

**Student-Based Conceptualisations of
University Brands:
A Brand Loyalty Model.**

Antonia Mocatta BFA(Witw.); MA(Middx.); MBA (SCU).

A dissertation submitted in fulfilment of the requirements for the degree of
Doctor of Business Administration.

Newcastle Graduate School of Business
Faculty of Business and Law
University of Newcastle (NSW)
July 2018.

STATEMENT OF DECLARATION

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision.

The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968 and any approved embargo.

Antonia Mocatta

July 1, 2018

ACKNOWLEDGEMENTS

I would like to express my deepest thanks to those who have assisted me throughout this dissertation.

First, I offer sincere appreciation to my supervisor, Dr. Fred Chao. His guidance, wisdom and good advice have profoundly shaped the quality of my work. I also extend gratitude to the lecturers in the Doctor of Business Administration programme whose teaching has been essential to the development of my research skills, and my comprehension of the concepts that are central to this study.

I furthermore acknowledge the services of two firms that have been invaluable in the completion of this project. [Research Now](#) was engaged to collect the data for this study, and professional editing services were provided by [The Expert Editor](#).

TABLE OF CONTENTS

STATEMENT OF DECLARATION	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
CHAPTER 1: INTRODUCTION	1
1.1 Background to the Research	1
1.2 Theoretical Underpinnings.....	2
1.3 The Research Problem and Research Questions.....	4
1.4 Research Methodology	5
1.5 Contribution of the Research	7
1.6 Delimitations.....	8
1.7 Dissertation Outline	9
1.8 Chapter Summary	11
CHAPTER 2: LITERATURE REVIEW, THEORETICAL UNDERPINNINGS AND HYPOTHESES DEVELOPMENT	12
2.1 Introduction.....	12
2.2 Parent Theories and Conceptual Models	13
2.2.1 Brand Theory: Context and Definitions.....	13
2.2.2 Customer-Based Brand Equity: Key Conceptual Models.....	15
2.3 Customer-Based Brand Equity in Service Environments.....	19
2.4 The Commodification of Education and the Student Consumer	22
2.5 Customer-Based Brand Equity in Higher Education Environments.....	25
2.6 Research Issues and Theoretical Framework.....	34
2.6.1 Literature Gaps, Research Problem and Questions.....	34
2.6.2 Conceptual Model and Hypotheses.....	38
2.6.2.1 Approach and Model Origins	38
2.6.2.2 Adaptation of the Measurement Model.....	43
2.6.2.3 The Inner Model Constructs and Hypothesised Relationships	47
2.7 Chapter Summary	50

CHAPTER 3: RESEARCH METHODOLOGY	53
3.1 Introduction.....	53
3.2 The Research Design	53
3.3 The Sample Group	54
3.4 Data Collection	56
3.5 Ethics and Confidentiality.....	58
3.6 The Survey Instrument.....	58
3.6.1 Development Approach and Rationale	58
3.6.2 Adaptation of the Questionnaire	61
3.6.3 Response Error.....	63
3.7 Data Analysis.....	64
3.7.1 Statistical Methods.....	64
3.7.2 Sample Size.....	69
3.8 Chapter Summary	69
CHAPTER 4: ANALYSIS AND RESULTS	71
4.1 Introduction.....	71
4.2 Model Specification.....	72
4.3 Analytic Approach.....	73
4.4 Model Estimation and Analysis.....	75
4.4.1 The Pilot Study.....	75
4.4.2 The Main Study.....	81
4.4.2.1 <i>Introduction</i>	81
4.4.2.2 <i>Data Preparation</i>	81
4.4.2.3 <i>Sample Characteristics</i>	82
4.4.2.4 <i>Outer Model Assessment</i>	82
4.4.2.5 <i>Inner Model Assessment</i>	89
4.5 Chapter Summary	92
CHAPTER 5: CONCLUSIONS AND IMPLICATIONS.....	94
5.1 Introduction.....	94
5.2 Discussion of the Conceptual Framework	95
5.2.1 The Outer Model Brand Attributes	95
5.2.1.1 <i>Controlled Communications</i>	97
5.2.1.2 <i>Uncontrolled Communications</i>	97
5.2.1.3 <i>Employee Service</i>	98
5.2.1.4 <i>Self-Image Congruence</i>	99

5.2.1.5	<i>Feelings</i>	100
5.2.1.6	<i>Core Service</i>	102
5.2.1.7	<i>Servicescape</i>	103
5.2.1.8	<i>Price Value</i>	104
5.2.1.9	<i>Brand Name</i>	105
5.2.2	The Inner, Structural Model.....	107
5.2.3	Conclusions About the Research Problem.....	111
5.3	Theoretical Implications	115
5.4	Methodological Implications	117
5.5	Managerial Implications	118
5.6	Limitations and Implications for Further Research	120
REFERENCES		125
APPENDICES		149
Appendix A: Comparison of Higher Education Branding Frameworks and Identified Brand Equity Drivers		149
Appendix B: Participant Invitation.....		151
Appendix C: Participant Information Statement		152
Appendix D: The Questionnaire.....		153
Appendix E: Indicators and Proposed Groupings to Latent Constructs.....		162

LIST OF TABLES

Table 1. Comparison of Higher Education Branding Frameworks	28
Table 2. Definitions for the Key Inner Model SBL Constructs	42
Table 3. Mapping: Higher Education Brand Model Attributes to SBV Model Attributes	44
Table 4. 2015 First Half Year Australian Student Data.....	56
Table 5. Summary and Sources of Construct Measures	60
Table 6. Pilot Data: Outer Model Convergent Validity and Reliability	78
Table 7. Pilot Data: Discriminant Validity – The Fornell-Larcker Criterion.	79
Table 8. Pilot Data: Discriminant Validity – Heterotrait-Monotrait (HTMT).....	80
Table 9. Sample Frequencies Compared to Quotas	82
Table 10. Outer Model Convergent Validity and Reliability – Initial Run	83
Table 11. Descriptive Statistics for the Feelings Indicators	84
Table 12. Outer Model Convergent Validity and Reliability – Second Run.....	84
Table 13. Discriminant Validity – The Fornell-Larcker Criterion.	85
Table 14. Discriminant Validity – Heterotrait-Monotrait (HTMT).....	86
Table 15. Weights for Formative Constructs Brand Hearsay and Brand Evidence.....	89
Table 16. Structural Model Results – R^2 and Q^2	90
Table 17. Structural Model Results - Direct Effects.....	90
Table 18. Summary of Hypothesis Results.....	92
Table 19. Comparison of Brand Attribute Importance for SBV / SBL Studies	96
Table 20. Summary of Hypothesis Results.....	107

LIST OF FIGURES

Figure 1: Service Brand Loyalty Model	41
Figure 2: The University Brand Loyalty Model	49
Figure 3: The University Brand Loyalty Model Including Indicators	73
Figure 4: Hypothesised Relationships Between Constructs	74
Figure 5: Stage 2 Outer and Structural Model in SmartPLS 3	87
Figure 6: Second Step PLS-SEM Model Results	91

ABSTRACT

The purpose of this exploratory study is to present an empirically tested customer-based brand equity framework for higher education institutions. Using an adapted service brand model, the framework addresses gaps in the higher education brand literature by incorporating a comprehensive inventory of brand attributes and dimensions, and by identifying their relative influence on student perceptions of university brands and the process by which brand loyalty is created as the ultimate expression of brand equity. The results are compared with other service sector studies on which the model is based.

The positivistic research involves the collection of quantitative survey data sampled from current, Australian university students. The partial least squares structural equation modelling (PLS-SEM) method is selected for its suitability for causal or structural equations where estimates of both the structural and measurement relations are required, and for complex hierarchical component models with two or more layers of formative and reflective constructs.

The study indicates that of the university brand attributes experienced by students, those most meaningful to them are employee service, followed by self-image congruence, feelings about the brand, and the core service. Whilst students' appraisal of controlled and uncontrolled university brand communications precedes and influences their subsequent assessment of the education service, it is their evaluation of those university brand attributes directly experienced during study that results in either satisfaction or dissatisfaction, determining their consequent brand attitude, and whether they are ultimately loyal towards the university brand.

The results suggest the model is applicable in the university context, and the process by which university brand loyalty is created is comparable to that of other services industries. A comparison of the current study results with those of earlier empirical studies using the same model in other industry settings, reveals variances that can be explained by industry context and the extent to which the service is experience and credence dominant.

By linking the higher education brand equity creation processes to that of other services, the findings contribute both to the higher education brand literature, and to services branding literature more broadly. From a managerial perspective, the scales and model provide a useful diagnostic tool for higher education brand managers to measure brand performance and make evidence-based decisions concerning brand strategy.