mexican immigrants. *Journal of Consumer Research*, 21(1), 32–54.
- Perez, R. M. (2011). Linguistic acculturation and emotional well-being in US schools. *Journal of Human Behavior in the Social Environment*, 21(8), 888–908. Journal Article.
- Perin, M. G., Sampaio, C. H., Simoes, C., & Polvora de Polvora, R. (2012). Modeling antecedents of student loyalty in higher education. *Journal of Marketing for Higher Education*, 22(1), 101–116. <http://doi.org/10.1080/08841241.2012.705797>

- Perna, Marck., C. (2005). The enrollment funnel. *Techniques: Connecting Education and Careers*, 80(8), 36–37.
- Perry, V. G. (2008). Acculturation, microculture and banking: An analysis of Hispanic consumers in the USA. *Journal of Services Marketing*, 22(6), 423–433.  
<http://doi.org/10.1108/08876040810901846>
- Pescher, C., Reichhart, P., & Spann, M. (2014). Consumer Decision-making processes in mobile viral marketing campaigns. *Journal of Interactive Marketing*, 28(1), 43–54.  
<http://doi.org/10.1016/j.intmar.2013.08.001>
- Peters, E., Västfjäll, D., Gärling, T., & Slovic, P. (2006). Affect and decision making: a “hot” topic. *Journal of Behavioral Decision Making*, 19(2), 79–85.  
<http://doi.org/10.1002/bdm.528>
- Petruzzellis, L., D’Uggento, A. M., & Romanazzi, S. (2006). Student satisfaction and quality of service in Italian universities. *Managing Service Quality: An International Journal*, 16(4), 349–364.
- Petruzzellis, L., & Romanazzi, S. (2010). Educational value: How students choose university: Evidence from an Italian university. *International Journal of Educational Management*, 24(2), 139–158. Journal Article.
- Pfarr, K., Blohm, M., Blom, a. G., Erdel, B., & Felderer, B. (2015). Are incentive effects on response rates and nonresponse bias in large-scale, face-to-face surveys generalizable to Germany? Evidence from ten experiments. *Public Opinion Quarterly*, 1–29. <http://doi.org/10.1093/poq/nfv014>
- Pimentel, R. W., & Reynolds, K. E. (2004). A model for consumer devotion: Affective commitment with proactive sustaining behaviors. *Academy of Marketing Science Review*, 5(1), 1–48. Journal Article.
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2011). Utilizing the brand ecosystem framework in designing branding strategies for higher education. *International Journal of Educational Management*, 25(7), 724–739.  
<http://doi.org/10.1108/09513541111172126>
- Pine, J., & Gilmore, J. (1999). *The experience economy: Work is theatre and every business is a stage*. Boston MA: Harvard Business School Press.
- Podoshen, J. S. (2006). Word of mouth, brand loyalty, acculturation and the American jewish consumer. *Journal of Consumer Marketing*, 23(5), 266–282. Journal Article.
- Podoshen, J. S. (2008). The African American consumer revisited: Brand loyalty, word-of-mouth and the effects of the black experience. *Journal of Consumer Marketing*, 25(4), 211–222. Journal Article.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903. <http://doi.org/10.1037/0021-9010.88.5.879>
- Prayag, G., Hosany, S., Muskat, B., & Chiappa, G. Del. (2015). Understanding the relationships between tourists' emotional experiences, overall image, satisfaction, and intention to recommend. *Journal of Travel Research*, in press, 1–14. <http://doi.org/10.1177/004728751562056>
- Prayag, G., Khoo-Lattimore, C., & Sitruk, J. (2015). Casual dining on the French riviera: Examining the relationship between visitors' perceived quality, positive emotions and behavioral intentions. *Journal of Hospitality Marketing & Management*, 24(1), 24–46. <http://doi.org/10.1080/19368623.2014.859114>
- Prayag, G., & Ryan, C. (2011). Antecedents of tourists' loyalty to Mauritius: The role and influence of destination image, place attachment, personal involvement, and satisfaction. *Journal of Travel Research*, 51(3), 342–356. <http://doi.org/10.1177/0047287511410321>
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <http://doi.org/10.3758/BRM.40.3.879>
- Priporas, C.-V., & Kamenidou, I. (2010). Perceptions of potential postgraduate Greek business students towards UK universities, brand and brand reputation. *Journal of Brand Management*, 18(4), 264–273. Journal Article.
- Qualter, P., Pool, L. D., Gardner, K. J., Ashley-Kot, S., Wise, A., & Wols, A. (2014). The emotional self-efficacy scale: Adaptation and validation for young adolescents. *Journal of Psychoeducational Assessment*, 33(1), 33–45. <http://doi.org/10.1177/0734282914550383>
- Quimby, J. L., & O'Brien, K. M. (2004). Predictors of student and career decision making self efficacy among nontraditional college women. *The Career Development Quarterly*, 52(4), 323–339. Journal Article.
- Ramkissoon, H., Graham Smith, L. D., & Weiler, B. (2013). Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A structural equation modelling approach. *Tourism Management*, 36, 552–566. <http://doi.org/10.1016/j.tourman.2012.09.003>



- Ramsden, P. (1991). A Performance indicator of teaching quality in higher education : The course experience questionnaire. *Studies in Higher Education*, 16(2), 129–150.
- Rana, M. A. (2015). An empirical investigation of ethnic food consumption: A perspective of majority ethnic group. *British Food Journal*, 117(4), 1239–1255.
- Rao, H. (1994). The social construction of reputation: Certification and contests, legitimation, the survival of organizations in the American automobile industry : 1895-1912. *Strategic Management Journal*, 15(1), 29–44
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38(1), 149–152. Journal Article.
- Reichheld, F. (1996). The loyalty effect, harvard business school press. *Harvard, MA*. Journal Article.
- Reichheld, F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46–55. Journal Article.
- Reichheld, F., & Teal, T. (2001). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Retrieved from [http://books.google.com.my/books?hl=en&lr=&id=JzkD\\_ooCNIYC&oi=fnd&pg=PA1&dq=Questioning+the+value+of+the+true+brand+loyalty+distinction&ots=s2S942ioe4&sig=5hth8fhAbnMLsZvMO9g8w\\_U8kk](http://books.google.com.my/books?hl=en&lr=&id=JzkD_ooCNIYC&oi=fnd&pg=PA1&dq=Questioning+the+value+of+the+true+brand+loyalty+distinction&ots=s2S942ioe4&sig=5hth8fhAbnMLsZvMO9g8w_U8kk)
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344. <http://doi.org/10.1016/j.ijresmar.2009.08.001>
- Reio, T. G. (2010). The threat of common method variance bias to theory building. *Human Resource Development Review*, 9(4), 405–411. <http://doi.org/10.1177/1534484310380331>
- Remler, D. K., & Ryzin, G. G. Van. (2015). *Research methods in practice: Strategies for description and causation* (2nd ed.). California, London, New Delhi: Sage.
- Rhodes, R. E., & Courneya, K. S. (2003). Self-efficacy, controllability and intention in the theory of planned behavior: Measurement redundancy or causal independence? *Psychology and Health*, 18(1), 79–91. Journal Article.
- Richardson, J. T. E., Slater, J. B., & Wilson, J. (2007). The national student survey : Development, findings and implications. *Studies in Higher Education*, 32(5), 557–580. <http://doi.org/10.1080/03075070701573757>

- Riscinto Kozub, K., Anthony O'Neill, M., & Palmer, A. (2014). Emotional antecedents and outcomes of service recovery: An exploratory study in the luxury hotel industry. *Journal of Services Marketing*, 28(3), 233–243. <http://doi.org/10.1108/JSM-08-2012-0147>
- Robert, P. (1928). Human migration and the marginal man. *American Journal of Sociology*, 33(6), 285–297.
- Roderick, L. J. ., & Rubin, D. B. (2002). *Statistical analysis with missing data*. Wiley, New York. (2nd ed.). New Jersey: Wiley.
- Rogers, L., & Finlayson, H. (2004). Developing successful pedagogy with information and communications technology: How are science teachers meeting the challenge? *Technology, Pedagogy and Education*, 13(3), 287–306. <http://doi.org/10.1080/14759390400200187>
- Rojas-Mendez, J. I., Vasquez-Parraga, A. Z., Kara, A., & Cerda-Urrutia, A. (2009). Determinants of student loyalty in higher education: A tested relationship approach in Latin America. *Latin American Business Review*, 10(1), 21–39. Journal Article.
- Rolls, E. T. (2008). Emotion , higher-order syntactic thoughts , and consciousness, (2007), 131–167.
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences*. Book, Holt, Rinehart and Winston New York.
- Rossiter, J. R., & Percy, L. (1987). *Advertising and promotion management*. Book, McGraw-Hill Book Company.
- Rowe, A. D., Fitness, J., & Wood, L. N. (2015). University student and lecturer perceptions of positive emotions in learning. *International Journal of Qualitative Studies in Education*, 28(1), 1–20. <http://doi.org/10.1080/09518398.2013.847506>
- Run, E. C. de, & Renganathan, T. selvi. (2013). Promoting Malaysian government universities: potential students' views. *Asian Journal of Business Research*, 3(2), 47–57. <http://doi.org/10.14707/ajbr.1300>
- Rundle-Thiele, S. (2005). Elaborating customer loyalty: Exploring loyalty to wine retailers. *Journal of Retailing and Consumer Services*, 12(5), 333–344. <http://doi.org/10.1016/j.jretconser.2004.11.002>
- Rundle-Thiele, S., & Mackay, M. M. (2001). Assessing the performance of brand loyalty measures. *Journal of Services Marketing*, 15(7), 529–546. <http://doi.org/10.1108/EUM0000000006210>

- Russell-Bennett, R., Härtel, C., & Worthington, S. (2013). Exploring a functional approach to attitudinal brand loyalty. *Australia Marketing Journal*, 21(1), 43–51. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1441358212000481>
- Saad, N. S. M., Yunus, M. M., & Embi, M. A. (2013). Research on international students in traditional host countries and Malaysia: Some potential areas in Malaysia. *Procedia - Social and Behavioral Sciences*, 90, 488–496. Journal Article. <http://doi.org/10.1016/j.sbspro.2013.07.118>
- Sahagun, M. A., & Vasquez-Parraga, A. Z. (2014). Can fast-food consumers be loyal customers, if so how ? Theory, method and findings. *Journal of Retailing and Consumer Services*, 21(2), 168–174. <http://doi.org/10.1016/j.jretconser.2013.12.002>
- Salkind, J. N. (2003). *Exploring research* (3rd ed.). New Jersey: Prentice Hall.
- Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5(4), 472–481. <http://doi.org/10.1177/1745691610373075>.
- Sampaio, C. H., Perin, M. G., Simoes, C., & Kleinowski, H. (2012). Students' trust, value and loyalty: Evidence from higher education in Brazil. *Journal of Marketing for Higher Education*, 22(1), 83–100. <http://doi.org/10.1080/08841241.2012.705796>
- San Martín, H., & Rodríguez del Bosque, I. a. (2008). Exploring the cognitive-affective nature of destination image and the role of psychological factors in its formation. *Tourism Management*, 29(2), 263–277. <http://doi.org/10.1016/j.tourman.2007.03.012>
- Santos, M. C. J., Magramo Jr, C. S., Oguan Jr, F., & Paat, J. N. J. (2014). Establishing the relationship between general self-efficacy and subjective well-being among college studies. *Asian Journal of Management Sciences & Education*, 3(1), 1–12. Journal Article.
- Sataøen, H. L. (2015). Higher education as object for corporate and nation branding: Between equality and flagships. *Journal of Higher Education Policy and Management*, 37(2), 702–717. <http://doi.org/10.1080/1360080X.2015.1102822>
- Sauders, M., Lewis, P., & Thornhill, A. (2003). *Research Method for Business Student* (3rd ed.). New York: Prentice Hall.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. Business (5th ed.). Pearson Education Limited. Retrieved from <http://books.google.com/books?id=u-txtfaCFiEC&pgis=1>

- Sayani, H. (2015). Customer satisfaction and loyalty in the United Arab Emirates banking industry. *International Journal of Bank Marketing*, 33(3), 351–375. <http://doi.org/http://dx.doi.org/10.1108/02683940010305270>
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147–177. <http://doi.org/10.1037/1082-989X.7.2.147>
- Scherbaum, C., & Shockley, K. (2015). *Analysing quantitative data*. Sage Publication Ltd.
- Schertzer, C. B., & Schertzer, S. M. B. (2004). Student satisfaction and retention: A conceptual model. *Journal of Marketing for Higher Education*, 14(1), 79–91. Journal Article.
- Schmitt, B. (2012). The consumer psychology of brands. *Journal of Consumer Psychology*, 22(1), 7–17. Journal Article.
- Schösler, H., de Boer, J., Boersema, J. J., & Aiking, H. (2015). Meat and masculinity among young Chinese, Turkish and Dutch adults in the Netherlands. *Appetite*, 89, 152–159. <http://doi.org/10.1016/j.appet.2015.02.013>
- Schwartz, S. J., Vignoles, V. L., Brown, R., & Zagefka, H. (2014). The identity dynamics of acculturation and multiculturalism: Situating acculturation in context. In *The Identity Dynamics of Acculturation and Multiculturalism* (pp. 57–94).
- Schwartz, S. J., Waterman, A. S., Umaña-Taylor, A. J., Lee, R. M., Kim, S. Y., Vazsonyi, A. T., ... Williams, M. K. (2013). Acculturation and well-being among college students from immigrant families. *Journal of Clinical Psychology*, 69(4), 298–318. <http://doi.org/10.1002/jclp.21847>
- Schwartz, S. J., Weisskirch, R. S., Zamboanga, B. L., Castillo, L. G., Ham, L. S., Huynh, Q.-L., & Park, I. J. K. (2011). Dimensions of acculturation: Associations with health risk behaviors among college students from immigrant families. *Journal of Counseling Psychology*, 58(1), 27. <http://doi.org/10.1037/a0021356>
- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology*, 14(4), 275. Journal Article.
- Schwarzer, R., Bäßler, J., Kwiatek, P., Schröder, K., & Zhang, J. X. (1997). The Assessment of optimistic self-beliefs: Comparison of the German, Spanish, and Chinese versions of the general self-efficacy Scale. *Applied Psychology*, 46(1), 69–88. <http://doi.org/10.1111/j.1464-0597.1997.tb01096.x>

- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. *Measures in Health Psychology: A User Portfolio. Causal and Control Beliefs, 1*, 35–37. Journal Article.
- Segev, S., Ruvio, A. A., & Shoham, A. (2015). Immigrants' approaches to shopping: The role of acculturation in determining Hispanic consumer decision making style. *The Sustainable Global Marketplace, 7*(1), 335.
- Segev, S., Ruvio, A., Shoham, A., & Velan, D. (2014). Acculturation and consumer loyalty among immigrants: A cross-national study. *European Journal of Marketing, 48*(9/10), 1579–1599. <http://doi.org/10.1108/EJM-06-2012-0343>
- Sekaran, U. (2006). *Research methods for business: A skill building approach*. Book, John Wiley & Sons.
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A skill building approach* (5th ed.). Book, UK: John Wiley & Sons.
- Seo, S. (2005). A hermeneutical study of older Korean graduate students' experiences in American higher education: From confucianism to Western educational values. *Journal of Studies in International Education, 9*(2), 164–187. <http://doi.org/10.1177/1028315305274695>
- Seo, S., Phillips, W. J., Jang, J., & Kim, K. (2012). The effects of acculturation and uncertainty avoidance on foreign resident choice for Korean foods. *International Journal of Hospitality Management, 31*(3), 916–927. Journal Article. <http://doi.org/10.1016/j.ijhm.2011.10.011>
- Severi, E., & 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), 125–137. Journal Article.
- Sevier, R. A. (1994). Image is everything strategies for measuring, changing, and maintaining your institution's image. *College and University, 69*(2), 60–75. Journal Article.
- Shah, A. (2009). The impact of quality on satisfaction, revenue, and cost as perceived by providers of higher education. *Journal of Marketing for Higher Education, 19*(2), 125–141. <http://doi.org/10.1080/08841240903451324>
- Shahijan, M. K., Rezaei, S., & Preece, C. N. (2016). Developing a framework of internationalisation for higher education institutions in Malaysia : A SWOT analysis. *International Journal Management in Education, 10*(2), 145–173.
- Sharon, L. L. (2009). *Sampling: Design and analysis* (2nd ed.). Boston USA: Brooks/Cole Cengage Learning.

- Sheila, T. (2014). This is Malaysia. You have to follow the custom here: Narratives of the student and academic experience in international higher education in Malaysia. *Journal of Education for Teaching*, (ahead-of-print), 1–15. Journal Article.
- Shen, S., Guo, J., & Wu, Y. (2014). Investigating the structural relationships among authenticity, loyalty, involvement, and attitude toward world cultural heritage sites: An empirical study of Nanjing Xiaoling Tomb, China. *Asia Pacific Journal of Tourism Research*, 19(1), 103–121. Journal Article.
- Sherer, M., & Adams, C. H. (1983). Construct validation of the self-efficacy Scale. *Psychological Reports*, 53(3), 899–902. <http://doi.org/10.2466/pr0.1983.53.3.899>
- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51(2), 663–671. <http://doi.org/10.2466/pr0.1982.51.2.663>
- Sherri H.Kennedy. (1977). Nurturing corporate image. *European Journal of Marketing*, 11(3), 119–164.
- Shi, Y., Prentice, C., & He, W. (2014). Linking service quality, customer satisfaction and loyalty in casinos, does membership matter? *International Journal of Hospitality Management*, 40, 81–91. <http://doi.org/10.1016/j.ijhm.2014.03.013>
- Sia, J. K. M. (2013). University Choice: Implications for marketing and positioning. *Education*, 3(1), 7–14. Journal Article.
- Simonson, I., Bettman, J. R., Kramer, T., & Payne, J. W. (2013). Directions for judgment and decision making research based on comparison selection: Reply to Arkes, Johnson, and Kardes. *Journal of Consumer Psychology*, 23(1), 161–163. <http://doi.org/10.1016/j.jcps.2012.10.006>
- Sin, S.-C. J., & Kim, K.-S. (2013). International students' everyday life information seeking: The informational value of social networking sites. *Library & Information Science Research*, 35(2), 107–116. <http://doi.org/10.1016/j.lisr.2012.11.006>
- Siti Falindah Padlee, Abdul Razak Kamaruddin, & Rohaizat Baharun. (2010). International students' choice behavior for higher education at Malaysian private universities. *International Journal of Marketing Studies*, 2(2), 202–211.
- Siti Falindah Padlee, & Azizul Yadi Yaacop. (2013). Service quality of Malaysian higher educational institutions a conceptual framework. *International Journal of Business, Economics and Law*, 2(1), 60–69.

- Slama, E. M., & Tashchian, A. (1987). Validating the S-O-R paradigm for Consumer involvement with a convenience good. *Academic of Marketing Science Review*, 15(1), 36–45.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality & Social Psychology*, 48(4), 813–838. <http://doi.org/10.1037/0022-3514.48.4.813>
- So, K. K. F., King, C., Sparks, B., & Wang, Y. (2014). The role of customer engagement in building consumer loyalty to tourism brands. *Journal of Travel Research*, 1–15. Retrieved from <http://jtr.sagepub.com/content/early/2014/07/04/0047287514541008.abstract>
- Söderlund, M. (2006). Measuring customer loyalty with multi-item scales: A case for caution. *International Journal of Service Industry Management*, 17(1), 76–98. <http://doi.org/10.1108/09564230610651598>
- Soutar, G. N., & Turner, J. P. (2002). Students' preferences for university: A conjoint analysis. *International Journal of Educational Management*, 16(1), 40–45. Journal Article.
- Spake, D. F., Joseph, M., & Weldy, T. (2010). Public university branding: What do students want to know about a prospective institution and how do they get information. *The Journal Academic Administration in Higher Education*, 6(1), 9–16.
- Spector, P. . (1992). *Summated rating scales construct: Sage university papers series: Quantitative applications in the social science*. (Michael S. Lewis-Beck, Ed.). Sara Miller McCune, Sage Publication.
- Spector, P. E. (2006). Method variance in organizational research. *Organizational Research Methods*, 9(2), 221–232. <http://doi.org/10.1177/1094428105284955>
- Stahl, F., Heitmann, M., Lehmann, D. R., & Neslin, S. a. (2012). The impact of brand equity on customer acquisition, retention, and profit margin. *Journal of Marketing*, 76, 44–63. <http://doi.org/10.1509/jm.10.0522>
- Stan, V. (2015). Antecedents of customer loyalty in the retailing sector: The impact of switching costs. *Journal of Applied Business Research*, 31(2), 371–382.
- Stangor, C., Carr, C., & Kiang, L. (1998). Activating stereotypes undermines task performance expectations. *Journal of Personality and Social Psychology*, 75(5), 1191–1197. <http://doi.org/10.1037/0022-3514.75.5.1191>

- Stone, M. (1974). Cross-validators choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B ( Methodological)*, 36(2), 111–147. Retrieved from <http://www.jstor.org/stable/2984809>
- Støren, L. A., & Aamodt, P. O. (2010). The quality of higher education and employability of graduates. *Quality in Higher Education*, 16(3), 297–313. <http://doi.org/10.1080/13538322.2010.506726>
- Su, H.-J., Cheng, K.-F., & Huang, H.-H. (2011). Empirical study of destination loyalty and its antecedent: The perspective of place attachment. *The Service Industries Journal*, 31(16), 2721–2739. <http://doi.org/10.1080/02642069.2010.511188>
- Su, L., Swanson, S. R., & Chen, X. (2015). The impact of perceived service fairness and quality on the behavioral intentions of Chinese hotel guests: The mediating role of consumption emotions. *Journal of Travel & Tourism Marketing*, 1–15. <http://doi.org/10.1080/10548408.2015.1008668>
- Sudman, S. (1980). Improving Sampling the of shopping Center Sampling. *Journal of Marketing Research*, 17(4), 423–431.
- Sui, J. J., & Baloglu, S. (2003). The role of emotional commitment in relationship marketing: An empirical investigation of a loyalty model for casinos. *Journal of Hospitality & Tourism Research*, 27(4), 470–489.
- Suinn, M. . R., Richard-Figueroa, Lew S, K., & Vigil.P. (1987). *The Suuin -Lew asian self-identity acculturation Scale: Educational and psychological measurement* (Report).
- Sultan, P., & Wong, H. Y. (2010). Service quality in higher education- a review and research agenda. *International Journal of Quality and Service Sciences*, 2(2), 259–272.
- Sultan, P., & Wong, H. Y. (2011). International review of business research papers service quality in a higher education context : Antecedents and dimensions. *International Review of Business Research Papers*, 7(2), 11–20.
- Sultan, P., & Yin Wong, H. (2013). Antecedents and consequences of service quality in a higher education context. *Quality Assurance in Education*, 21(1), 70–95. <http://doi.org/10.1108/09684881311293070>
- Sung, Y., & Kim, J. (2010). Effects of brand personality on brand trust and brand affect. *Psychology & Marketing*, 27(7), 639–661. <http://doi.org/10.1002/mar>



- Sung, & Yang, S.-U. (2008). Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research*, 20(4), 357–376. <http://doi.org/10.1080/10627260802153207>
- Suomi, K., Kuoppakangas, P., Hytti, U., Hampden-Turner, C., & Kangaslahti, J. (2014). Focusing on dilemmas challenging reputation management in higher education. *The International Journal of Educational Management*, 28(4), 461–478. <http://doi.org/http://dx.doi.org/10.1108/IJEM-04-2013-0046>
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics. Using multivariate statistics* (5th ed.). New York: Pearson. <http://doi.org/10.1037/022267>
- Taff, R. (1977). Coping with unfamiliar culture. *Studies in Cross-Cultural Psychology*, 121–153. Journal Article.
- Tan, Y. S., & Goh, S. K. (2014). International students, academic publications and world university rankings: The impact of globalisation and responses of a Malaysian public university. *Higher Education*, 68(4), 489–502. <http://doi.org/10.1007/s10734-014-9724-2>
- Tang, S. F. (2012). Academic quality characteristics and Satisfaction : An empirical survey among the students of two Malaysian private universities. *Academic Research International*, 2(1), 213–228. Retrieved from [www.savap.org.pk/journals/ARInt./Vol.2\(1\)/2012\(2.1-26a\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.2(1)/2012(2.1-26a).pdf)
- Tas, A., & Ergin, E. A. (2012). Key factors for student recruitment: The issue of university branding. *International Business Research*, 5(10), p146. Journal Article.
- Taylor, S. a., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163–178. [http://doi.org/10.1016/0022-4359\(94\)90013-2](http://doi.org/10.1016/0022-4359(94)90013-2)
- Temple, P. (2006). Branding higher education: illusion or reality? *Perspectives: Policy and Practice in Higher Education*, 10(1), 15–19. <http://doi.org/10.1080/13603100500508215>
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, 48(1), 159–205. <http://doi.org/10.1016/j.csda.2004.03.005>
- Tepeci, M. (1999). Increasing brand loyalty in the hospitality industry increasing brand loyalty in the hospitality industry. *International Journal of Contemporart Hospitality Management*, 11(5), 223–230.

- Tham, S. Y. (2010). Trade in higher education services in Malaysia: Key policy challenges. *Higher Education Policy*, 23(1), 99–122. Journal Article.
- Tham, S. Y. (2011). *Exploring access and equity in Malaysia's private higher education*. Retrieved from [www.adbi.org](http://www.adbi.org)
- Tham, S. Y., & Kam, A. J. Y. (2008). Internationalising higher education: Comparing the challenges of different higher education institutions in Malaysia. *Asia Pacific Journal of Education*, 28(4), 353–367. Journal Article.
- Tham, S. Y., Mahmud, N. K. N., & Alavi, R. (2013). Assessing policies for attracting international students: Case of Malaysia. *Asia Pacific Journal of Education*, 33(1), 112–126. <http://doi.org/10.1080/02188791.2012.759536>
- Theng So, J., Parsons, A. G., & Yap, S.-F. (2013). Corporate branding, emotional attachment and brand loyalty: The case of luxury fashion branding. *Journal of Fashion Marketing and Management*, 17(4), 403–423. <http://doi.org/10.1108/JFMM-03-2013-0032>
- Thompson, F. M., Newman, A., & Liu, M. (2014). The moderating effect of individual level collectivist values on brand loyalty. *Journal of Business Research*, 67(11), 2437–2446. <http://doi.org/10.1016/j.jbusres.2014.02.011>
- Thompson, Rindfleisch, A., & Arsel, Z. (2006). Emotional branding and the strategic value of the doppelganger brand image. *Journal of Marketing*, 70(1), 50–64.
- Thomson, M. (2006). Human brands : Investigating antecedents to consumers ' strong attachments to celebrities. *Journal of Marketing*, 70(3), 104–119.
- Thomson, M., MacInnis, D., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, 15(1), 77–91. Retrieved from <http://www.sciencedirect.com/sci-hub.org/science/article/pii/S1057740805700954>
- Thomson, & Hoffman-Goetz, L. (2009). Defining and measuring acculturation: A systematic review of public health studies with Hispanic populations in the United States. *Social Science & Medicine*, 69(7), 983–991. Journal Article.
- Timbol, M. P. F., & Caballero, R. T. (2014). Culture and tradition toward funeral services: Creation of a brand loyalty model in the Philippine. *International Journal of Social Sciences and Entrepreneurship*, 1(9), 1–12.
- Tojib, D. R., Sugianto, L.-F., & Sendjaya, S. (2008). User satisfaction with business-to-employee portals: conceptualization and scale development. *European Journal of Information Systems*, 17(6), 649–667. <http://doi.org/10.1057/ejis.2008.55>

- Tompson, R., Barcalay, D., & Hinggin, C. (1995). The partial least squares approach to causal modeling: Personal computer adoption and use as illustration. *Technology Studies*, 2(2), 285–309.
- Tran, L. T. (2012). Engaging international students. *Insights Blog*, 1–3. Journal Article.
- Tsai, S. (2014). Meaning threats heighten consumer attachment: implications for global brand management. *European Management Journal*, 32(6), 991–1000. <http://doi.org/10.1016/j.emj.2014.04.005>
- Tushnet, M. V. (1983). Following the rule laid down: A critique of interpretivism and neutral Principles. *Havard Law Review*, 96(4), 781–827.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application*, 11(2), 5–40. Retrieved from [http://iris.ebs.edu.sci-hub.org/accessdb/WWW/iris\\_pub\\_web.nsf/wwwPublAuthorSingleEng/A58520D5E3C484DCC1257C50007F8697/\\$file/Urbach et al. 2010 Structural Equation Modeling in IS Research Using PLS.pdf](http://iris.ebs.edu.sci-hub.org/accessdb/WWW/iris_pub_web.nsf/wwwPublAuthorSingleEng/A58520D5E3C484DCC1257C50007F8697/$file/Urbach%20et%20al.%202010%20Structural%20Equation%20Modeling%20in%20IS%20Research%20Using%20PLS.pdf)
- Uslu, A., Durmus, B., Tasdemir, S., Durmuş, B., & Taşdemir, S. (2013). Word of mouth, brand loyalty, acculturation and the turkish ethnic minority group in Germany. *Procedia-Social and Behavioral Sciences*, 99, 455–464. Journal Article. <http://doi.org/10.1016/j.sbspro.2013.10.514>
- Valencia, E. Y., & Johnson, V. (2006). Latino students in North Carolina acculturation, perceptions of school environment, and academic aspirations. *Hispanic Journal of Behavioral Sciences*, 28(3), 350–367. Journal Article.
- van Beuningen, J., de Ruyter, K., Wetzels, M., & Streukens, S. (2009). Customer self-efficacy in technology-based self-service. *Journal of Service Research*, 11(4), 407–428. <http://doi.org/10.1177/1094670509333237>
- van de Ridder, J. M. M., Peters, C. M. M., Stokking, K. M., de Ru, J. A., & Ten Cate, O. T. J. (2014). Framing of feedback impacts student's satisfaction, self-efficacy and performance. *Advances in Health Sciences Education : Theory and Practice*, 20(3), 803–16. <http://doi.org/10.1007/s10459-014-9567-8>
- Van Dinther, M., Dochy, F., Segers, M., & Braeken De, J. (2014). Student perceptions of assessment and student self-efficacy in competence- based education. *Educational Studies*, 40(3), 330–351. <http://doi.org/10.1080/03055698.2014.898577>
- Vander Schee, B. (2010). Students as consumers: Programming for brand loyalty. *Services Marketing Quarterly*, 32(1), 32–43. <http://doi.org/10.1080/15332969.2011.534331>

- Vaus, D. A. d. (2001). *Research design in social research*. Sage Publications.
- Veasna, S., Wu, W.-Y., & Huang, C.-H. (2013). The impact of destination source credibility on destination satisfaction: The mediating effects of destination attachment and destination image. *Tourism Management*, *36*, 511–526. Journal Article.
- Velazquez, B. M., Saura, I. G., & Molina, M. E. R. (2014). Conceptualizing and measuring loyalty : Towards a conceptual model of tourist loyalty antecedents. *Academic Paper*, *17*(1), 65–81. <http://doi.org/10.1177/1356766710391450>
- Vijaygopal, R., Dibb, S., & Meadows, M. (2013). Does acculturation affect brand preference ? A study of british Indians. *European Advanced in Consumer Research*, *10*, 51–63.
- Vincent, W. E. K., & Periyayya, T. (2013). Student expectations branding strategies among private institutions of higher education in Malaysia. *Malaysia Journal of Chinese Studies*, *2*(1), 69–81. Journal Article.
- Vinicius, F., & Bergamo, D. M. (2011). Students ' loyalty and retention pattern for higher education institutions : A theoretical study based on the relationship marketing. *Brazilian Business Review*, *8*(2), 42–65.
- Vinitzky, G., & Mazursky, D. (2011). The effects of cognitive thinking style and ambient scent on online consumer approach behavior, experience approach behavior, and search motivation. *Psychology and Marketing*, *28*(5), 496–519. <http://doi.org/10.1002/mar.20398>
- Vlachos, P. A., Theotokis, A., Pramataris, K., & Vrechopoulos, A. (2010). Consumer-retailer emotional attachment: Some antecedents and the moderating role of attachment anxiety. *European Journal of Marketing*, *44*(9/10), 1478–1499. Journal Article.
- Vlachos, P. A., & Vrechopoulos, A. P. (2012). Consumer-retailer love and attachment: Antecedents and personality moderators. *Journal of Retailing and Consumer Services*, *19*(2), 218–228. <http://doi.org/10.1016/j.jretconser.2012.01.003>
- Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer equity drivers and future sales. *Journal of Marketing*, *72*(6), 98–108. Journal Article.
- Voss, R., Gruber, T., & Szmigin, I. (2007). Service quality in higher education: The role of student expectations. *Journal of Business Research*, *60*(9), 949–959. <http://doi.org/10.1016/j.jbusres.2007.01.020>

- Wæraas, A., & Solbakk, M. N. (2009). Defining the essence of a university: Lessons from higher education branding. *Higher Education*, 57(4), 449–462. <http://doi.org/10.1007/s10734-008-9155-z>
- Wagner, K., & Fard, P.-Y. (2009). Factors influencing Malaysian students' intention to study at a higher educational institution. *E-Leader Kuala Lumpur*. Journal Article.
- Walls, A. R., Okumus, F., & Wang, Y. (Raymond). (2011). Cognition and affect interplay: A framework for the tourist vacation decision-making process. *Journal of Travel & Tourism Marketing*, 28(5), 567–582. <http://doi.org/10.1080/10548408.2011.588121>
- Walsh, G., Shiu, E., Hassan, L. M., Michaelidou, N., & Beatty, S. E. (2011). Emotions, store-environmental cues, store-choice criteria, and marketing outcomes. *Journal of Business Research*, 64(7), 737–744. <http://doi.org/10.1016/j.jbusres.2010.07.008>
- Wan, R., Md Nordin, S., & Razali, R. (2013). International students cultural experiences: Exploring socio-cultural and academic adjustment in Malaysian universities. *Recent Advances in Modern Educational Technologies*, 1(1), 31–37. Journal Article.
- Wang, C., Harris, J., & Patterson, P. (2013). The roles of habit, self-efficacy, and satisfaction in driving continued use of self-service technologies: A Longitudinal Study. *Journal of Service Research*, 16(3), 400–414. <http://doi.org/10.1177/1094670512473200>
- Wang, C.-C., Chen, C.-T., & Chen, C.-F. (2012). Investigation on the influence of the brand image of higher educational institutions on satisfaction and customer lifetime value. *Educational Studies*, 38(5), 593–608. Journal Article.
- Wang, Y. S., Yeh, C. H., & Liao, Y. W. (2013). What drives purchase intention in the context of online content services? the moderating role of ethical self-efficacy for online piracy. *International Journal of Information Management*, 33(1), 199–208. <http://doi.org/10.1016/j.ijinfomgt.2012.09.004>
- Ward, C., & Kus, L. (2012). Back to and beyond Berry's basics: The conceptualization, operationalization and classification of acculturation. *International Journal of Intercultural Relations*, 36(4), 472–485. Journal Article.
- Watkins, B. A., & Gonzenbach, W. J. (2013). Assessing university brand personality through logos : An analysis of the use of academics and athletics in university branding. *Journal of Marketing for Higher Education*, 23(1), 15–33. <http://doi.org/10.1080/08841241.2013.805709>

- Watson, M. Z., & Ruoh-Nan Yan. (2013). An exploratory study of decision process of fast versus slow fashion consumer. *Journal of Fashion Marketing and Management: An International Journal*, 17(2), 141–159.
- Weber, K., Hsu, C. H. C., & Sparks, B. a. (2014). Consumer responses to service failure: The influence of acculturation. *Cornell Hospitality Quarterly*, 55(3), 300–313. <http://doi.org/10.1177/1938965514535246>
- Weber, K., Hsu, C., & Sparks, B. (2015). Same but different: Chinese-American and mainland Chinese consumers' perceptions of and behavior in a service failure situation. *Journal of Travel & Tourism Marketing*, 1–26. <http://doi.org/10.1080/10548408.2015.1064060>
- Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult attachment, social self-efficacy, self-disclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology*, 52(4), 602. Journal Article.
- Wetzels, M., Odekerken-Schröder, G., & van Oppen, C. (2009). Using pls path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 33(1), 177–195. <http://doi.org/Article>
- White, C. J. (2011). On the evaluation of teaching and learning in higher education: A multicultural inquiry. *Assessment and Evaluation in Higher Education*, 36(6), 643–656. <http://doi.org/10.1080/02602931003632407>
- Wilkins, S., & Huisman, J. (2013). Student evaluation of university image attractiveness and its impact on student attachment to international branch campuses. *Journal of Studies in International Education*, 17(5), 607–623. <http://doi.org/10.1177/1028315312472984>
- Wilkins, S., & Huisman, J. (2014). Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Studies in Higher Education*, 1(1), 1–17. <http://doi.org/10.1080/03075079.2014.881347>
- Williams Jr, R., Osei, C., & Omar, M. (2012). Higher education institution branding as a component of country branding in Ghana: Renaming Kwame Nkrumah University of Science and Technology. *Journal of Marketing for Higher Education*, 22(1), 71–81. Journal Article.
- Wilson, K. L., Lizzio, A., & Ramsden, P. (1997). The development, validation and application of the course experience questionnaire. *Studies in Higher Education*, 22(1), 33–53. Journal Article.

- Wong, A., & Sohal, A. (2002). An examination of the relationship between trust, commitment and relationship quality. *International Journal of Retail & Distribution Management*, 30(1), 34–50. <http://doi.org/10.1108/09590550210415248>
- Woodall, T., Hiller, A., & Resnick, S. (2012). Making sense of higher education : Students as consumers and the value of the university experience. *Studies in Higher Education*, 39(1), 48–67. <http://doi.org/10.1080/03075079.2011.648373>
- Worthington, S. (2009). A tri-dimensional approach for auditing brand loyalty. *Journal of Brand ...*, 17(4), 243–253. Retrieved from <http://www.palgrave-journals.com/bm/journal/v17/n4/abs/bm200924a.html>
- Worthington, S., Russell-Bennett, R., & Hartel, C. (2009). A tri-dimensional approach for auditing brand loyalty. *Journal of Brand Management*, 17(4), 243–253. Retrieved from <http://core.kmi.open.ac.uk/download/pdf/10893582.pdf>
- Wright, S. L., Perrone • McGovern, K. M., Boo, J. N., & White, A. V. (2014). Influential factors in academic and career self efficacy: Attachment, supports, and career barriers. *Journal of Counseling & Development*, 92(1), 36–46. Journal Article.
- Wu, G. (2011). Country image, informational influence, collectivism/individualism, and brand loyalty: Exploring the automobile purchase patterns of Chinese Americans. *Journal of Consumer Marketing*, 28(3), 169–177. Journal Article.
- Wu, Lin, Y., & Hsu, F. (2011). An empirical synthesizing the effects of service quality, perceived value, corporate image and customer satisfaction on behavioral intentions in the transport industry: A case of Taiwan high-speed rail. *Innovative Marketing*, 7(3), 83–99. Retrieved from [http://www.businessperspectives.org/journals\\_free/im/2011/im\\_en\\_2011\\_03\\_Wu.pdf](http://www.businessperspectives.org/journals_free/im/2011/im_en_2011_03_Wu.pdf)
- Wymer, W., & Alves, H. M. B. (2013). Scale development research in nonprofit management & marketing: A content analysis and recommendation for best practices. *International Review on Public and Nonprofit Marketing*, 10(1), 65–86. <http://doi.org/10.1007/s12208-012-0093-1>
- Yavas, U., & Shemwell, D. J. (1996). Graphical Representation of University Image: A Correspondence Analysis. *Journal of Marketing for Higher Education. Journal of Marketing for Higher Education*, 7(2), 75–84. Journal Article.
- Yi, Y., & Gong, T. (2008). The electronic service quality model: The moderating effect of customer self-efficacy. *Psychology & Marketing*, 25(7), 587–601. <http://doi.org/10.1002/mar>

- Yieh, K., Chiao, Y.-C., & Chiu, Y.-K. (2007). Understanding the antecedents to customer loyalty by applying structural equation modeling. *Total Quality Management & Business Excellence*, 18(3), 267–284. <http://doi.org/10.1080/14783360601152400>
- Yim, C., Tse, D., & Chan, K. (2008). Strengthening customer loyalty through intimacy and passion: Roles of customer-firm affection and customer-staff relationships in services. *Journal of Marketing Research*, 45(6), 741–756. Retrieved from <http://journals.ama.org.sci-hub.org/doi/abs/10.1509/jmkr.45.6.741>
- Yong Ki, L., Lee, C.-K., Choi, J., Yoon, S.-M., & Hart, R. J. (2014). Tourism's role in urban regeneration: examining the impact of environmental cues on emotion, satisfaction, loyalty, and support for Seoul's revitalized Cheonggyecheon stream district. *uJournal of Sustainable Tourism*, 22(5), 726–749. <http://doi.org/10.1080/09669582.2013.871018>
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1–14. Journal Article.
- Yoon, E., Langrehr, K., & Ong, L. Z. (2011). Content analysis of acculturation research in counseling and counseling psychology: A 22-year review. *Journal of Counseling Psychology*, 58(1), 83. Journal Article.
- Yorke, M., Orr, S., & Blair, B. (2014). Hit by a perfect storm? Art & design in the national student survey. *Studies in Higher Education*, 39(10), 1788–1810. <http://doi.org/10.1080/03075079.2013.806465>
- Yu, W., & Shu, W. (2011). An investigation into the acculturation strategies of Chinese students in Germany. *Intercultural Communication Studies*, 20(2), 190–210.
- Yu, & Dean, A. (2001). The contribution of emotional satisfaction to consumer loyalty. *International Journal of Service Industry Management*, 12(3), 234–250. Journal Article.
- Yusliza, M. . Y. (2010). Demographic differences among international undergraduate students at a Malaysian public university. *Global Journal of Management And Business Research*, 10(2), 36–41. Journal Article.
- Yusliza, M. . Y., & Chelliah, S. (2010). Adjustment in international students in Malaysian public university. *International Journal of Innovation, Management and Technology*, 1(3), 275–278. Journal Article.
- Yusoff, M., Mcleay, F., & Woodruffe-burton, H. (2015). Quality assurance in education dimensions driving business student satisfaction in higher education. *Quality Assurance in Education*, 23(1), 86–104.



- Žabkar, V., Brenčič, M. M., & Dmitrović, T. (2010). Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management*, 31(4), 537–546. <http://doi.org/10.1016/j.tourman.2009.06.005>
- Zamperi, A. S. (2014). Evaluating student satisfaction of quality at international branch campuses. *Assessment & Evaluation in Higher Education*, 40(4), 37–41. <http://doi.org/10.1080/02602938.2014.925082>
- Zeelenberg, M., Nelissen, R. M. A., Breugelmans, S. M., & Pieters, R. (2008). On emotion specificity in decision making : Why feeling is for doing. *Judgment and Decision Making*, 3(1), 18–27.
- Zeithaml, A., Berry, L., & Parasuraman, A. (1996). Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31–46.
- Zhao, X., Jr., J. G. L., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206. <http://doi.org/10.1086/651257>
- Zhao, X., Mattila, A. S., & Tao, L.-S. E. (2008). The role of post-training self-efficacy in customers' use of self service technologies. *International Journal of Service Industry Management*, 19(4), 492–505. <http://doi.org/10.1108/09564230810891923>
- Zheng, X., MK, C., Cheung, M. K. ., & Liang, L. L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites: *Information Technology & People*, 28(1), 1.
- Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2012). *Business research methods*. Book, Cengage Learning.
- Zuria, Amat, S., Rahman, S., & Ishak, N. M. (2010). Challenges for international students in Malaysia: Culture, climate and care. *Procedia-Social and Behavioral Sciences*, 7, 289–293. Journal Article.

## APPENDIX 1

### A. GENERAL ASSESSMENT OF THE QUESTIONNAIRE FORMAT

PLEASE GIVE YOUR BEST OPINION ABOUT THE FOLLOWING FEATURES OF THE SURVEY INSTRUMENT. THE FEEDBACK/COMMENT CAN BE WRITTEN AT THE PROVIDED COLUMN.

1. ALIGNMENT OF THE SURVEY TO THE PURPOSE OF THE STUDY

---

---

2. ALIGNMENT OF THE SURVEY TO THE CONCEPTUAL FRAMEWORK

---

---

3. CLARITY OF INSTRUCTIONS TO PARTICIPANTS

---

---

4. GENERAL FORMAT AND APPEARANCE OF THE STUDY

---

### B. EVALUATION OF RELEVANCY, FORMAT AND MEASUREMENT OF SURVEY ITEMS

PLEASE CHECK "YES" OR "NO" TO INDICATE YOUR OPINION ABOUT THE RELEVANCY, FORMAT ADEQUACY AND MEASUREMENT APTNESS OF ALL VARIABLES AND THEIR RESPECTIVE ITEMS. ALSO WRITE A BRIEF COMMENT ABOUT WHAT SHOULD BE DONE TO IMPROVE QUALITY OF VARIABLE OR ITEM THAT YOU THINK NEEDS IMPROVEMENT. (FORMAT ENTAILS LANGUAGE, CLARITY AND LENGTH OF THE ITEM).

CONTINUE FROM PREVIOUS PAGE

Number of items/question	Expert evaluation						Recommendation
	Relevancy to the study		Format adequacy		Measurement		
	Yes	No	Yes	No	Yes	No	
Example No xx		√		√	√		NONE

**C. STATEMENT OF APPROVAL/DISAPPROVAL**

THE CONTENT OF THE SURVEY INSTRUMENT OF THIS STUDY IS HEREBY (PLEASE TICK √):

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

APPROVED

APPROVED WITH MINOR REVISION

APPROVED WITH MAJOR REVISION

NOT APPROVED

FINAL COMMENT:

---



---



---

NAME OF THE EXPERT PANEL MEMBER : \_\_\_\_\_

TITLE/POSITION : \_\_\_\_\_

FIELD OF WORK : \_\_\_\_\_

SIGNATURE : \_\_\_\_\_

DATE : \_\_\_\_\_

## APPENDIX II



OTHMAN YEOP ABDULLAH  
GRADUATE SCHOOL OF BUSINESS  
Universiti Utara Malaysia  
06010 UUM SINTOK  
KEDAH DARULAMAN  
MALAYSIA



Tel: 604-928 7118/7119/7130  
Faks (fax): 604-928 7160  
Laman Web (Web): [www.oyagsb.uum.edu.my](http://www.oyagsb.uum.edu.my)

KEDAH AMAN MAKMUR • BERSAMA MEMACU TRANSFORMASI

UUM/OYAGSB/K-14  
15 December 2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

### LETTER FOR DATA COLLECTION AND RESEARCH WORK

This is to certify that **Mona Fairuz Ramli (Matric no: 94464)** is a bonafied student of Doctor of Philosophy (PhD), Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia. She is conducting a research entitled "**The factors effect of brand loyalty : A study on Malaysia Public Higher Education Institutions.**" under the supervision of Assoc. Prof. Dr. Abdul Rahim B Othman.

In this regard, I hope that you could kindly provide assistance and cooperation for her to successfully complete the research. All the information gathered will be strictly used for academic purposes only.

Your cooperation and assistance is very much appreciated.

Thank you.

"SCHOLARSHIP, VIRTUE, SERVICE"

Yours faithfully

  
**ROZITA BINI RAMLI**  
Assistant Registrar  
for Dean  
Othman Yeop Abdullah Graduate School of Business

c.c - Supervisor  
- Student's File (94464)

Universiti Pengurusan Terkemuka  
The Eminent Management University

### APPENDIX III



**Dear Respondents,**

I am a PhD student of University Utara Malaysia (UUM). I am conducting a study on **“Determinants of Brand Loyalty in public higher education institutions in Malaysia”**.

This questionnaire is designed to study the factors influence brand loyalty at public higher education institutions in Malaysia.

I would appreciate if you could spare some time and thought in completing this survey questionnaire. I hope that you would cooperate in completing the questionnaire to the best of your ability.

This questionnaire consists of two parts. Part one consists of questions about factors that influence the brand loyalty in Malaysia public higher education. Part two comprises of questions related to the demographic profile of your Institutions.

Your response will be treated as confidential and only used for research purposes.

Thank you for your willingness to participate in this study.

Sincerely,

.....

(Mona Fairuz Binti Ramli)  
University Utara Malaysia  
Sintok, Kedah.  
Email : [monafairuz78@gmail.com](mailto:monafairuz78@gmail.com)

## APPENDIX IV

### (Questionnaire)

#### Part One:

#### Factors Influencing Brand Loyalty.

Please indicate your respond categories. For each statement please tick (/) on the appropriate number to indicate whatever it is.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

#### 1. Please rate for the University Image

Listed below are the statements about perception of international students regarding image of current university. The following scales to indicate how much agree or disagree with each of the statement. Please tick (/) your answers.

No.	Statement for the university image	Score						
<i>Covenant (mission and vision)</i>								
UI.1	Graduates of this university have excellent job and career prospects.	1	2	3	4	5	6	7
UI.2	A degree from this university has a high status in the outside world.	1	2	3	4	5	6	7
UI.3	A degree from this university will be useful to a person throughout his or her entire life.	1	2	3	4	5	6	7
UI.4	This university is committed to being among the top universities in this sector.	1	2	3	4	5	6	7
UI.5	This university has a clear and desirable mission	1	2	3	4	5	6	7
<i>Symbolic and external representation</i>								
UI.6	This university name and logo is memorable.	1	2	3	4	5	6	7
UI.7	The university name and logo tells me a lot about the nature of the university.	1	2	3	4	5	6	7
UI.8	The things I have heard about this university from newspaper reports, television, conversations with other people, etc. present a good image of the university.	1	2	3	4	5	6	7

<b><i>Covenant (learning and social environment)</i></b>								
UI.9	This university has excellent student support services (help with study skill, academic writing, etc.)	1	2	3	4	5	6	7
UI.10	This university has a lively social environment with many opportunities to make new friends.	1	2	3	4	5	6	7
UI.11	This university has an excellent library, information technology, and other learning facilities.	1	2	3	4	5	6	7
UI.12	The university has teaching and support staff who are easily accessible to students.	1	2	3	4	5	6	7
UI.13	The university has many clubs and societies.	1	2	3	4	5	6	7
UI.14	The university has excellent sports and leisure facilities.	1	2	3	4	5	6	7
<b><i>Quiddity</i></b>								
UI.15	The university is located in an area that is convenient for me.	1	2	3	4	5	6	7
UI.16	The university has academic entry requirements that are appropriate for someone like me.	1	2	3	4	5	6	7
UI.17	Lecturers of the university have impressive research and publication records.	1	2	3	4	5	6	7
UI.18	The university has a proportion of foreign students that I find desirable.	1	2	3	4	5	6	7
UI.19	The university has a physically attractive campus.	1	2	3	4	5	6	7
UI.20	The university is located in an area that is physically safe.	1	2	3	4	5	6	7
UI.21	The university is located in geographical area that has many attractions and entertainment facilities.	1	2	3	4	5	6	7

2. Please rate for the **Perceived Quality**.

Listed below are the statements about the overall judgement of teaching quality at current university. The following scales to indicate how much agree or disagree with each of the statements. Please tick (/) your answers.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

No.	Statement for the Perceived Quality	Score						
<b><i>The teaching on my course</i></b>								
PQ.1	This university lecturer is good at explaining things.	1	2	3	4	5	6	7
PQ.2	This university lecturer has made the subject interesting.	1	2	3	4	5	6	7
PQ.3	This university lecturer is enthusiastic about what they are teaching in class.	1	2	3	4	5	6	7
PQ.4	The course at this university is intellectually encouraging.	1	2	3	4	5	6	7
<b><i>Organisation and management</i></b>								
PQ.5	The timetable works efficiently as far as my activities are concerned.	1	2	3	4	5	6	7
PQ.6	Any changes in the course or teaching have always been communicated effectively to the student.	1	2	3	4	5	6	7
PQ.7	This university course is well organized and is running smoothly.	1	2	3	4	5	6	7
<b><i>Assessment and feedback</i></b>								
PQ.8	Lecturer of the university give prompt feedback on student's work.	1	2	3	4	5	6	7
PQ.9	I have received detailed comments on my work from my lecturer during in class.	1	2	3	4	5	6	7
PQ.10	Feedback on my work has helped me clarify things I did not understand.	1	2	3	4	5	6	7
PQ.11	The criteria used in marking have been clarified in advance by lecturer.	1	2	3	4	5	6	7
PQ.12	This university assessment arrangements and marking have been fair for all students.	1	2	3	4	5	6	7
<b><i>Personal development</i></b>								
PQ.13	This university course has helped me to present myself with confidence.	1	2	3	4	5	6	7
PQ.14	My communication skills have improved	1	2	3	4	5	6	7



	since I study at this university.							
PQ.15	As a result of the course, I feel confident in tackling unfamiliar problems.	1	2	3	4	5	6	7
<b>Academic support</b>								
PQ.16	I have received sufficient advice and support with my studies.	1	2	3	4	5	6	7
PQ.17	I have been able to contact lecturers when I needed to.	1	2	3	4	5	6	7
PQ.18	Whenever I need advice regarding my study, the university staff are able to give me a good ones.	1	2	3	4	5	6	7
<b>Learning resources</b>								
PQ.19	The library resources are good enough for my needs.	1	2	3	4	5	6	7
PQ.20	I have always been able to access to general IT resources when required.	1	2	3	4	5	6	7
PQ.21	When required, there is sufficient access to specialised equipment, facilities, or rooms.	1	2	3	4	5	6	7

### 3. Please rate for the **Acculturation**.

Listed below are the statements of acculturation. Acculturation is the adaptation of new culture. The following scales to indicate how much agree or disagree with each of the statements. Please tick (/) your answers.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

No.	Statement for the Acculturation	Score						
<b>Assimilation</b>								
AC.1	I write better in Malay than in my native language (for example: Nigerian, Iranian, Arabica, etc).	1	2	3	4	5	6	7
AC.2	When I am in my hostel, I typically speak Malay.	1	2	3	4	5	6	7
AC.3	If I were asked to write an assignment, I would prefer to write in Malay.	1	2	3	4	5	6	7
AC.4	I get along better with Malaysian than Asians.	1	2	3	4	5	6	7
AC.5	I feel that Malaysian understand me better	1	2	3	4	5	6	7

	than Asians do.							
AC.6	I find it easier to communicate my feelings to Malaysians than to Asians.	1	2	3	4	5	6	7
AC.7	I feel more comfortable socializing with Malaysians than I do with Asians.	1	2	3	4	5	6	7
AC.8	Most of my friends at school are Malaysians.	1	2	3	4	5	6	7
<b>Separation</b>								
AC.9	Most of the music I listen is Asian.	1	2	3	4	5	6	7
AC.10	My closest friends are Asian.	1	2	3	4	5	6	7
AC.11	I prefer going to social gatherings where most of the people are Asian.	1	2	3	4	5	6	7
AC.12	I feel that Asians treat me as an equal, more so than with Malaysian.	1	2	3	4	5	6	7
AC.13	I would prefer to go out on a date with an Asian than when I am with a Malaysian.	1	2	3	4	5	6	7
AC.14	I feel more relaxed when I am with an Asian than when I am with a Malaysian.	1	2	3	4	5	6	7
AC.15	Asians should not date non-Malaysian.	1	2	3	4	5	6	7
<b>Integration</b>								
AC.16	I tell jokes both in Malay and in my native language (for example: Nigerian, Iranian, Arabic, etc.).	1	2	3	4	5	6	7
AC.17	I think as well in Malay as I do in my native language (for example: Nigerian, Iranian, Arabic, etc.).	1	2	3	4	5	6	7
AC.18	I have both Malaysian and Asian friends.	1	2	3	4	5	6	7
AC.19	I feel that both Asians and Malaysians value me.	1	2	3	4	5	6	7
AC.20	I feel very comfortable around both Malaysians and Asians.	1	2	3	4	5	6	7
<b>Marginalization</b>								
AC.21	Generally, I find it is difficult to socialize with anybody, Asian.	1	2	3	4	5	6	7
AC.22	I sometimes feel that neither Malaysians nor Asians like me.	1	2	3	4	5	6	7
AC.23	There are times when I think no one understands me.	1	2	3	4	5	6	7
AC.24	I sometimes find it hard to communicate with people.	1	2	3	4	5	6	7
AC.25	I sometimes find it hard to make friends.	1	2	3	4	5	6	7
AC.26	Sometimes I feel that Asians and Malaysians do not accept me.	1	2	3	4	5	6	7
AC.27	Sometimes I find it hard to trust both Malaysians and Asians.	1	2	3	4	5	6	7
AC.28	I find that both Asians and Malaysians often	1	2	3	4	5	6	7

	have difficulty understanding me.							
AC.29	I find that I do not feel comfortable when I am with other people.	1	2	3	4	5	6	7

4. Please rate for the **Self-efficacy**

Listed below are the statements of international student self-efficacy. The following scales to indicate how much agree or disagree with each of the statement. Please tick (/) your answers.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

No.	Statement for self-efficacy	Score						
SE.1	I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6	7
SE.2	If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4	5	6	7
SE.3	I am certain that I can accomplish my goals.	1	2	3	4	5	6	7
SE.4	I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6	7
SE.5	Thanks to my resourcefulness, I can handle unforeseen situations.	1	2	3	4	5	6	7
SE.6	I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6	7
SE.7	I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5	6	7
SE.8	When I am confronted with a problem, I can find several solutions.	1	2	3	4	5	6	7
SE.9	If I am in trouble, I can think of a good solution.	1	2	3	4	5	6	7
SE.10	I can handle whatever comes my way.	1	2	3	4	5	6	7

5. Please rate for the **Emotional Brand Attachment**

Listed below are the statements about emotional attachment. The following scales to indicate how much agree or disagree with each of the statement. Please tick (/) your answers.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

No.	Statement for the emotional brand attachment	Score						
<b>Affection</b>								
EBA.1	I always enjoy my experience at this university.	1	2	3	4	5	6	7
EBA.2	I always have warm and comfortable feeling when staying at this university.	1	2	3	4	5	6	7
EBA.3	My experience great happiness with staying at this university.	1	2	3	4	5	6	7
EBA.4	My feeling toward the University can be characterized by peaceful.	1	2	3	4	5	6	7
<b>Connection</b>								
EBA.5	I care about maintaining my relationship with this university.	1	2	3	4	5	6	7
EBA.6	I have decided that this is “my” university.	1	2	3	4	5	6	7
EBA.7	I could not let anything get in the way of my attachment to this university.	1	2	3	4	5	6	7
<b>Passion</b>								
EBA.8	I will never get bored of going to this university.	1	2	3	4	5	6	7
EBA.9	I find myself always thinking about staying at this university	1	2	3	4	5	6	7
EBA.10	My feelings toward the University can be characterized by passion.	1	2	3	4	5	6	7

6. Please rate for the **Brand Loyalty**

Listed below are the statements about student loyalty of current university. The following scales to indicate how much agree or disagree with each of the statements. Please tick (/) your answers.

Totally disagree	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6	7

No.	Statement for the Brand Loyalty	Score						
		1	2	3	4	5	6	7
BL.1	I would recommend my course to someone else.	1	2	3	4	5	6	7
BL.2	I would recommend my university to someone else.	1	2	3	4	5	6	7
BL.3	I'm very interested in keeping in touch with "my faculty."	1	2	3	4	5	6	7
BL.4	If I was faced with the same choice again, I would still choose the same course.	1	2	3	4	5	6	7
BL.5	If I was faced with the same choice again, I would still choose the same university.	1	2	3	4	5	6	7
BL.6	I would become a member of any alumni organizations at this university or faculty.	1	2	3	4	5	6	7
BL.7	I will say positive things about this university to other people.	1	2	3	4	5	6	7
BL.8	In my future, I will continue my post graduate education in this university.	1	2	3	4	5	6	7
BL.9	I will encourage my friends and relatives to join this university.	1	2	3	4	5	6	7
BL.10	When the issue of universities comes up in conversation, I would recommend this university.	1	2	3	4	5	6	7
BL.11	I take pride in telling other people about my experiences in this university.	1	2	3	4	5	6	7
BL.12	I tell other people positive things about this university.	1	2	3	4	5	6	7

BL.13	If I saw an idea that I liked at another university, I would share this idea with this university's management and employees.	1	2	3	4	5	6	7
BL.14	I would allow my name and positive comment I made about this university to be used in media.	1	2	3	4	5	6	7
BL.15	I am more likely to tell management or employees about problems that occur at this university than other university.	1	2	3	4	5	6	7

**Part Two: Demographic information**

The following are some personal questions about you that will be used for research purposes only. Please tick (/) the relevant information and provide details whenever necessary.

***Background of the respondent***

1. What your current level education study

- Undergraduate
- Master
- Phd/DBA

2. Country of Origin: \_\_\_\_\_

3. Marital Status

- Single
- Married
- Others

4. How old are you?  
 \_\_\_\_ years

5. Gender (please tick)?

- Male
- Female

6. Mode of study (please tick)?

Fulltime       Part time

7. What is your current semester? Please specify: \_\_\_\_\_

8. Scholarship;

Yes       No

9. What is your program?

<input type="checkbox"/> Business Administration	<input type="checkbox"/> Dental Surgery
<input type="checkbox"/> Accounting	<input type="checkbox"/> Economy
<input type="checkbox"/> Computer Science	<input type="checkbox"/> Education
<input type="checkbox"/> Information Technology	<input type="checkbox"/> Law
<input type="checkbox"/> Anthropology and Sociology	<input type="checkbox"/> Medicine
<input type="checkbox"/> Language and Linguistics	<input type="checkbox"/> Science
<input type="checkbox"/> Geography	<input type="checkbox"/> Engineering
<input type="checkbox"/> Population	<input type="checkbox"/> Others please

specify: \_\_\_\_\_

10. Before being enrolled at university, how did you hear about the university?

Conversation with friends

Newspaper

Internet websites

Parents

Prospectus and leaflets

**THANK YOU VERY MUCH FOR YOUR COOPERATION**

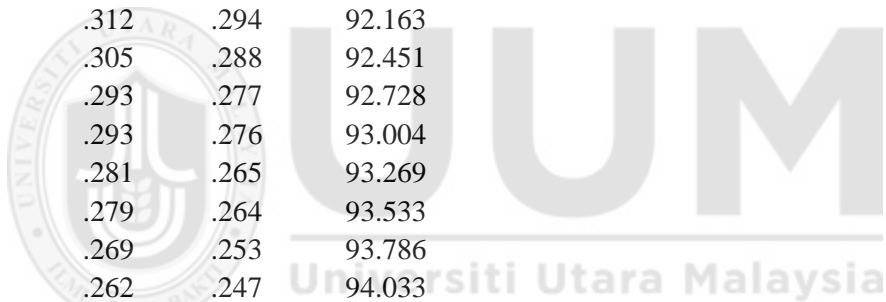
## APPENDIX V

### *Total variance explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	28.104	26.513	26.513	28.104	26.513	26.513
2	10.582	9.983	36.496	10.582	9.983	36.496
3	7.358	6.942	43.438	7.358	6.942	43.438
4	5.559	5.244	48.683	5.559	5.244	48.683
5	4.685	4.420	53.102	4.685	4.420	53.102
6	3.276	3.090	56.192	3.276	3.090	56.192
7	2.627	2.478	58.671	2.627	2.478	58.671
8	2.287	2.158	60.829	2.287	2.158	60.829
9	1.818	1.715	62.543	1.818	1.715	62.543
10	1.717	1.620	64.164	1.717	1.620	64.164
11	1.530	1.444	65.607	1.530	1.444	65.607
12	1.480	1.396	67.004	1.480	1.396	67.004
13	1.372	1.294	68.298	1.372	1.294	68.298
14	1.257	1.185	69.483	1.257	1.185	69.483
15	1.148	1.083	70.567	1.148	1.083	70.567
16	1.047	.987	71.554	1.047	.987	71.554
17	.999	.943	72.497			
18	.962	.908	73.405			
19	.948	.894	74.299			
20	.905	.854	75.153			
21	.871	.822	75.975			
22	.821	.775	76.749			
23	.783	.739	77.488			
24	.742	.700	78.188			
25	.710	.670	78.858			
26	.682	.643	79.502			
27	.668	.630	80.132			
28	.641	.605	80.737			
29	.627	.592	81.329			
30	.614	.579	81.908			
31	.590	.556	82.464			
32	.586	.553	83.017			
33	.578	.545	83.562			
34	.537	.507	84.069			
35	.527	.497	84.565			
36	.499	.470	85.036			



37	.489	.461	85.497
38	.477	.450	85.947
39	.460	.434	86.381
40	.458	.432	86.814
41	.447	.422	87.235
42	.436	.411	87.647
43	.423	.399	88.045
44	.415	.391	88.437
45	.410	.387	88.824
46	.402	.379	89.203
47	.385	.363	89.567
48	.379	.358	89.925
49	.375	.354	90.279
50	.365	.345	90.623
51	.341	.322	90.945
52	.331	.312	91.257
53	.326	.308	91.565
54	.322	.304	91.869
55	.312	.294	92.163
56	.305	.288	92.451
57	.293	.277	92.728
58	.293	.276	93.004
59	.281	.265	93.269
60	.279	.264	93.533
61	.269	.253	93.786
62	.262	.247	94.033
63	.260	.245	94.278
64	.251	.237	94.515
65	.244	.231	94.746
66	.239	.225	94.971
67	.232	.219	95.190
68	.222	.209	95.400
69	.220	.208	95.607
70	.218	.205	95.813
71	.210	.199	96.011
72	.202	.191	96.202
73	.189	.178	96.380
74	.185	.175	96.555
75	.184	.174	96.729
76	.177	.167	96.895
77	.171	.161	97.056
78	.168	.158	97.215
79	.166	.157	97.371



80	.161	.152	97.523
81	.152	.144	97.667
82	.144	.136	97.803
83	.141	.133	97.936
84	.138	.131	98.067
85	.134	.126	98.193
86	.130	.122	98.315
87	.126	.119	98.434
88	.124	.117	98.551
89	.116	.109	98.661
90	.113	.106	98.767
91	.111	.105	98.872
92	.107	.101	98.973
93	.103	.097	99.069
94	.099	.094	99.163
95	.094	.088	99.251
96	.092	.087	99.339
97	.091	.086	99.424
98	.082	.077	99.502
99	.080	.076	99.578
100	.074	.070	99.647
101	.072	.068	99.715
102	.067	.063	99.779
103	.065	.061	99.840
104	.062	.059	99.899
105	.056	.053	99.952
106	.051	.048	100.000

Extraction Method: Principal Component Analysis.

---

## APPENDIX VI

### Cross Loading

ITEMS	DBL	iACC	MEBA	iPTQ	iSE	iUI
AC10	-0.0006	0.7507	0.0665	0.0652	-0.0681	0.0747
AC11	0.0243	0.7773	0.0833	0.0328	-0.0615	0.084
AC12	0.0234	0.7606	0.03	0.0179	-0.0483	0.0789
AC13	0.0173	0.7391	-0.0187	0.011	-0.083	0.0746
AC14	0.001	0.699	0.0202	0.0201	-0.0657	0.0519
AC15	0.033	0.5401	0.0296	0.016	-0.1292	0.0449
AC17	0.1883	0.6684	0.2488	0.1621	-0.0375	0.1271
AC18	-0.0133	0.6899	-0.0059	0.0152	-0.0411	0.0035
AC19	0.0696	0.7302	0.0736	0.0928	-0.0328	0.0452
AC2	0.1914	0.641	0.1426	0.1459	-0.0334	0.1529
AC20	0.0043	0.6942	0.0001	0.0626	0.0215	0.0734
AC3	0.2011	0.596	0.1485	0.1925	-0.0371	0.2113
AC4	0.1945	0.7667	0.1287	0.2114	-0.0343	0.1896
AC5	0.2083	0.7618	0.1675	0.2263	-0.039	0.2064
AC6	0.2335	0.7891	0.2104	0.2971	-0.0209	0.257
AC7	0.1868	0.7502	0.1428	0.2677	0.0144	0.2228
AC8	0.122	0.7787	0.115	0.1817	-0.0371	0.1384
AC9	0.119	0.7624	0.1482	0.1709	-0.0212	0.1607
BL.14	0.7014	0.1185	0.5322	0.4137	0.1568	0.4487
BL.15	0.725	0.1465	0.5189	0.4285	0.2126	0.3475
BL1	0.7094	0.0914	0.5523	0.3953	0.4181	0.3777
BL10	0.8316	0.1659	0.5646	0.5174	0.2664	0.4917
BL11	0.7648	0.1397	0.5549	0.5127	0.2881	0.493
BL12	0.7902	0.1327	0.5746	0.5103	0.3228	0.4867

BL13	0.7727	0.0895	0.5619	0.5019	0.2252	0.4643
BL2	0.7887	0.0967	0.605	0.5083	0.3213	0.4731
BL3	0.7454	0.0471	0.6477	0.4988	0.4083	0.5124
BL4	0.738	0.0306	0.4788	0.4214	0.3596	0.3696
BL5	0.812	0.1166	0.5353	0.5031	0.2721	0.4596
BL6	0.769	0.0981	0.5147	0.3777	0.3427	0.384
BL7	0.7524	0.1453	0.5952	0.4905	0.2799	0.4308
BL8	0.7922	0.0917	0.5494	0.4992	0.1971	0.4049
BL9	0.8424	0.1064	0.565	0.5119	0.3031	0.4409
EBA1	0.4736	0.1089	0.720	0.4144	0.4123	0.362
EBA10	0.59	0.1028	0.803	0.3701	0.3405	0.3711
EBA2	0.6085	0.1622	0.809	0.4763	0.3633	0.4369
EBA3	0.582	0.1273	0.844	0.4887	0.3664	0.4587
EBA4	0.5652	0.1225	0.804	0.4383	0.3764	0.418
EBA5	0.6031	0.1003	0.845	0.4653	0.3865	0.446
EBA6	0.5973	0.1052	0.798	0.4858	0.3675	0.4805
EBA7	0.6383	0.0992	0.846	0.4749	0.3986	0.4642
EBA8	0.6153	0.0963	0.820	0.4637	0.3694	0.4756
EBA9	0.5834	0.0785	0.817	0.3517	0.3165	0.3778
PQ1	0.4576	0.166	0.3941	0.7543	0.1455	0.6019
PQ10	0.4213	0.1647	0.4401	0.7229	0.226	0.5225
PQ11	0.3937	0.1509	0.3109	0.7071	0.2563	0.4996
PQ12	0.4177	0.0779	0.3728	0.6898	0.2488	0.5655
PQ13	0.4623	0.1237	0.4006	0.7063	0.2325	0.5546
PQ14	0.4317	0.1113	0.3233	0.6802	0.3316	0.498
PQ15	0.4686	0.1627	0.4145	0.7301	0.3083	0.511
PQ16	0.4474	0.1493	0.3381	0.7142	0.283	0.487

PQ17	0.3793	0.0992	0.2877	0.6252	0.2236	0.4278
PQ18	0.4515	0.1301	0.3848	0.7392	0.1846	0.4987
PQ19	0.3744	0.064	0.3883	0.5893	0.286	0.3985
PQ2	0.4675	0.2178	0.4283	0.7663	0.1485	0.5969
PQ20	0.389	0.0057	0.4141	0.5939	0.2972	0.442
PQ21	0.4062	0.0289	0.3903	0.5929	0.404	0.4272
PQ3	0.4328	0.1999	0.4166	0.7839	0.1582	0.5909
PQ4	0.4721	0.1707	0.4117	0.7509	0.2174	0.5622
PQ5	0.4583	0.0805	0.382	0.7466	0.2037	0.5564
PQ6	0.4424	0.0892	0.4017	0.7308	0.0872	0.5109
PQ7	0.4354	0.0895	0.4217	0.7424	0.1746	0.5424
PQ8	0.4908	0.1143	0.3811	0.7675	0.2484	0.553
PQ9	0.4838	0.1384	0.4463	0.7579	0.1779	0.5282
SE1	0.2754	0.0162	0.3414	0.2255	0.6442	0.2311
SE10	0.2637	-0.0551	0.3596	0.1725	0.7475	0.2463
SE2	0.3092	-0.0544	0.3272	0.2795	0.7167	0.2727
SE3	0.2313	-0.0523	0.2908	0.1845	0.7266	0.2661
SE4	0.2729	-0.0834	0.3292	0.2593	0.7876	0.3187
SE5	0.3277	-0.009	0.3892	0.3045	0.7964	0.3611
SE6	0.2814	-0.0508	0.3328	0.2414	0.7870	0.3142
SE7	0.2498	-0.0591	0.2792	0.2304	0.6946	0.3107
SE8	0.2756	-0.0562	0.3556	0.2124	0.7576	0.2628
SE9	0.3039	-0.025	0.3533	0.2474	0.7657	0.3359
UI1	0.4157	0.0267	0.3993	0.436	0.2924	0.6533
UI10	0.4627	0.1569	0.4125	0.5902	0.2131	0.7213
UI11	0.3266	0.0718	0.3431	0.5124	0.2905	0.7191
UI12	0.4064	0.0831	0.3606	0.5718	0.3125	0.7202

UI13	0.3796	0.1466	0.2637	0.4494	0.2425	0.6822
UI14	0.3899	0.1486	0.3157	0.4433	0.2548	0.6713
UI15	0.4002	0.1335	0.3727	0.4913	0.1867	0.6556
UI16	0.3351	0.1636	0.3032	0.5113	0.3043	0.5926
UI17	0.4366	0.1101	0.3701	0.6057	0.2944	0.653
UI18	0.3782	0.1049	0.3272	0.5383	0.3112	0.6158
UI19	0.3737	0.1346	0.3516	0.5585	0.203	0.6778
UI2	0.437	0.0659	0.4088	0.4797	0.2921	0.677
UI20	0.3363	0.0993	0.377	0.5216	0.2887	0.6509
UI21	0.4457	0.1593	0.4306	0.5984	0.2353	0.7089
UI3	0.3434	0.1387	0.3204	0.4142	0.3046	0.6925
UI4	0.4035	0.129	0.4148	0.4857	0.312	0.7488
UI5	0.3339	0.1104	0.3517	0.4206	0.3146	0.7469
UI6	0.3492	0.1826	0.319	0.3995	0.3297	0.7104
UI7	0.4083	0.1313	0.4048	0.484	0.2556	0.7076
UI8	0.4203	0.0906	0.4051	0.4689	0.3225	0.7358
UI9	0.5086	0.1236	0.4226	0.638	0.1798	0.7617