



**The influences of hedonic and utilitarian motivations
on user experience and engagement within the tertiary
student credit card market**

Rebecca L. Hogan

BBus, BComm, GradCertIA, GradCertPM, MBA

Submitted to Charles Sturt University in partial fulfilment of the requirements
for the Doctor of Business Administration

School of Management and Marketing
Faculty of Business, Justice and Behavioural Sciences

January 2023

Table of Contents

List of Figures	vi
List of Tables	vii
Certificate of Authorship	ix
Acknowledgements	x
Professional Editorial Assistance	xi
Ethics	xii
Abstract	xiii
Abbreviations	xv
Chapter 1: Introduction	1
1.1 Introduction	1
1.2 Background	2
1.3 Industry Overview.....	4
1.4 Research Motivation	5
1.4.1 Overarching Theories considered within the Study	6
1.4.2 Concepts to be Examined.....	6
1.4.3 Research Questions	8
1.5 Theoretical Significance of the Study	9
1.6 Industry Significance of the Study	11
1.7 Overview of Methodology, Data Analysis, and Scope	12
1.8 Overview of Delimitations and Limitations of the Study	13
1.9 Outline of Thesis	14
1.10 Conclusion	16
Chapter 2: Literature Review	17
2.1 Introduction	17

2.2	Research Aims and Objectives.....	19
2.3	Understanding the Credit Card Market	19
2.3.1	Credit Card Market Segmentation	21
2.3.2	Australian Credit Card Market.....	22
2.3.3	Tertiary Student Credit Card Market	23
2.4	Conceptual Model	24
2.5	Motivation and Goal Theory in Consumer Behaviour.....	26
2.6	Motivation and Personal Shopping Values	28
2.6.1	Utilitarian Motivation.....	29
2.6.2	Hedonic Motivation	29
2.6.3	Experiential Motivation	30
2.6.4	The Personal Shopping Value Scale	31
2.6.5	Key Considerations for the Application of Hedonic and Utilitarian Research Findings	33
2.7	Key Factors Influencing Buying Behaviours in the Credit Card Market	34
2.7.1	Normative Influence.....	34
2.7.2	Compulsive Buying Tendencies	35
2.7.3	Materialism	37
2.7.4	Financial Literacy	38
2.8	Influences of Motivation on Brand Attitude and Consumer Engagement	40
2.8.1	Models of Brand Attitude and Customer Engagement	40
2.8.2	Relationship between Brand Attitude, Customer Engagement and Credit Card Uptake	42
2.9	Consumer Credit Card Purchase Intention and Product Uptake.....	43
2.10	Other Factors Influencing Credit Card Adoption and Use	44
2.10.1	Other Personal Factors	45
2.10.2	Other Cultural and Societal Factors	46
2.10.3	Other Psychological Factors	47
2.11	Hypotheses to be Tested.....	48
2.12	Conclusion	49
Chapter 3: Research Methodology.....		50
3.1	Introduction	50
3.2	Research Paradigmatic Stance	51
3.3	Research Design.....	55
3.4	Sampling Design	56
3.4.1	Relevant Population, Parameters of Interest and Sampling Frame.....	56

3.4.2	Sample Type and Sampling Strategy	59
3.4.3	Sample Size	60
3.4.4	Sampling Costs	61
3.4.5	Ethical Considerations	62
3.5	Data Collection Method	63
3.5.1	Survey Method	63
3.5.2	Self-administered Online Survey	64
3.5.3	Data Collection by an External Research Firm.....	65
3.6	Measurement Design.....	66
3.6.1	Construct Operationalisation.....	67
3.6.2	Scaling Format	79
3.6.3	Ensuring Data Quality.....	80
3.6.4	Mitigating Bias.....	81
3.7	Questionnaire Design	83
3.7.1	Information Needed	84
3.7.2	Interviewing Method and Content of Questions	85
3.7.3	Overcoming Inability or Unwillingness to Answer	86
3.7.4	Question Structure and Wording.....	87
3.7.5	Question Ordering, Form and Layout	87
3.7.6	Pre-testing the Questionnaire	88
3.8	Data Analysis Technique	89
3.8.1	Preliminary Data Analysis	89
3.8.2	Factor Analysis	90
3.8.3	Structural Equation Modelling.....	91
3.8.4	Model Fit Assessment.....	92
3.8.5	Hypothesis Testing.....	93
3.9	Conclusion	93
Chapter 4: Results		94
4.1	Introduction.....	94
4.2	Preliminary Data Analysis	95
4.2.1	Data Quality Checks and Cleansing Activities	95
4.2.2	Nature of Sample Collected	96
4.2.3	Descriptive Analysis of Key Variables and Constructs	98
4.2.4	Common Method Bias and Validity Analysis	100
4.2.5	Exploratory Factor and Reliability Analysis.....	101
4.3	Measurement Model Assessment.....	109
4.3.1	Confirmatory Factor Analysis.....	109
4.3.2	Construct Validity Analysis	122
4.4	Structural Model Assessment.....	126
4.4.1	Overall Model Fit Results	126
4.4.2	Hypothesis Testing.....	128
4.4.3	Variance Explained	133

4.5	Summary of Results	134
4.6	Conclusion	135
Chapter 5: Discussion and Conclusions.....		137
5.1	Introduction	139
5.2	Research Findings	137
5.2.1	Effects of Brand Attitude and Customer Engagement on Credit Card Acquisition Intentions	139
5.2.2	The role Personal Shopping Values, Materialism, Normative Influence, Compulsive Buying Tendencies, Financial Self-Efficacy plays on Brand Attitude, Customer Engagement and Credit Card Product Uptake	141
5.2.3	Personal Shopping Values as an Antecedent on Factors Influencing Buying Motives and Propensity Towards Credit Cards.....	144
5.3	Implications for Research	146
5.4	Implications for Practice	148
5.4.1	Targeted Engagement Programs prior to Coming of Age	149
5.4.2	Alignment with the Fulfillment of Financial Goals	150
5.4.3	Favourable Positioning within Key Reference Groups.....	151
5.4.4	Suitable Product Offerings	151
5.4.5	Ongoing Customer Engagement Programs	152
5.5	Limitations	153
5.6	Directions for Future Research	154
5.7	Concluding Remarks	155
References		157
Appendices		176
Appendix A: Informed Consent and Information Sheet		176
Appendix B: Online Survey Questions		178
Appendix C: Debriefing Statement		202
Appendix D: Survey Termination Message		203
Appendix E: Flowchart of Questionnaire Design		204
Appendix F: Item-by-item Analysis of Key Variables		205
Appendix G: Item-by-item Factor Loadings		212

List of Figures

Figure 1: Outline of Chapter 1	1
Figure 2: Outline of Thesis	15
Figure 3: Outline of Chapter 2	18
Figure 4: Conceptual Model.....	25
Figure 5: Outline of Chapter 3	51
Figure 6: Questionnaire Design	84
Figure 7: Outline of Chapter 4	94
Figure 8: Personal Shopping Value Second-Order Model	113
Figure 9: Normative Influence Model.....	114
Figure 10: Compulsive Buying Model.....	115
Figure 11: Materialism Model.....	117
Figure 12: Financial Self Efficacy Model	118
Figure 13: Brand Attitude Model	119
Figure 14: Customer Engagement Model	120
Figure 15: Credit Card Product Uptake/Purchase Intention Model	121
Figure 16: Structural Model	127
Figure 17: Outline of Chapter 5	139
Figure 18: Conceptual Model.....	138

List of Tables

Table 1: Hypotheses Tested in the Study	
Table 2: Research Paradigms	53
Table 3: Excluded Universities	58
Table 4: Measurement Items for Credit Card Product Uptake.....	68
Table 5: Measurement Items for Brand Attitude.....	Error! Bookmark not defined.
Table 6: Measurement Items for Customer Engagement.....	69
Table 7: Measurement Items for Personal Shopping Values.....	70
Table 8: Measurement Items for Normative Influence	71
Table 9: Measurement Items for Materialism	
Table 10: Measurement Items for Compulsive Buying	
Table 11: Measurement Items for Financial Self-Efficacy	Error! Bookmark not defined.
Table 12: Conceptual and Operational Definitions	74
Table 13: Final Construct Measurements.....	76
Table 14: Response Categories for Rating Questions	80
Table 15: Model Fit Assessment	93
Table 16: Demographic Profile	97
Table 17: Descriptive Statistics: Constructs.....	99
Table 18: Cronbach's Alpha Values	102
Table 19: Summary of Exploratory Factor Analysis: Personal Shopping Values	102
Table 20: Summary of Exploratory Factor Analysis: Materialism	105
Table 21: Summary of Exploratory Factor Analysis: Normative Influence, Impulse and Compulsive Buying, Financial Self-Efficacy, Brand Attitude, Customer Engagement, and Credit Card Product Uptake	106
Table 22: Validity and Reliability Thresholds.....	110

Table 23: Model Fit Indices for the Measurement Models of PSV	111
Table 24: Model Fit Indices for Normative Influence	114
Table 25: Model Fit Indices for Impulse and Compulsive Buying.....	116
Table 26: Model Fit Indices for Materialism	117
Table 27: Model Fit Indices for Financial Self-Efficacy Scale.....	118
Table 28: Model Fit Indices of Brand Attitude	119
Table 29: Model Fit Indices for Customer Engagement	120
Table 30: Model Fit Indices for Credit Card Product Uptake.....	122
Table 31: Model Fit Index Summary	122
Table 32: Convergent Validity and Composite Reliability of Constructs	123
Table 33: Correlation Matrix.....	125
Table 34: Model Fit Indices for the Structural Model.....	128
Table 35: Hypothesis Testing	129
Table 36: Levels of Predictive Accuracy	133
Table 37: Squared Multiple Correlations	134
Table 38: Summary of Results	135

Certificate of Authorship

I hereby declare that this submission is my own work and to the best of my knowledge and belief, understand that it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with normal conditions established by the Executive Director, Library Services, Charles Sturt University, or nominee, for the care, loan and reproduction of thesis, subject to confidentiality provisions as approved by the University.

Name: Rebecca Leanne Hogan

Date: 02/01/2022

Acknowledgements

First and foremost, I would like to express my sincere gratitude to my research supervisory team, Dr Abhishek Dwivedi, Dr Mark Frost and Prof. Steven D'Alessandro. Thank you for your invaluable input and guidance throughout this research; the support and teaching provided greatly inspired me, and it has been a privilege to work with each of you. Without you, I would not have been able to accomplish this research.

I would like to acknowledge Charles Sturt University for providing me the opportunity to pursue studies in my area of interest, and pathways to further my education in the fields of consumer finance and marketing.

I thank my dearest friends and family for inspiring me to fulfil my passion. Your support and belief motivated me and has helped shape this research in many ways. I express utmost gratitude to my husband, David Hogan, for his patience, invaluable encouragement, and continued support throughout all stages of this research. I am extremely grateful for your love, dedication, understanding and motivation—each and every day.

Finally, this thesis is dedicated to my mother, Debbie Harris, the woman who taught me to cherish what we have in life, never underestimate our ability and be courageous; you are the woman I will always aspire to be.

Professional Editorial Assistance

Professional editorial assistance according to Australian Standard for Editing Practice (ASEP) Standard D—Language and Illustrations and ASEP Standard E—Completeness and Consistency was provided by Elite Editing.

Ethics

This research involved human participants. It conforms with the Australian National Statement on Ethical Conduct in Research Involving Humans and required approval from a Human Research Ethics Committee.

The Charles Sturt University Human Research Ethics Committee approved this research under protocol number H19293.

The consent and information sheet provided to the participants is provided in Appendix A.

Abstract

There is strong agreement that consumers' purchasing behaviours are shaped by a number of internal and external factors, driven by hedonic and utilitarian values and motives. While these have been explored in a number of retailing studies, scant research has examined how this affects credit card behaviour and credit card selection. With this in mind, this thesis aims to investigate the coexistence of hedonic and utilitarian motivations, compulsive buying behaviour, subconscious materialistic urges, normative influence and financial literacy, and how these factors influence credit card product selection and engagement. This information will help shape consumer credit card product development, design and pricing decisions, and remove guesswork in identifying product offerings best suited to consumer needs.

The population of interest examined in this research is Australian tertiary students, selected because of (1) the likelihood of respondents being new entrants to the credit card market; (2) the researcher's knowledge of the Australian payments landscape; and (3) the location in which the research was undertaken. The thesis adopts deductive reasoning, a 'top down' approach for adding to theory, using previous literature to develop a framework for the cultivation of hypotheses, data collection and analysis, and validation. A quantitative research methodology was adopted for the purpose of the study, using a cross-sectional survey design deployed online by research panel provider Qualtrics. Data was collected over an 11-week period with a total of 832 responses captured. Given the research objectives being to further examine the underpinning values and motivations which shape credit card purchase intentions, covariance based structural equation modelling was undertaken to test the 15 proposed hypotheses detailed in the conceptual model.

Based on analysis of 795 valid responses from students, the research findings show a significant effect of both personal shopping values (hedonic and utilitarian motivations) and normative influence on credit card product uptake, with 7 of the 15 hypotheses accepted. The findings, however, also reveal an insignificant influence of other factors considered to shape a consumer's buying behaviour, including materialism and compulsive buying tendencies, in this market. The results provide detailed insights contributing to the literature on credit card consumer behaviour, and provides implications for theory and practice alike. Noting, this research empirically contributes to literature by expanding the examination of customer engagement within the student

credit card market, and complementing findings accentuating the importance of engagement strategies for financial service providers. The results of the study supports the influence of personal shopping values on a consumer's susceptibility to normative influence, likelihood to succumb to materialistic urges and contribution to financial self-efficacy; presenting a fresh perspective on the drivers for product acquisition within this market. From which it seems that credit card selection and use behaviour is more complex and varied than originally thought, even with young consumers about to enter a transformative stage of their lives.

Keywords: credit card; hedonic motivation; personal shopping values; shopping motivation; utilitarian motivation.

Abbreviations

ABS	Australian Bureau of Statistics
AGFI	Adjusted Goodness-of-fit Index
AVE	Average variance extracted
BNPL	Buy now, pay later
CE	Customer engagement
CFA	Confirmatory factor analysis
CFI	Comparative Fit Index
CFM	Common factor model
CMB	Common method bias
CR	Composite reliability
CV	Convergent validity
DV	Discriminant validity
EFA	Exploratory factor analysis
GFI	Goodness-of-fit Index
MFI	Main financial institution
PCA	Principal component analysis
PSV	Personal shopping value
RMSEA	Root mean square error of approximation
SEM	Structural equation modelling
SQRTAVE	Squared root of average variance extracted
TLI	Tucker–Lewis Index

Chapter 1: Introduction

1.1 Introduction

This chapter discusses the background to this study, which examines factors and motives that may influence credit card uptake and engagement in the Australian tertiary student market, and outlines the motivations for the research. The chapter also outlines the contributions to theory and industry that can be derived from the study, and presents the research questions to be addressed. The chapter is structured as shown in Figure 1.

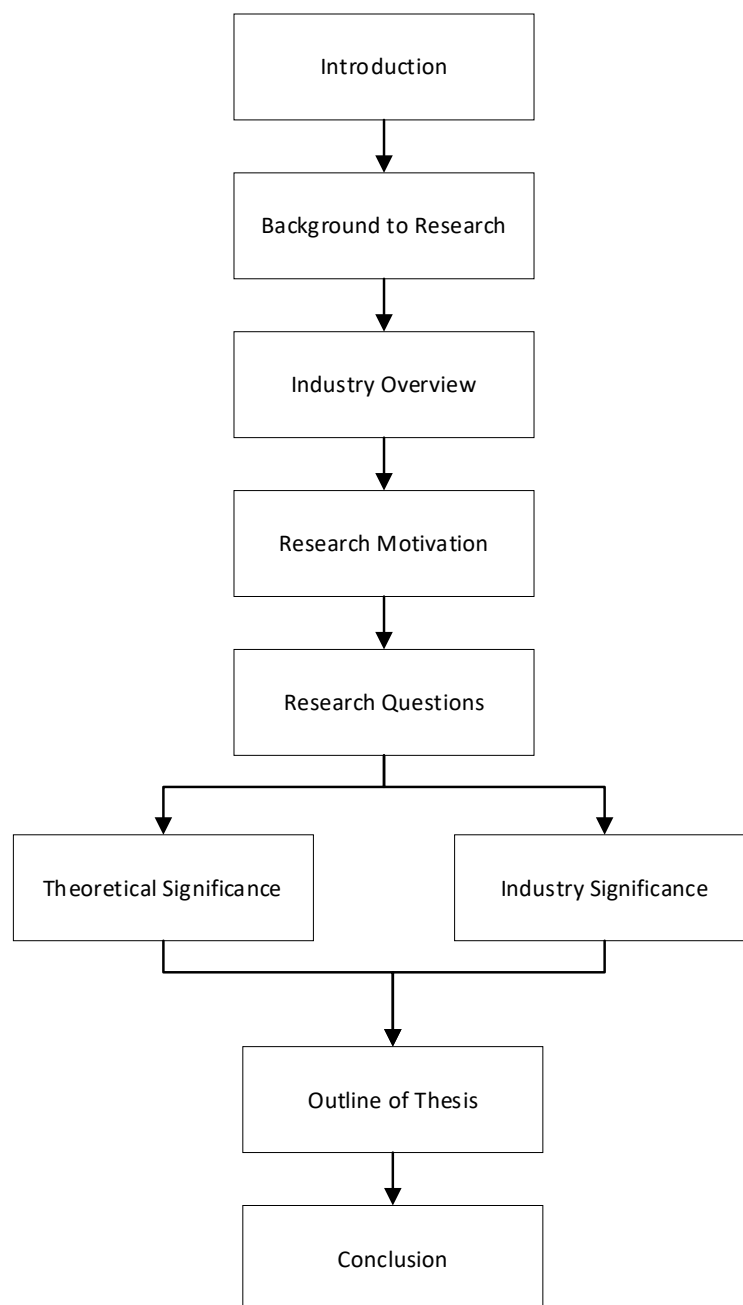


Figure 1: Outline of Chapter 1

1.2 Background

Empirical research suggests that a consumer's purchasing decisions and buying behaviours are shaped by a number of internal and external factors that affect the consumer's overall engagement with a brand, product or service and brand attitude (Haghshenas et al., 2013; Ramya & Mohamed Ali, 2016; Schiffman et al., 2008). These factors include (1) the expectation to conform with the opinions or beliefs of another individual or group, commonly referred to as 'normative influence'; (2) the compulsive buying tendencies possessed by an individual; (3) an individual's subconscious materialistic urges; and (4) the financial literacy acquired through previous experiences and learnings. Underpinning all this are the values and motives that, both consciously and unconsciously, shape an individual's behaviour including their personal shopping values (PSVs), which consist of hedonic and utilitarian motivations.

Despite these factors driving the urge to purchase, and consumer behaviours, in numerous buying instances the buying behaviours of an individual are largely dependent on their capacity to purchase, and their access to payment methods at the desired time. The rise of consumer credit seeks to address variation in capacity and access to purchase when demanded by the consumer, with consumer credit playing a pivotal role in today's modern world (Bernthal et al., 2005; Singh et al., 2018).

Since the introduction of credit cards in Australia in 1974, the use of this form of consumer credit to meet purchasing behaviour demand in times of disposable income shortfall has stimulated household and personal spending, with over 13 million credit cards in circulation and 20.5% of non-cash payments currently undertaken via this channel (Reserve Bank of Australia, 2020). In Australia, the credit card market is characterised by several competing products/brands, offering consumers a plethora of choice based on individual preference and perception of risk (Shakinovsky & Hassan, 2021). Credit card products are commonly categorised by product type, with two general categories: (1) low rate/fee and (2) rewards. Suitability of the product type and benefits derived from the product offering is driven by consumer spending and payment behaviours. Cardholder segments are referred to by industry analysts as either 'transactors' or 'revolvers'. Rewards-based credit card product offerings are perceived as beneficial for those who undertake a high volume of transactions and possess the ability to pay off debt accrued in full on a regular basis (transactors). These products

customarily offer a points per dollar spent proposal, although this comes at a cost to the consumer with higher interest rates and/or fees associated with maintaining the account. Conversely, low rate/fee cards are considered more suitable for consumers who carry debt over lengthy periods (revolvers), or do not intend to utilise the product on a regular basis, maintaining the product offering in case of emergencies (Commonwealth of Australia, 2015). Cardholder spending and payment segmentation—tangible or intentional—has been identified as playing a role in the acquisition and acceptance of the payment facility by the consumer, at the same time playing a role for credit card issuers through product design and pricing strategies. The development of compelling and sustainable credit card product propositions is considered to play a pivotal role in the development of immediate and long-term profitable customer relationships for a financial institution—hence the number of products/issuers competing for space in the market.

While the extensive range of consumer credit card options is commonly perceived as beneficial by ensuring choice and affordability, the array of options may also be detrimental for consumers, with the market being perceived as difficult to navigate. This muddies the water, particularly for consumers seeking to obtain consumer credit for the first time (Commonwealth of Australia, 2016). In addition, over recent years, the array of payment options for consumers and access to credit for necessary and/or desired purchases has continued to expand, with credit cards been joined by subscription-based credit and instalment payment options, including AfterPay, Zip Pay and Klarna. Marketed as suitable products for consumers who wish to access immediate payment options without continuous access to a line of credit, these ‘buy now, pay later’ (BNPL) instalment payment options have led to a generation of consumers ‘adverse to credit card debt’, slowing the uptake of traditional consumer credit cards and driving credit card issuers to rethink their product propositions and marketing strategies (Caddy et al., 2020b).

For the purposes of this study, the focal point for consumer credit and payment options is credit cards.

1.3 Industry Overview

Since its original incarnation as a cardboard card used by elite diners, the fundamental premise of a credit card being a buy now and pay later method has continued to grow in popularity, with many consumers around the globe turning to credit cards as their preferred payment method. Within the credit card payment system there are four parties involved; the consumer (payer), their financial institution (credit card provider), the recipient of funds (payee) and their financial institution. The process involves a flow of information and payment instructions between the parties, with flows and timings varying between parties. This allows for the payee to receive funds at the time of sale, but providing the payer up to 40 to 50 days to make a payment on their account. In Australia, the flow of information and payment instructions between parties is underpinned by a payments network (being Visa, Mastercard, American Express or Diners Club) whose role consists of processing, leaving creation and distribution to the individual credit card providers (Royal Bank of Australia [RBA], 2020).

Driven from a rise in demand for cash alternatives, the global credit card market continues to grow at a rate of 8.5% per annum, with an estimated 2.8 billion cards in use and a market revenue valued at over US\$138 billion in 2020, making the credit card offerings attractive to banks and other financial service providers (Borasi et al., 2021). From 2011 to 2017, approximately 19% of consumers aged 15 and above held credit cards, with the Canadian market bolstering an 82.5% of credit card issuance rate (Global Economy, 2021). Global outstanding credit balances amount to over US\$784 billion, with the average cardholder in monthly debit of US\$780 (Shepard, 2020). However, the credit card issuance rate and outstanding monthly balances detailed are not sustained within the Australian market, and product issuers are competing to acquire business and maintain the long-term profitable relationship credit card holder's devise.

Credit card ownership and usage remains relatively high worldwide, with the average credit card user holding up to four cards. However, it is noted, factors such as increased fraud and the disruption to consumer spending resulted from the Covid-19 pandemic has led to a significant decline in conventional spending of end users and continues to hamper the adoption of consumer credit cards, particularly for new entrants to market (Borasi et al., 2021; Shepard, 2020). Within the Australian market, Millennials under the age of 30 are significantly less likely to acquire a credit card. This is an outcome of the aforementioned disruption within the market, the rise of BNPL

alternatives and difficulties obtaining credit (Illion, 2020). Further detail regarding the credit card market has been included in Chapter 2.

1.4 Research Motivation

With credit card providers across the globe investing billions of dollars into marketing activities with the goal of acquiring new customers, innovative marketing activities driven from a sophisticated understanding of consumer motivations and needs is essential for differentiation amidst the plethora of offerings; leading into the motivation for research. While the adoption and use of consumer credit cards as a payment method has remained relatively stable in Australian financial markets despite the growth of other payment methods/technologies, as noted above there is an identified emergence of a generation of ‘credit card debt-adverse’ consumers, which has resulted in slower adoption rates of new entrants to the market (Caddy et al., 2020b). This is viewed as problematic for numerous credit card issuers, as consumer credit cards pave the way for long-term profitable customer relationships. As such, issuers continue to review and evolve their credit card product propositions, launching new products into a market full of credit card products and brands. The abundance of choice for consumers in the market, however, poses challenges for consumers as they attempt to make informed purchasing decisions when it comes to credit card selection. Currently, credit card acquisition decisions and product uptake may be influenced by several internal and external factors that can come into play, some of which will be examined throughout this research.

In addition to the aforementioned motivation, being a significant contribution to practice, this research aims to address identified gaps in current literature relating to the interplay of the key concepts to be examined within the credit card consumer decision-making process. Contrastingly examining how hedonic and utilitarian motives shape behaviours and experiences, noting previous consumer behaviour literature predominately considers consumers to make purchases to fulfil these motives, further detailed in sections below.

1.4.1 Overarching Theories considered within the Study

Throughout literature, examination of shopping behaviour research is dominated by theoretical frameworks of motivation and goal theory, as researchers have sought to understand why people shop in the way they do (Babin et al., 1994; Bagozzi & Dholaki, 1999; Harris et al., 2018; Howarth et al., 2021; Lee & Ariely, 2006; Tauber, 1972). Similarly, this study considers motivation and goal theory, naming goal directed behaviour, as the overarching theories applied, to examine how financial service providers can best evolve their credit card product propositions to appeal to Australian tertiary students and how consumers can be better equipped to identify the suitability of products in a market abundant with choice. As further detailed below, through the application of Tauber's (1972) commonly referenced model of personal shopping values, this study aims to uncover the interplay of intrinsic and extrinsic motives, on the concepts to be examined (as outlined below), exploring the consumer's journey towards credit card acquisition and goal attainment.

1.4.2 Concepts to be Examined

Throughout marketing literature, consumer behaviour and decision-making processes have been topics of particular interest, as we seek to understand how and why consumers act to improve marketing strategies and increase market share (Stankevich, 2017). Underpinning all of this, is motivation and goal theory: positing a consumer's behaviour is subject to biological influences through instinctive forces, drives, goals or motives, which may act in or outside conscious thought, understanding or reasoning (Bayton, 1958; Malter et al., 2020; Qazzafi, 2020; Schiffman et al., 2008; Woods, 1960). This study aims to explore some of these forces or drives in relation to credit card product acquisition intention and uptake, namely, hedonic and utilitarian motivations, normative influence, compulsive buying tendencies, materialism, financial literacy, brand attitude and customer engagement (CE).

Examined using PSV, hedonic and utilitarian motives are the fundamental human motivations suggesting that consumer buying behaviours are driven by a desire to: (a) acquire a product (utilitarian); (b) to attain goals not related to the product's acquisition; or (c) to acquire a product and provide satisfaction with non-product-related needs (combination of utilitarian and hedonic) (Tauber, 1972). Whilst not commonly

examined in relation to consumer finance products, PSVs are considered influential in consumer decision making and understanding beneficial in the development and deployment of marketing campaigns, and therefore will be examined in this study.

Normative influence, defined as influence derived from an anticipation to 'conform to the expectations of another person or group' (Burnkrant & Cousineau, 1975, p. 207), is considered to play an imperative role, as consumers strive to feel that their buying behaviours/decisions are derived from informed choice (Lord et al., 2001). Normative perspectives and influences may provide both general and specific guidelines for conduct in purchase decision, impacting the acquisition of particular brands, products and/or services.

Compulsive buying tendencies, defined as a 'chronic tendency to spend beyond one's needs and means' (Palan et al., 2011, p. 81) is examined throughout this study as it relates to the acquisition of consumer credit card products to fulfil the desire. In addition, the personality-trait-like motivating factor of materialism is examined, in relation to its influence on purchase decisions and motivation to shop on a subconscious level. Whilst both concepts have previously been examined in relation to credit card use, this study aims to look at the impact of these factors within the Australian tertiary student market.

Financial literacy, comprised of an individual's financial knowledge and skills, and the impact of financial literacy on credit card product uptake is to be examined, noting insight into the perceived economic benefits of consumer credit acquisition should outweigh any extrinsic desire to obtain the product. A student's financial literacy and credit card use has been extensively examined within the United States, with scholars noting financial knowledge plays a significant role in credit card adoption (Hancock et al., 2013; Norvilitis et al., 2006; Robb, 2011). This study seeks to extend these findings, by examining the impact of financial literacy on brand attitude and CE when it comes to Australian student credit cards.

The final two constructs to be examined within this study, brand attitude and CE. Brand attitude being considered by marketers as a useful construct in predicting consumer behaviour, this study seeks to explore if the prediction extends to the student credit card market and respondents have a favourably predisposition towards the acquisition of a credit card offering from their main financial institution (MFI). CE, defined as an individual's participation in and connection with an organisation's

offerings or activities (Vivek, et. al., 2014), is also examined, noting CE within the financial services industry has previously been examined as a psychological process driving loyalty, impacting potential product uptake (Kosiba et al., 2018; Monferrer et al. 2019). This student seeks to explore the extension of this theory.

1.4.3 Research Questions

To date, limited research has been conducted investigating the effects of the coexistence of hedonic and utilitarian motivations, compulsive buying behaviour, materialism, normative influence, and financial literacy, and how these factors influence credit card product selection and engagement with new entrants to the market. An inability to understand the coexistence and influence of the underlying motivations for product selection in the credit card market leads to guesswork by issuers in their product development, design, and pricing; as well as for consumers, who may be unable to identify the product offerings best suited to their needs. This gap in knowledge motivates this research and is the premise which drives the following research questions:

RQ1: Does brand attitude and customer engagement affect a consumer's credit card acquisition intentions?

RQ2: What influence do factors including personal shopping values (hedonic and utilitarian motivations), materialism, normative influence, compulsive buying tendencies, and financial literacy have on a brand attitude and customer engagement, and how does this influence credit card product acquisition intentions?

RQ3: Do the above-listed factors influence the buying motives of an individual and their propensity towards credit card use?

Failure to understand, and be readily able to identify, consumer needs and motivations can also have a detrimental effect on the reputation of a financial institution. In extreme circumstances, this may lead to the application of product intervention powers by Australia's regulatory body, the Australian Securities and Investments Commission (ASIC), if the actions undertaken by the issuer in the

promotion and distribution of the product appear unjust. Failure to comply with legislation and regulatory guidance can not only have a detrimental effect on the reputation of the organisation/brand, but may result in increased scrutiny, financial penalties and even the loss or restriction of an issuer's credit licence, affecting their ability to operate (Dwyer, 2020; Hassan & Ellis, 2016). While a breach of legislative or regulatory requirements and the ramifications of this are considered extreme, a failure to identify consumer needs and motivations is likely to result in higher product maintenance costs, as issuers continue to apply guesswork to product design and development, adding low-value offerings to their range in a desperate attempt to capture greater market share.

Similarly, failure to understand and identify suitable products among the plethora of credit card offerings in the market can be detrimental for consumers, resulting in product dissatisfaction and, in some circumstances, inability to service the debt. Unsuitable product uptake for consumers' usage intentions and inability to service the debt by meeting the minimum monthly repayments of the account, in turn may affect the consumer's suitability for consumer credit in the future (Caddy et al., 2020a; Tahir et al., 2020). This potential effect on a consumer's credit rating; lack of education and understanding in relation to consumer finance products and services; and consumer confusion surrounding product suitability has seen a generation of consumers shy away from credit card products, forgoing both necessary and desired purchases.

1.5 Theoretical Significance of the Study

This study sets out to enrich understanding of how hedonic and utilitarian motives, materialism, normative influence, compulsive buying, and financial literacy impact a consumer's brand attitude and CE in the Australian consumer credit card market, and how this effects tertiary students' propensity to acquire and utilise credit cards as their preferred payment method. Through the integration and application of consumer behaviour theories, this study aims to bridge a gap between theory and the real-life complexities surrounding credit card market entry in practice.

To date, limited research has been conducted into the coexistence of the concepts to be examined, and how they are shaped by an individuals' values, in the consumer credit card decision making process; with variables previously examined only in

isolation and/or across border. As such, this research is expected to provide theoretical insight through the establishment of a comprehensive conceptual framework.

The study comprehensively integrates previous consumer behaviour theories, starting with the individual's hedonic and utilitarian motives through PSV (Arnold & Reynolds, 2003; Babin et al., 1994), and examining how these values shape susceptibility to normative influence (Batra et al., 2001), materialistic urges (Richins & Dawson, 1992), compulsive buying tendencies (Valence et al., 1988), and financial literacy self-efficacy (Lown, 2011). The study examines the influences of all these factors on brand attitude and CE utilising the frameworks developed by Spears and Singh (2004) and Vivek et al. (2014), and the overall propensity to acquire and use a credit card. Utilising existing theory to build a conceptual framework aimed at exploring the research questions, expanding the literature and making a significant theoretical contribution to the field of consumer behaviour in consumer credit.

Most previous research conducted into consumer credit cards is comparative (Cakarnis & D'Alessandro, 2015; De Silva & Patabendige, 2021; Hancock et al., 2013; Lim et al., 2014; Singh et al., 2018); the current study is one of the few examining a plethora of factors influencing consumer acquisition intentions and ongoing engagement in the credit card industry. To the researcher's knowledge, this is the first study to examine how PSV, materialism, normative influence, compulsive buying, and financial literacy shape CE and brand attitude, expanding this investigation to understand acquisition intentions and behaviours in a credit card market. Moreover, this study is the first to investigate these influences in an under-represented cohort within the consumer credit card market. This research is a foundation into the dynamic interaction of people, environments, and behaviours, for new entrants to the credit card market and unfolds pathways for further research related to social influences, attitudes, and engagement in the service marketing context. Empirically contributing to consumer research and literature by expanding the examination of CE within the target market, this study complements previous findings accentuating the importance of engagement strategies for financial service providers. It is considered, in general, consumers make purchases to fulfil both hedonic and utilitarian motives; this study, contrastingly, examines how these motives shape consumer's behaviours and experiences within the credit card market. The results aimed at presenting a fresh perspective on the drivers for financial product acquisition.

Literature is enhanced through the exploration and extension provided in this study, including the demonstration that personal shopping values act as an antecedent in the consumer decision making process and contributing to the formation of financial self-efficacy of young consumers, and how brand attitude and CE positively influence consumer credit card decisions and strengthen the relationship between the individual and their financial institution of choice. Equipped with an advancement in theoretical knowledge relating to the multitude of variables affecting consumer decision-making processes when using credit in Australia, as derived from this study, there is an anticipated likelihood that the outcomes of the research will prompt further examination of the influence of these variables on decision-making processes across product ranges, shopping channels and cultures, and paves the way for further exploration into motivation and goal theory in this field.

1.6 Industry Significance of the Study

The findings in relation to the research questions addressed in this study aim to increase industry understanding of consumer behaviours and intentions for credit card adoption and use in an evolving consumer credit market, with anticipated application of findings to develop constructive and competitive product offerings aligned with the needs and demands of new entrants to the market—specifically an Australian tertiary student cohort.

Brought forth by the findings of the Australian Royal Banking Commission, there is increased scrutiny surrounding the suitability of products and services offered by financial institutions to consumers, including the obligation on issuers to consider a wide range of factors to ensure products meet the needs of the target market and do not create consumer detriment. Under these obligations, issuers of financial products are required to actively design, test and distribute products with a target market in mind for the purpose of ensuring their products meet the needs of consumers, with ASIC granted additional product intervention powers to reduce risk of harm (Dwyer, 2020; Hassan & Ellis, 2016). The findings of this study are aimed to improve insight into factors shaping credit card consumer acquisition intentions for financial product issuers, helping ensure the suitability of product design and disclosure materials, as well as product distribution methods.

Keeping this in mind, it is recognised that the consumer credit needs of individuals enrolled in undergraduate tertiary education in Australia are likely to vary significantly from those of individuals employed full time in the workforce because of access to disposable income, and a clear under-representation of the tertiary student cohort is evident in the market. This under-representation may derive from a product gap, with young consumers unaware of the value that can be derived from current market offerings. Enhancing consumer awareness of motives and factors shaping their financial product decisions endeavours to promote a deeper understanding of the consumer credit market and enable the identification of suitable product offerings. The expectations of consumers equipped with this understanding are most likely to be met and products acquired are more likely to be perceived by the individual to provide exceptional value.

Acquisition and engagement with credit card products are considered to play a vital role in creating both immediate and long-term profitable customer relationships with issuers (Baumann et al., 2007). Accordingly, in addition to ensuring product suitability, the key motivating factors in an individual's intentions to undertake a product offering and post-acquisition consumption behaviours should transpire as a significant consideration from product design to the development and application of marketing strategies to create meaningful customer relationships (Romdonny & Rosmadi, 2019). There is currently limited understanding of the key drivers and influencing factors in consumer credit card uptake, resulting in guesswork throughout product design, pricing strategies and campaign development; thus, diminishing their effectiveness. This study aims to address this gap, providing valuable insights and understanding for the industry, and aiding in the development of prosperous banking relationships.

1.7 Overview of Methodology, Data Analysis, and Scope

Adopting a deductive reasoning approach, this study examines previous literature pertaining to the key constructs of PSV, normative influence, financial literacy, materialism, CE, and brand attitude to develop a conceptual model utilised for the cultivation of hypotheses. Utilising a quantitative research design through the application of a cross-sectional online survey, data was collected from 832 students over an 11-week period. Further detailed within Chapter 4, preliminary data analysis,

measurement model assessment including exploratory factor analysis and confirmatory factor analysis, and structural model assessment utilising covariance based structural equation modelling was undertaken to examine the 15 proposed hypotheses.

As noted, the scope of this thesis is to enrich understanding of the interplay of the key constructs aforementioned on credit card purchase intentions for students who are new entrants to market. Students are considered underrepresented within the credit card landscape, and therefore the results of the study are considered to make a valuable contribution to practice, enabling financial services providers to design and position their products in a favourable manner. With the objective in mind, delimitations are defined.

1.8 Overview of Delimitations and Limitations of the Study

First, this study is delimited to only examine Australian tertiary students due to the researcher's knowledge of the Australian payments landscape and the location in which the research was undertaken. Whilst there are some differences across payment landscapes globally, it is possible the results of this study can be generalised and applied within other regions; however, may require additional examination and testing.

Furthermore, this study excludes the examination of other factors outside the detailed constructs which may influence motivation to acquire the product; a conscious decision made by the researcher to limit the scope. Credit card acquisition and use behaviour is complex and may vary throughout a consumer's life, therefore the constructs to be examined were specifically selected by the researcher with the consideration that young consumers are entering a transformative stage of life, where credit is becoming readily available.

The consumer credit market is volatile and constantly changing. This study does not examine other forms of consumer credit which may be available within the market, which could further influence a young consumer's desire to obtain traditional consumer credit card products. This is a major limitation to the study; although due to the longevity of credit cards, convenience and accessibility within the market, and profitability of the product, it is not seen as unreasonable to examine credit cards in isolation.

1.9 Outline of Thesis

This thesis is comprised of five chapters: (1) Introduction; (2) Literature review; (3) Research methodology; (4) Results; and (5) Discussion and conclusion as illustrated in Figure 2.

Chapter 1 has presented the outline of the study, which will examine motivating factors and influences on credit card engagement in the Australian tertiary student market, including expected consequential theoretical and industry contributions.

Chapter 2 examines the theoretical literature in the field, and forms the premise of the study as depicted in the conceptual model. The hypotheses to be examined are defined in the chapter, as the study explores identified gaps in the understanding of consumer credit card behaviour for new entrants to the market. The study focuses on the engagement and uptake of consumer credit cards in the Australian tertiary student market, as this cohort is heavily under-represented in the Australian credit card payments landscape and can play a critical role in the development of a long-term consumer relationship with a financial institution.

Following the examination of the literature and representation of the conceptual model to be examined, Chapter 3 outlines the research methodology employed. The study's research questions are explored through a quantitative methodology underpinned by the positivist paradigm. Cross-sectional survey design is employed encompassing defined consumer behaviour frameworks and administered via an online panel, as described in Chapter 3. The chapter details the sampling design, measurement, and procedure.

Analysis of the data and results of the study are presented in Chapter 4 of the thesis. The chapter presents the results of the preliminary data analysis, measurement model assessment and structural model assessment undertaken utilising SPSS software, prior to detailing the results of hypothesis testing.

The final chapter of this thesis, Chapter 5, concludes the study with discussion of the findings and implications for practice, noting limitations and directions for future research.

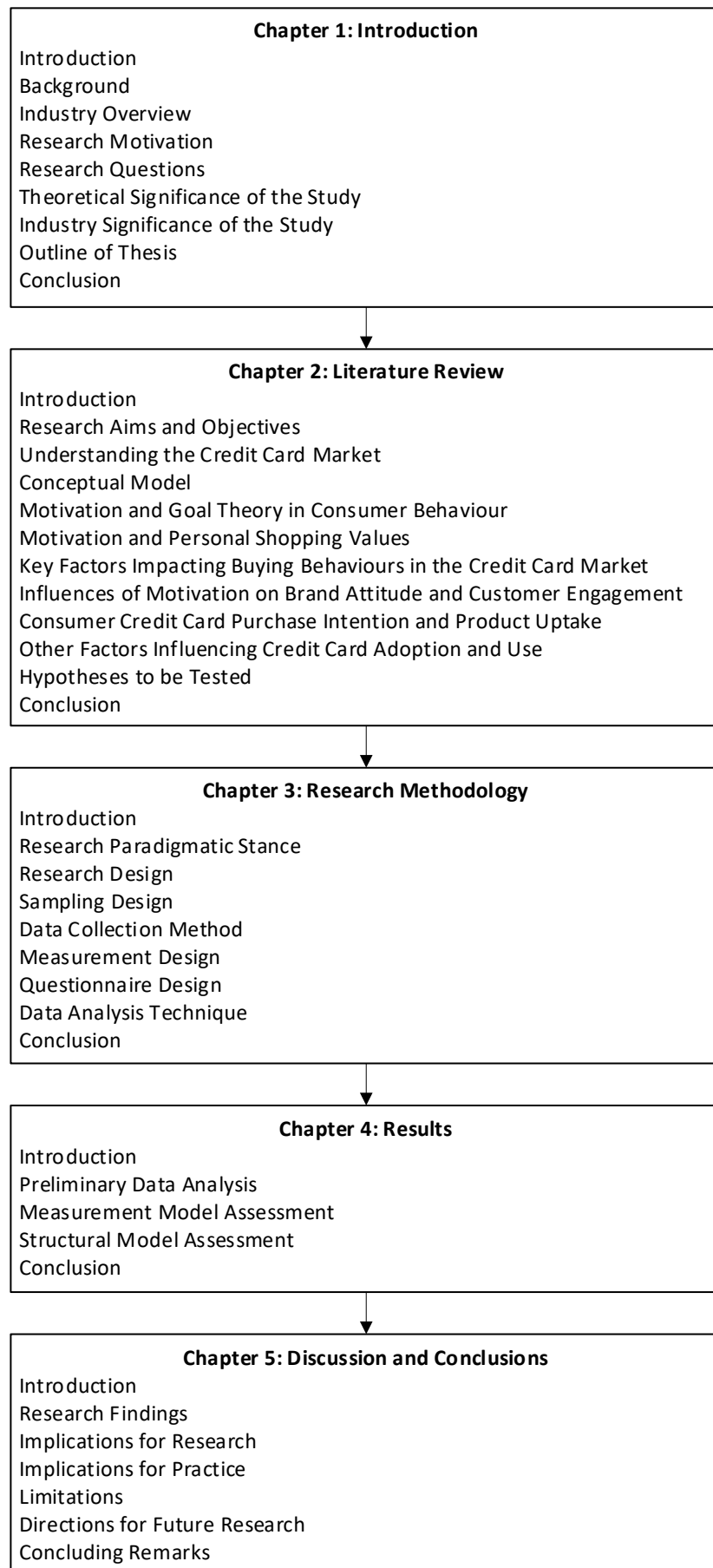


Figure 2: Outline of Thesis

1.10 Conclusion

Building an understanding of the motivating factors shaping credit card acquisition and use aims to further develop understanding and benefits of the application of theoretical frameworks throughout product design and development in the Australian credit card market. The insights gained and findings depicted are likely to assist issuers and consumers alike in ensuring the practicality and suitability of credit card product offerings, and the appropriateness of consumer credit card use for purchase fulfilment. As detailed throughout the chapter, the study examines the effects of brand attitude and CE on credit card acquisition—factors considered imperative in the development of long-term and profitable banking relationships—and how these factors are shaped by PSVs (hedonic and utilitarian motivations), materialism, normative influence, financial literacy, and compulsive buying tendencies.

The following literature review chapter includes an outline of the research aims and objectives arising from the aforementioned research questions, and examines relevant literature in the field from which the conceptual model and hypotheses are developed.

Chapter 2: Literature Review

2.1 Introduction

The previous chapter was an introduction to this study into the motivations for credit card acquisition and utilisation within the Australian tertiary student market; discussing the theoretical and industry background, outlining the key research questions to be addressed, and providing an overview to the structure of the study.

This chapter presents the research aims and objectives of the study, and provides the reader with background information on the credit card industry. Through the analysis of literature relevant to the key concepts to be examined, the conceptual model is developed and hypotheses to be examined are formulated, as outlined in Figure 3.

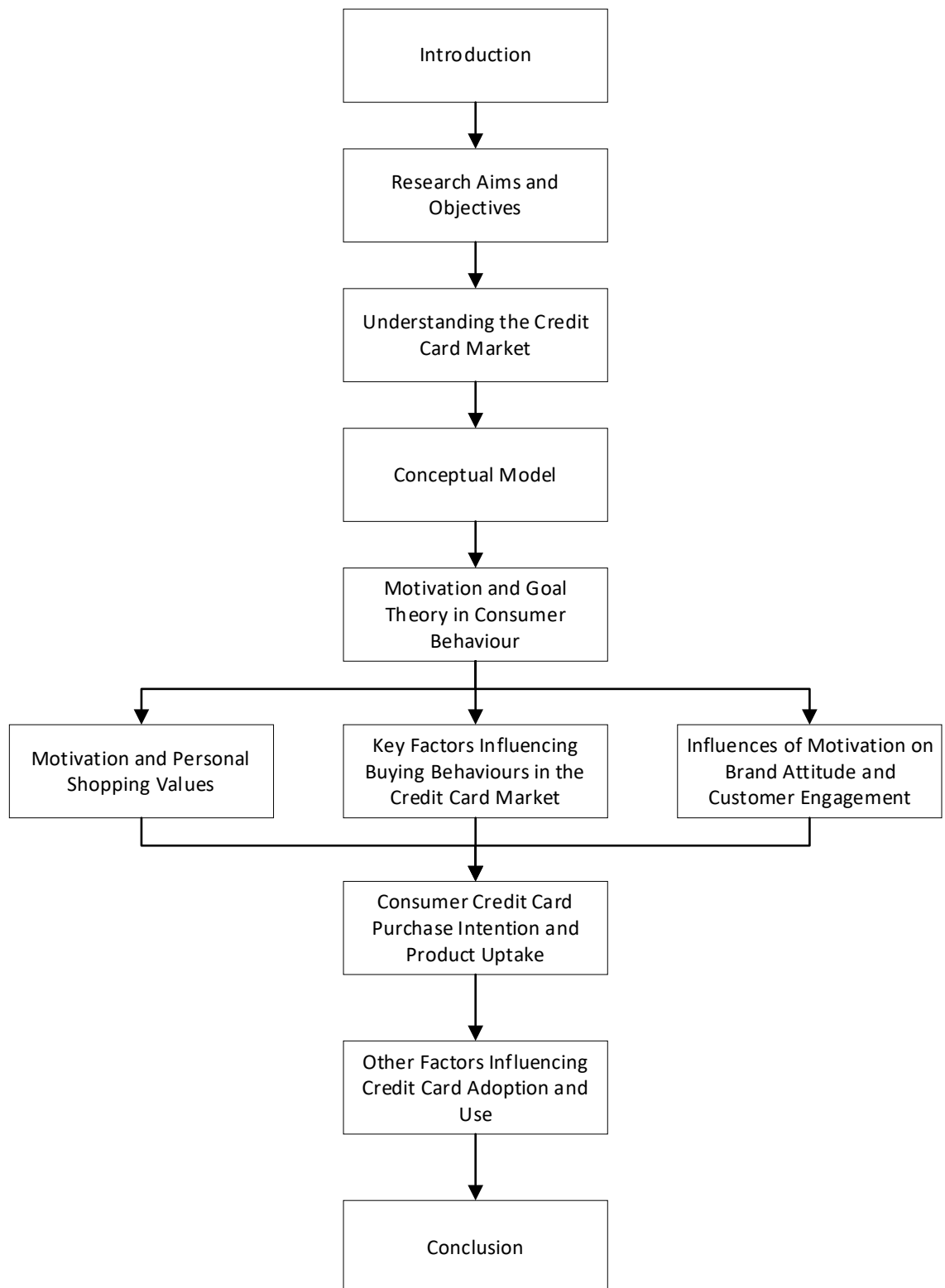


Figure 3: Outline of Chapter 2

2.2 Research Aims and Objectives

To address the questions posed in Chapter 1 and explore the academic literature on consumer behaviour and the utilisation of credit cards, this research aims to examine the effect of a range of dependent and independent constructs on credit card purchase intentions of Australian undergraduate tertiary students, underpinned by the values and motivations that shape an individual's purchasing decisions. In particular, this study considers the individuals' PSVs, brand attitude and customer engagement shapes credit card product uptake / intention to purchase. In addition, to exploring the impacts of financial literacy, materialism, compulsive buying tendencies, and normative influence within the market segment examined. Ultimately, the objective of the study is to better understand consumer behaviour, motivations and intentions for credit card adoption and use in an evolving consumer customer cohort, with anticipated contribution to the industry through enabling the application of findings in the development of constructive and competitive product offerings.

It is assumed that a comprehensible reality exists in consumer shopping motivations, driven by undeniable natural laws and mechanisms as prescribed in studies of purchase behaviours and influences, which are examined throughout this chapter. This study aims to demonstrate that these motivational influences on user experiences and engagement in the credit card product category may be summarised as cause-and-effect relationships, from which when applied within the industry, the developed understanding can have a salient impact on the prediction of acquisition and utilisation behaviours.

2.3 Understanding the Credit Card Market

The credit card market is vast and multifaceted. The importance of credit cards in today's society is consequential to the consumption-centred ambition to obtain a 'good life'. This ambition has seen credit cards become a major financial service, stimulating household and personal spending across all income classes (Bernthal et al., 2005; De Silva & Patabendige, 2021). Credit cards are often recognised for their ability to regulate and facilitate particular lifestyles in Western societies, and when balanced effectively with self-control can lead to advancement towards and/or ascertainment of a

consumer's needs or desires. Credit cards are considered to encourage spending and increase willingness to pay. Studies into credit card usage support this perception, noting that consumers have the tendency to spend more on groceries or in department stores or provide a greater tip in restaurants when making payments via credit (Greenacre & Akbar, 2019; Hirschman, 1979; Prelec & Simester, 2001; Ramlan et al., 2020).

Following the Global Financial Crisis in 2008, and more recently the effects of the COVID-19 global pandemic, a shift in consumer behaviour and consumer confidence in financial products, services and management has seen an increase in household savings. However, despite this inclination to save, industry research demonstrates the stability of the credit card market with consumer credit remaining an attractive payment method for many consumers for both every day and spontaneous purchases (Commonwealth of Australia, 2016; Consumer Financial Protection Bureau, 2015; Shakinovsky & Hassan, 2021). In many instances, the attractive nature of credit cards can be associated with their convenience, their wide acceptance by merchants and the overall attractiveness of product features including reward programs with accrued spending amounts. Credit cards can be seen to enable consumers to efficiently manage their spending patterns through times of high expenditure or temporary shortfalls in income, providing flexibility and discretion in regard to the amount borrowed and the amount repaid (Commonwealth of Australia, 2016; Pulina, 2011; Surekha, et al., 2022).

Studies show the decision to acquire and utilise a consumer credit card as a payment method may be driven by a number of factors, including psychological, cultural, and economic influences. In many instances, credit card acquisition and use has been associated with having the capacity to compel the cardholder towards a desired lifestyle that becomes more attainable through the utilisation of credit to facilitate purchases (Bernthal et al., 2005; Fulford & Schuh, 2020; Greenacre & Akbar, 2019; Khare et al., 2012; Surekha et al., 2022). Observations highlight that once a credit card product is acquired, product switching remains relatively low among Australian consumers (Commonwealth of Australia, 2016). This can be attributed to an optimistic bias in consumers towards their main banking financial institution and brand familiarity; the complexities involved with product switching; and/or inability to comprehend product offerings in the market that are more aligned with their financial needs and objectives (Agarwal et al., 2007; Commonwealth of Australia, 2016).

Throughout the information search and evaluation of alternatives stages of the consumer decision making process, Australian consumers are faced with a number of alternative product selections. Most common card types are categorised as either ‘low rate’, ‘low fee’, ‘platinum’ or ‘reward’ (Australian Bankers Association Inc, 2015). When acquiring a credit card product, consumers are most likely to evaluate the products offered by their main financial institution, first and foremost—rather than those of other providers—in terms of annual card fees, interest rates and security of information (Visa International Service Association, 2016). Thus, the development of compelling value-driven acquisition campaigns by providers plays a vital role in sustaining growth in credit card portfolios and fostering long-term customer relationships (Lewis & Soureli, 2006; Ramlan et al., 2020).

2.3.1 Credit Card Market Segmentation

Segmentation of the credit card market plays an important role in credit card product lifecycle management, promoting customer value and engagement. Segmentation allows for issuers to align the product value proposition to fulfil consumers’ needs, and clarifies product positioning and promotions. The most commonly adopted credit card market segmentation targets consumers based on their spending and payment behaviours. Industry analysts categorise cardholders as either ‘transactors’ or ‘revolvers’ (Commonwealth of Australia, 2015; Fiorio et al., 2014; Stavins, 2018). These market segments are commonly referred to by the financial services press but less so in the academic literature where segments are derived from transactional statistics.

Cardholders deemed transactors typically pay off their card balance in full each month, and in doing so avoid paying interest. These consumers typically use their credit card as a payment mechanism for a variety of everyday purchases, rather than cash, debit cards or other payment methods. Conversely, revolvers are deemed cardholders who typically pay interest on their credit card balance, as the balance carries forward (revolves) over time. Revolvers typically use their credit card for large and/or unexpected purchases, facilitating spending in times of disposable income shortfalls (Stavins, 2018). In 2021, around 58% of Australian credit card users fell into the revolver category, netting a national debt of \$18.5 billion in accruing interest (Cooke,

2022). Revolvers can be further segmented based on the frequency of holding a revolving balance, whether occasional or frequent (Commonwealth of Australia, 2015). The Reserve Bank of Australia (2015) notes that the proportion of frequent revolvers is higher among low-income households, with high-income households more likely to only fall into this category on an occasional basis because of their capacity to make credit card repayments when they fall due. It is also noted that the existence of a frequent revolver category is driven by an optimistic predisposition held by consumers that they will be able to fulfil repayments when acquiring the product, as well as intrinsic buying motives stimulating higher credit card use (Commonwealth of Australia, 2015).

The behaviour of new entrants to the credit card market is unascertainable, and therefore observed segmentation is not applied in this study. However, there is a perception held by financial service providers that new entrants to the market (in particular, young consumers) are likely to be frequent revolvers because of limitations in access to disposable income during times of shortfall. Consumer credit card product positions for new entrants are commonly positioned according to this assumption, which may be appropriate for some but also considered a deterrent for others.

2.3.2 Australian Credit Card Market

According to industry statistics presented in Shakinovsky and Hassan's (2021) *The Future of Credit Cards Report*, around three-quarters of Australian adults hold at least one consumer credit card product. Credit cards are considered to provide individuals with the ability to acquire wealth by borrowing to buy assets that may increase in value over time; as well as the flexibility and discretion to purchase goods or services that may otherwise be unobtainable. In Australia, credit card purchases facilitated \$317.9 billion worth of purchases in 2021, producing an average credit card balance of \$2,801 per month (Cooke, 2022). These figures highlight the momentous role that consumer credit card products play in stimulating spending in the economy (Australian Bankers Association Inc, 2015; Cooke, 2022). However, research in recent years shows that Australian credit card holders are becoming more prudent with their spending, and take a proactive approach to paying off consumer debt, which may be

attributed to downfalls in consumer sentiment (Shakinovsky & Hassan, 2021; Trading Economics, 2021; Westpac Banking Corporation, 2021).

The Australian credit card market is comprised of several competing brands and products offering cardholders a wide variety of choice based on individual preference and perception of risks in relation to the benefits of product acquisition and engagement (Allgood & Walstad, 2011; Commonwealth of Australia, 2016; Khare et al., 2012). In 2021, the top four consumer credit card issuers in Australia are the Big Four banks, which reflects both the concentration of the Australian financial system and consumer preference to hold credit product offerings with their main banking financial institution because of brand familiarity and confidence (Cooke, 2022).

2.3.3 Tertiary Student Credit Card Market

Students are often considered a credit card provider's prime suspect due to the long credit life ahead of the consumer (Cummins et al., 2005; Hayhoe et al., 2000). Commencing tertiary study often signifies the first real taste of freedom, with many individual's "flying the coop" to experience life on campus. With this coming of age, comes increased financial responsibility, and in some cases, there are times when a student may find they are short of disposable income. Whilst many students may turn to their parents for financial support, many others consider the uptake of their first credit card, with over 55% of college students in the United States adopting credit card payment methods (Cummins et al., 2005; Duncan, 2021; Holmes, 2021).

As noted in the previous section, the Australian credit card market is comprised of several competing brands and products offering cardholders a plethora of choice. Within this, there is a suite of entry-level credit cards, aimed at young consumers who do not typically have a long credit history, high income, or consistent record of employment (Duncan, 2021). These product offerings are frequently bolstered with attractive interest- or fee- free periods, however unless coupled with strong financial management capabilities students may find themselves facing financial, personal and/or academic difficulties after the introductory offer lapses (Cummins et al., 2005; Duncan, 2021; Hayhoe et al., 2000; Liu and Zhang, 2021). As such, these product offerings and the extension of credit to students has come under scrutiny over the years, leaving further work to be done to understand this market, and develop both compelling and

appropriate product propositions based on the consumers' motivation for the application of credit.

2.4 Conceptual Model

As detailed in Figure 4, the constructs to be examined provide comprehensive insight into factors shaping buying behaviours and intentions, personal shopping motives and the effect of brand attitude and CE in the Australian consumer credit card market. The conceptual model forms the foundation of the study and acts as a guide for examination. Previously noted, the examination of shopping behaviour throughout literature is dominated by theoretical frameworks of motivation and goal theory, as researchers have sought to understand why people shop in the way they do (Babin et al., 1994; Bagozzi & Dholaki, 1999; Harris et al., 2018; Howarth et al., 2021; Lee & Ariely, 2006; Tauber, 1972). Similarly, this study considers motivation and goal theory, naming goal directed behaviour, as the overarching theories applied, to examine how financial service providers can best evolve their credit card product propositions to appeal to Australian tertiary students and how consumers can be better equipped to identify the suitability of products in a market abundant with choice. As the study aims to explore the shopping motives of individuals, goal theory, examined through personal shopping values and utilising Tauber's (1972) model, forms the premise of this thesis. As noted throughout literature, consumption goals are not limited to the end-state, and also encompasses experiences, interconnected happenings and ongoing processes (Bagozzi & Dholakia, 1999). Bearing this in mind the study also examines other driving influences often identified within the consumer buying process of materialism, compulsive buying behaviours, financial literacy, and normative influence. The theories underpinning the model, are further explained in subsequent sections, with the operationalisation of each construct detailed within Chapter 3. As noted above, for the purposes of this study behavioural market segments 'transactors' and 'revolvers' are not considered moderating factors, as the study aims to examine new entrants to market whose credit card behaviours are not yet tangible.

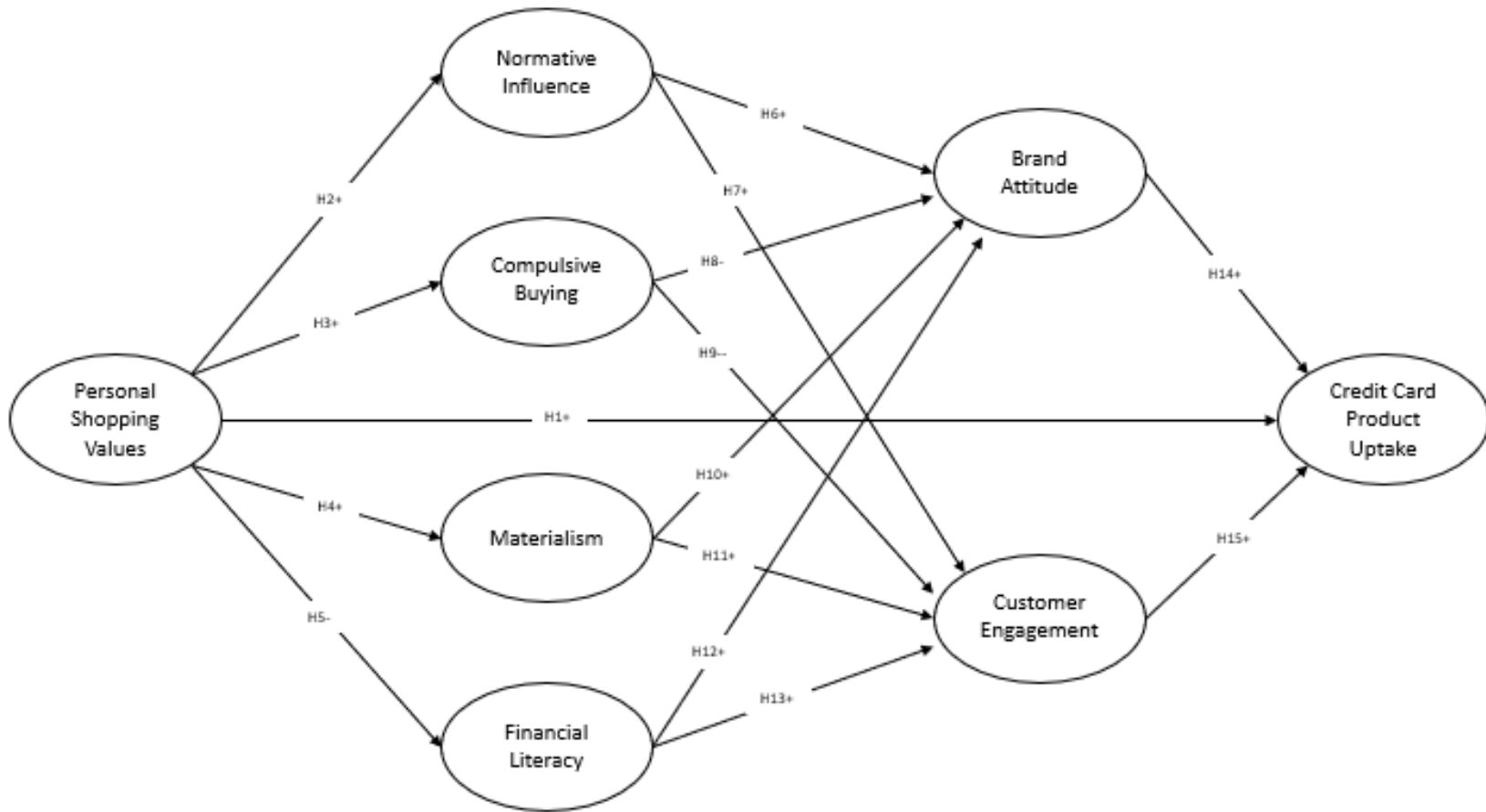


Figure 4: Conceptual Model

2.5 Motivation and Goal Theory in Consumer Behaviour

Motivation and goal theoretical approaches to consumer behaviour posit that a consumer's behaviour is subject to biological influences through instinctive forces, drives, goals, or motives, which may act in or outside conscious thought, understanding or reasoning. These drives, urges, wishes or desires lead to sequential events or behaviours commonly referred to in the literature as consumer motivation (Bayton, 1958; Malter et al., 2020; Qazzafi, 2020; Schiffman et al., 2008; Woods, 1960). Bayton (1958) notes that motivation arises from a state of disequilibrium that triggers a sequence of psychological events in an individual aimed at ascertainment of a goal, which releases the tension and reinstates equilibrium. As this study aims to explore individuals' motives, and the influence of underlying drivers, goal theory, naming goal-directed behaviour is drawn upon as theoretical underpinnings of the study.

Studies of consumer motivation also note that there may be differences between the true motives of an individual and their rationalised motives. This difference arises when an individual intentionally conceals the true motives for their behaviours because of the perception that the motive may be harmful to others or socially unacceptable (Qazzafi, 2020). However, differences between true motives and rationalised motives may also occur on a subconscious level, when an individual attempts to assign motives to their behaviour that are acceptable to their personality structure (Bayton, 1958).

In addition, to true and rationalised motives, scholars have paid particular attention to the pivotal role goals play in consumer behaviour, in addition to the process of goal setting and goal pursuit. As noted by Bagozzi & Dholakia (1999), consumption goals are not limited to the end-state goals, also encompassing experiences, interconnected happenings, and ongoing processes. One of the most well-known models detailing underlying drivers of consumption behaviour, consumer motivation and cognitive goals, Maslow's hierarchy of needs, is often applied by marketers to interpret how products and/or services can be perceived as satisfying distinct levels of consumer needs (Howard & Sheth, 1969; Jisana, 2014; Sheth, 1985). The theory identifies five basic levels of human needs: (1) physiological, (2) safety, (3) belongingness, (4) esteem and (5) self-actualisation, which rank chronologically in order of importance and fulfilment requirements. These needs reflect the inferred motivations of an individual and facilitate product positioning in marketing strategies. While the model developed by Maslow has been criticised in relation to generalisations, it demonstrates usefulness for

understanding intrinsic consumer motivations in the six stages of consumer decision making—from the recognition of needs to evaluation and post-consumption behaviours—and continues to provide a useful foundation (Oleson, 2004; Sheth, 1985; Simamora, 2021).

Another commonly referenced model of consumer motivation results from Tauber's (1972) categorisation of personal and social shopping motives. The model identifies consumer orientations and the motivations behind consumer shopping, classifying shopping motives as either intrinsic or extrinsic. This results in development of PSVs/motives that can be classified as hedonic or utilitarian motives. Desire to fulfil these motives, and the influence of hedonic and utilitarian motivations on shaping a consumer are considered to underpin purchase decisions. Hence, imagery displaying the fulfilment of both intrinsic and extrinsic needs is commonly applied by marketers in the development of marketing campaigns aimed to intensify the desire to buy (Babin & Krey, 2020; Picot-Coupey et al., 2021).

Furthermore, whilst many studies focus on consumers' impulsiveness in decision making whilst shopping, Ahmed & Ting (2018) argue that shoppers are not always impulsive, and a consumers' behaviour and motives are most commonly derived from one's goals. This argument coincides with accumulating evidence within goal theory studies which acknowledges the fundamental role of goals in providing a sense of direction and influencing the way in the consumer behaves, noting that individuals often possess multiple goals and goals are not static (Bagozzi & Dholakia, 1999; Howarth et al., 2021; Kruglanski et al., 2002; Lee & Ariely, 2006). From this, the concept that shopping motivations are purpose-specific, activity-specific, and demand-specific can be derived; with goals focused on the specific outcome(s) that consumption can produce. These consumption goals are not limited to the end state, encompassing the shopping experiences, brought about through understanding of the pathway to lead to the consumers' primary objectives, and may be hedonic or utilitarian in nature (Bagozzi & Dholakia, 1999; Howarth et al., 2021; Overby & Lee, 2006). With the objective of this study to develop deeper understanding of the role shopping motives play in the consumer credit card decision making process, PSVs are considered an antecedent in this study, further detailed below.

2.6 Motivation and Personal Shopping Values

Since Tauber (1972), consumer motivations and various orientations in the way individual consumers shop have been studied, as have shopping outcomes/behaviours (Arnold & Reynolds, 2003; Babin et al., 1994; Buttle, 1992; Crowley et al., 1991; Picot-Coupey et al., 2021; Voss et al., 2003). Tauber's (1972) taxonomy of personal and social shopping motives has since been related to personality trait theories, corroborating the appropriateness of the constructs for understanding consumer buying behaviours (Guido, 2006). The framework developed by Tauber (1972) was later linked to the typology of fundamental human motivations, suggesting that consumer buying behaviours are driven by fundamental reasons: to acquire a product (purely utilitarian motives); to acquire a desired product and provide satisfaction with non-product-related needs (containing both utilitarian and hedonic elements); or to attain goals not related to the product's acquisition (hedonic motives). The study by Arnold & Reynolds (2003) reveals that shopping/buying activities undertaken by consumers and overall shopping value are driven by the drives, urges, needs or desires of the individual at the time, which can vary depending on influencing factors. These findings have since been examined throughout consumer motivation research, strengthening the importance for marketers to possess a sound understanding of consumer motivation and its effects when developing/delivering marketing strategies and communications.

In addition, many studies have measured the effect of consumer values on purchase intentions. One such study conducted by Sheeraz et al. (2012) notes that an individual's values can be separated into two main dimensions: external values and internal values. When an individual has competing goals and/or objectives that they struggle to achieve, the selection of goals occurs via values. The external and internal values of an individual consumer may be associated with hedonic and utilitarian motivation. As such, it is considered that consumer values are strong predictors of consumer purchase intentions, with values underpinning motivations for consumer decision making. Therefore, marketers should focus on the values of consumers because of affect when developing and delivering communications (Sheeraz et al., 2012).

2.6.1 Utilitarian Motivation

Utilitarian shopping includes the purchase and consumption of goods, products or services to meet basic needs or to provide additional convenience, quality and/or variety at a reasonable price (Sakar, 2011). The motives behind utilitarian purchases can be defined as task orientated, cognitive and non-emotional, and may incorporate aspects of attitude relating to economic value for money and judgments of convenience (Overby & Lee, 2006; Vieira et al., 2018). It is perceived that utilitarian shopping motives are positively related to purchases, or information gathering, through necessity rather than recreation. Utilitarian shopping is often considered by consumers as an errand or chore; therefore, the ability for consumers to acquire products easily provides positive utilitarian shopping value, leading to increased satisfaction and higher probability for repeat consumption, as identified in studies undertaken by Babin et al. (1994), Jones et al. (2006) and Sakar (2011).

In many instances, the use of credit cards facilitates shopping and can fulfil utilitarian motives by enabling consumers to complete purchases of necessity easily, even in times of shortfalls in cash flows (Bernthal et al., 2005; Commonwealth of Australia, 2016). Thus, in this study utilitarian motives are examined as part of the PSV construct.

2.6.2 Hedonic Motivation

Hedonic motivation is derived from the concept of hedonism; a philosophy acknowledging pleasure in the content and meaning of life. Buying motives that are hedonic in nature are described as relating to the purchase and consumption for the reason of obtaining a sense of enjoyment, and are driven by the individual's desire for fun, entertainment and satisfaction (Sakar, 2011; Vieira et al., 2018). Numerous studies work towards the establishment and acceptance of a definition for hedonic consumption motivations, with Crowley et al. (1991) stating that the hedonic component of motivation is related to 'sensory attributes, and focuses on consummatory affective gratification'. In addition, Bakırtaş and Divanoğlu (2013) state that hedonic consumption signifies the 'joy and pleasure' experienced from undertaking shopping experiences. Babin et al. (1994) concurs, noting that hedonic motives are more

subjective and personal, resulting in purchases being considered pleasurable rather than as a task completion. Consumers who shop to fulfil hedonic motives experience appreciation for the process in the sense of entertainment and/or escapism, resulting in consumption gratification (Babin et al., 1994; Overby & Lee, 2006; Voss et al., 2003). Batra and Ahtola (1991) note that the attitudinal evaluation of gratification from hedonic experiences should be presumed to be based on the individual consumer's assessment of how much pleasure they experience; this can differ between individuals, with expectations of pleasure varying based on a range of factors including past experiences and socioeconomic factors. These studies recognise the importance of being aware of hedonic factors of consumption and consider understanding of hedonic motivation advantageous to businesses across a variety of sectors/areas. The ability for a business to effectively identify hedonic motives allows for the development of understanding of the feelings, thoughts and perceptions that shape consumer decision making.

The ease of access to credit payment methods enables consumers to undertake shopping experiences and fulfil hedonic shopping motives on a more frequent basis, even when they do not currently have the money. This enables them to attain desired lifestyles and products (Bernthal et al., 2005; De Silva & Patabendige, 2021; Plummer, 1971; Safakli, 2007). Therefore, hedonic motives are also considered part of the PSV construct in this study.

2.6.3 Experiential Motivation

Another type of consumer buying motivation commonly identified in the academic literature is experiential motivation. The notion of experiential consumer motivation has similar characteristics to those described as hedonic motivation, with Holbrook and Hirschman (1982), Lofman (1991) and Wu and Wang (2020) noting the importance of the consumer experience and the development of understanding of individuals' leisure activities, artistic endeavours, creativity, symbolic meanings, psycho-temporal resources, and emotions. In the research and development of products/services levelled towards evoking experiential motives, marketers need to be concerned with a vast variety of factors relating to the environmental context, feelings, and evaluations of the consumer, as well as the consumer's stimulation through sensory modalities based on the individuals' orientation (Lofman, 1991).

Differences between hedonic consumption motivation and experiential consumption are highlighted by comparing the prominence of emotional processing activities and evaluations associated with hedonic consumption. In this study, hedonic consumption motives are determined as an enrichment of experiential consumption motives, and these concepts are considered collectively under PSV.

2.6.4 The Personal Shopping Value Scale

Research by Babin et al. (1994) supports the general view that when determining consumer buying motives, both utilitarian and hedonic outcomes can be recognised and may provide value, influencing future consumer decision processes. Their study identifies emotions associated with PSV, which plays a fundamental role in influencing product evaluation, determining price–quality relationships and driving customer re-patronage, as well as overall customer relationships. Based on the shopping values identified by Tauber (1972), Babin et al. (1994) communicate the development of an all-encompassing shopping motivation scale that has since been utilised in various consumer buying motive studies. It recognises the duality of instrumental and experiential outcomes of shopping experiences and provides insight into consumer behaviours that cannot be explained through functional, intellectual and task-related motivational facets alone. Their PSV scale connotes consumer preference and a better explanation of consumer choice. The scale, validated through confirmatory factor analysis (CFA), has the potential to play a role in the understanding of the consciousness–emotional–value of customer shopping experiences as developed by Holbrook and Hirschman (1982).

Since its conception, the application of the PSV scale in further research has provided useful insight into consumer perceptions of both intrinsic (hedonic) and extrinsic (utilitarian) shopping values. It has been applied to purchase decision evaluations and cultural influences in consumer behaviours, however, has not been commonly applied in credit card research. The PSV scale has also been applied in studies investigating the differential effects of PSVs on retail variables such as customer satisfaction, positive word-of-mouth, and loyalty (e.g., Jones et al., 2006). The application of the scale supports the perception that both intrinsic and extrinsic motives have a positive effect on the overall satisfaction of a consumer with the retailer, with

hedonic shopping values also having a significant relationship with positive word-of-mouth and loyalty.

The detailed scale depicted by Babin et al. (1994) and further refined by Arnold and Reynolds (2003) is useful for the proposed research topic in increasing understanding of the consumption experience of credit card products, evaluation of product offerings and effects of other consumer considerations in shopping behaviours, and identifies six broad categories of shopping motivations:

- (1) adventure shopping—shopping for stimulation, adventure and the feeling of being in another world;
- (2) social shopping—shopping for the enjoyment of socialising while shopping, and spending time bonding with friends and family;
- (3) gratification shopping—shopping to alleviate a negative mood, as stress release, or to treat oneself;
- (4) idea shopping—shopping to keep up with trends and new fashions, and to be the first to see new products or innovations;
- (5) role shopping—obtaining enjoyment from shopping for other people; and
- (6) value shopping—shopping for sales, looking for discounts and hunting for bargains.

The scale, and the identified shopping categories, support the connotation of an interplay between utilitarian and hedonic values, furthering a suggestion that substantial heterogeneity exists between utilitarian and hedonic values, and customer satisfaction (Babin & Krey, 2020; Picot-Coupey et al., 2021). In this study, PSV is considered an antecedent; shaping factors that may influence a consumer's credit card product acquisition motives, leading to the following hypothesis:

H1: Personal shopping values have a positive influence on consumer credit card product uptake/acceptance in the Australian tertiary student market.

2.6.5 Key Considerations for the Application of Hedonic and Utilitarian Research Findings

Identified as a limitation in many studies of consumer buying motives, the effect of cultural differences on hedonic and utilitarian motives has been explored in recent times. Differentiation in social, economic and political structures can be identified to reflect on the consumption practices of individual consumers (Arisal & Cömert, 2016; Mattila, 1999). In considering cultural influences on consumer preference and hedonic/utilitarian motives, Arisal and Cömert (2016) note significant differences in buying motives between developing and Western societies as the objective of shopping changes from conventional (utilitarian) to hedonic in nature. Mattila (1999) also notes, in an empirical investigation into the influence of culture on consumer perceptions of service encounters, that the popularity of global marketing at the time of the study accentuated the growing homogenisation of markets. However, increasing idiosyncrasies in the buying motives of consumers from Western and developing cultures promote ongoing differences between them. For the purposes of this study, cultural heritage and its influence on consumption practices is not examined, and results obtained from consumers reflect the cultural diversity of Australia.

Studies also address the realisation of buying motives by consumers and the conceptualisation that their purchase is based on hedonic and/or utilitarian product characteristics, rather than lifestyle factors alone (Bakırtaş & Divanoğlu, 2013). Equipped with this knowledge, consumers are empowered to make informed consumer purchasing decisions, which can be related to overall customer satisfaction and loyalty. The expectation of consumers before and during product acquisition orientates their behaviour at the time and afterwards, influencing their decision making. For marketers, being armed with the knowledge that consumer buying motives can be conceptualised by the individual and that the orientation of consumer behaviour may be modified based on this realisation provides an opportunity for the shaping of the mind of the market through effectively developed products and campaigns focusing on neurological aspects of buying motives (Bakırtaş & Divanoğlu, 2013). This idea is implicit in the current study.

2.7 Key Factors Influencing Buying Behaviours in the Credit Card Market

2.7.1 Normative Influence

Conceptual studies of social influences on the consumer decision-making process and buying behaviours commonly refer to three types of influence: (1) informational, (2) value expressive, and (3) normative. All three forms of influence are considered to play an imperative role, as consumers strive to feel that their buying behaviours/decisions are derived from informed choice (Lord et al., 2001). In the academic literature, informational influence refers to that from perceived referent expertise, whereas normative influence is defined as influence derived from an anticipation to ‘conform to the expectations of another person or group’ (Burnkrant & Cousineau, 1975, p. 207). Normative influence has long been recognised as an important power in shaping a consumer’s shopping behaviours by enhancing the individual’s self-image. The normative influence of those around us is considered one of the most persuasive determinants in consumer behaviours and decision-making processes, and conforming is considered a relatively effortless act (Burnkrant & Cousineau, 1975; Orth & Kahle, 2008; Qazzafi, 2020; R. Spears, 2021). The prevalence of normative influence in many decision-making situations is highlighted in the theory of reasoned action, and the subjective norm construct is incorporated in the behavioural intention model.

Similarly to normative influence, value expressive influence is considered to drive the decision-making processes and buying behaviours of individuals based on a desire to comply with the norms, values and behaviours of a primary reference group. When an individual admires a reference group it is likely that they will attempt to mimic the group’s decisions or behaviours in an attempt to gain psychological alignment. Lord et al. (2001) notes that normative influence and value expressive influence are often difficult to distinguish empirically, as they are likely to coexist in the same primary reference groups. This is unlike the dichotomy between informational and normative social influences. Thus, for the purposes of this study, normative influence and value expressive influence are considered collectively.

Batra et al. (2001) and Doney (2004) identify susceptibility in making purchase decisions in consumers who shop in groups, in contrast to those who shop alone,

supporting the idea that individuals shopping in groups are more likely to make hedonic purchase decisions to coincide with the expectations of others. This increases the likelihood of impulsive purchase decisions, unlike when shopping alone or for utilitarian needs (Arisal & Cömert, 2016; Burnkrant & Cousineau, 1975). Thus, the following hypothesis is proposed:

H2: Personal shopping values positively influence normative influence in the credit card market segment.

The information search and evaluation of brands, products and/or services phases of the consumer decision-making process are subject to information and prior references of others (Burnkrant & Cousineau, 1975; Rook & Fisher, 1995; Spears, 2021). The diversity of normative views has the potential to influence a consumer's buying behaviours, shaping evaluations of appropriateness of decision making in particular buying situations. Normative perspectives and influences may provide both general and specific guidelines for conduct in situations, affecting subjective norms in relation to the acquisition of particular brands, products and/or services. However, Burnkrant and Cousineau (1975) argue that the expectation of an individual to comply with normative influence and the prior evaluations of others applies only where the outcome is visible to others, and/or there is perceived reward or punishment associated with noncompliance. Lord et al. (2001) concurs, noting that higher levels of normative influence are associated with purchase decisions and consumption behaviours when the purchase is conspicuous.

2.7.2 Compulsive Buying Tendencies

Impulse and compulsive buying behaviours play an influential role in credit card product uptake and ongoing engagement. Impulse purchases, often referred to as unplanned purchases, constitute a substantial proportion of consumer spending and generally relate to lower-cost items (Deshpande & Krishnan, 1980). Impulse purchases differ from compulsive buying tendencies, which can be defined as a 'chronic tendency to spend beyond one's needs and means' (Palan et al., 2011, p. 81) or a 'frequent preoccupation with buying or impulses to buy that are experienced as irresistible, intrusive, and/or senseless' (Muller et al., 2005, p. 3). This chronic tendency is often affiliated with credit card misuse and credit card debt, as consumers utilise credit to

facilitate payment for compulsive purchases (Khare, 2013; Palan et al., 2011; Phau & Woo, 2008; Pirog & Roberts, 2007; Roberts & Jones, 2001).

As noted by Kalla and Arora (2011) and Youn and Faber (2000), impulse buying is driven by a hedonistic or affective component, which can be facilitated through the use of credit cards, and may be driven by both positive and negative affective moods. These researchers also note that impulse purchases can be driven by external environmental factors including point-of-purchase promotions and advertisements. In contrast, purchases undertaken to fulfil utilitarian motives/needs are more likely to be planned and accounted for. Researchers in the field of impulse purchasing behaviours also note that accessibility to consumer credit products to make payments increases the likelihood of impulse purchases, as the consumer has the ability to satisfy impulsive urges even during shortfalls in disposable income (Deshpande & Krishnan, 1980; Kalla & Arora, 2011; Khare, 2013; Maccarrone-Eaglen & Schofield, 2020; Youn & Faber, 2000). This notion is again supported in studies relating to credit card use to facilitate compulsive buying behaviours, with Palan et al. (2011) noting credit card products make it easier for an individual to spend beyond their means and to make compulsive purchases that they would perhaps not be making with cash. This significant relationship between credit card use and compulsive buying tendencies has been noted in several studies (Palan et al., 2011; Phau & Woo, 2008; Roberts & Jones, 2001), with compulsive consumers more likely to own credit cards than non-compulsive consumers and explaining increased product demand.

Tarka and Harnish (2020) examined the influence of personal values as an antecedent of compulsive buying, noting hedonism is positively related to compulsive buying tendencies, with compulsive buyers self-focused and achievement orientated. It is also documented throughout literature the onset of compulsive buying tendencies occurs between the ages of 18 and 25, and typically dissipates with age (Harvanko et al., 2013; Tarka & Harnish, 2020), making this an area of particular interest within the study and leading to the following hypothesis:

H3: Personal shopping values positively influence compulsive buying tendencies in the credit card market.

Whilst the hypotheses aims to substantiate the relationship between compulsive buying tendencies and PSV, it is noted in the Australian market, credit card regulations and legislation ensure responsible lending in terms of consumer credit approvals. The

regulations affect the ability of consumers to acquire credit card products deemed unsuitable for the objectives of the consumer, or if it is considered that the consumer's capacity to repay the debt is low based on socioeconomic and income factors which may have bearing on the operationalisation of findings relating to the influence of compulsive buying tendencies (Commonwealth of Australia, 2016).

2.7.3 *Materialism*

The term 'materialism' is described by Goldsmith et al. (2011, p. 279) as referring to 'how important material goods are to a person's life'. Materialism can be categorised as a personality-trait-like motivating factor, influencing purchase decisions and motivating individuals to shop on a subconscious level. The general focus of obtaining possessions can lead to a consumer expending a disproportionate amount of resources on acquiring goods, with materialism considered to influence numerous aspects of consumer behaviour defined by the origin and consequences of the materialistic urges (Goldsmith et al., 2011). There is agreement in the literature that while materialistic values may be present in both hedonic and utilitarian purchases, they are more strongly related with hedonic buying motives. Higher gratification from shopping experiences for enjoyment purposes is experienced by individuals with higher materialistic values (Burroughs et al., 2013; Eren et al., 2012; Fitzmaurice & Comegys, 2006; Goldsmith et al., 2011). Consequently, the following hypothesis is proposed:

H4: An individual's personal shopping values have a positive influence on materialism.

In some instances, materialism is considered to be associated with negative consequences, as noted by Burroughs et al. (2013) and Ong et al. (2021), as it is considered an outward manifestation of unmet psychological needs and insecurities. However, Fitzmaurice and Comegys (2006) consider that for marketers, consumers with higher materialistic values are valuable conveyers of information and influencers in consumer decision-making purchases. Therefore, while materialism is not considered a product-specific characteristic (with materialistic consumers perceived to have an active interest in a broad spectrum of product categories), possessing an understanding of the motivating factors and development of brand attitude in these consumers can have a positive effect on ongoing engagement and overall profitability.

2.7.4 Financial Literacy

Throughout literature, the term financial literacy is often used interchangeably with financial knowledge, with some scholars considering financial literacy synonymous to financial knowledge (Bucher-Koenen et al., 2016; Garg & Singh, 2018; Hilgert et al., 2003; Lusardi & Mitchell, 2011). Few scholars have attempted to differentiate these terms, with Huston (2010) acknowledging to be financially literate, individuals must demonstrate understanding (knowledge) and application (skills). Taking the synonymous approach to conceptualising financial literacy and financial knowledge, the concept can be defined as an “individuals’ ability to obtain, understand and evaluate financial information” (Khan, Rothwell, Cherney & Sussman, 2017, p. 4), with a financially literate person considered to possess the basic knowledge of financial concepts (Huston, 2010). Therefore, for the purpose of this study, financial knowledge is considered a key dimension and synonym of literacy.

The construct of financial literacy, and the effect it has on buying motives, is identified as being shaped by numerous sources, and can have varying effects on the attitudinal response to products, goods or services (Dinkova et al., 2021; Kidwell & Turrisi, 2000; Warwick & Mansfield, 2000). Shim et al. (2010) notes that financial literacy is significantly related to financial self-efficacy, playing a critical role in predicting financial behaviour and attitudes towards financial products/services, in line with the theory of planned behaviour noting one's behaviours will be influenced by attitudes, subjective norms, and perceived control (Ajzen, 1991). In turn, Shim et al. (2010) defines the concept of financial literacy to include self-efficacy and self-confidence. This definition is supported throughout literature noting financial literacy can be made up of attitude towards money, financial self-efficacy, and financial behaviour (Amagir et al., 2018). The Organisation for Economic Cooperation and Development (OECD) (2014, p.33) encapsulates these aspects in one unitary concept:

“knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life”.

Financial literacy may be shaped through education; influence groups including peers and parents; gender roles; and culture, and may have consequent effects on the consumer behaviours of an individual (Hancock et al., 2013; Robb & Sharpe, 2009; Warwick & Mansfield, 2000). Mandell and Klein (2007) suggest that increased financial literacy should be related to financial and purchasing behaviours that are in a consumer's best monetary interests. Therefore, the acquisition of goods, products or services in the financial services sector should not be driven by intrinsic or extrinsic motivations, materialism or normative/social influences, but instead by insight into the likelihood of the perceived economic benefits.

Financially literate consumers are considered to make informed choices in relation to household financial management and may be characterised as having assessed the market to find the most suitable product/service to meet their financial needs. The importance of literacy in relation to credit card acquisition by the student market has been examined in a range of consumer studies, with Hilgert et al. (2003) noting the importance of financial knowledge not only in acquiring the most suitable product but also in its appropriate use. In addition, financial services and product knowledge is found to be aligned with the knowledge and understanding of personal reference groups, in particular family groups. The shaping of financial knowledge and attitudes through family reference groups is achieved both explicitly (through direct hands-on teaching and discussions) and implicitly (through observations of financial management and transactions) (Hancock et al., 2013).

It is identified in the financial services industry that consumers with higher levels of financial literacy are more likely to possess greater understanding of the risks/implications associated with consumer credit product acquisition (Commonwealth of Australia, 2015; Malelak & Anastasia, 2020); therefore, these consumers will make more informed purchasing decisions overriding a consumers' intrinsic and extrinsic motivations.

In contrast, Worthington (2006) outlines the existence of a wide array of financial products and services available to the consumer in the Australian market and the issues that may result. The extensive list of product/service options results from financial deregulation, proliferation of products, increased competition, and marketing and technology advancements may be problematic for the average Australian consumer, few of whom are considered to possess the required level of financial literacy capability to effectively process the assortment of options available. As such, the individuals'

intrinsic and extrinsic motivations for buying may override, resulting in either uninformed consumer decisions or obstruction in the uptake of suitable financial products/services.

To that end, this study investigates the relationship between the fulfilment of shopping motivations and the financial literacy of tertiary students in relation to credit card products, examining the following hypothesis:

H5: Personal shopping values negatively influence financial literacy.

2.8 Influences of Motivation on Brand Attitude and Consumer Engagement

2.8.1 Models of Brand Attitude and Customer Engagement

Attitude towards a particular brand or product is considered by marketers a useful construct for predicting consumer behaviour, as noted by Spears and Singh (2004) and Faircloth et al. (2001). Faircloth et al. (2001) contends that brand attitude is a brand association that reflects a learned predisposition to consistently respond either favourably or unfavourably towards a product or provider, with self-reported brand value derived from brand attitude. Consumers respond favourably to brands associated with a positive brand attitude through the demonstration of preference towards a brand/product in purchase intentions and repurchase behaviours, which in turn can have positive repercussions for organisational performance, including increased profitability and higher market share (Balakrishnan et al., 2014; Chang & Liu, 2009; Faircloth et al., 2001; N. Spears & Singh, 2004). Brand attitudinal loyalty is considered an important concept for marketers, as customers who exhibit brand attitudinal loyalty reduce the cost of doing business through a reduction in acquisition costs, positive word-of-mouth advertising and reduced price sensitivity in the consumer base. The development of a positive brand attitude and attitudinal loyalty towards a particular brand/product may simplify the purchase decision, reduce an individual's need for an extended information search among alternatives, and may even lead to the acquisition of a product/brand becoming habitual in nature (Rundle-Thiele & Mackay, 2001).

In developing brand attitude in the banking and finance industry, Page and Luding (2003) note the importance of face-to-face personal interaction in boosting consumer confidence and minimising perceived risk associated with the brand/product. Boosting confidence enhances the individual's attitude towards the brand, and consequently increases the likelihood of intention to purchase. It is also noted by Page and Luding that numerous variables, including psychographic and demographic factors such as income and education, have an effect on the development of an individuals' attitude towards financial products/brands and receptiveness towards marketing campaigns. This notion is supported by the findings of Băbut and Dabija (2012) and Yen and Nhung (2018), affirming the concept that positive attitude towards a brand/product in the banking/financial services sector is affected by cognitive and affective emotions, in addition to demographic influences. However, as noted by Page and Luding (2003) and Rundle-Thiele and Mackay (2001), the development of brand attitude in a service industry such as the credit card market is multidimensional and multifaceted, and may vary overtime. This can pose difficulties for marketers in this sector in the development and delivery of product acquisition campaigns, as it may influence purchase intention and repurchase probability in consumers.

In contrast to traditional behavioural approaches to brand attitude and purchase intention, Goldsmith et al. (2011) examine these constructs from the perspective of detailing engagement with a product or brand in a self-concept sense. Brand engagement in self-concept is described as the general tendency of consumers to use the product/brand to shape their identity and express themselves to others, compared with the development of brand attitude and CE shaped through obvious consumer behaviour factors, such as the fulfilment of materialistic urges. Using the notion that engagement is driven by individual differences (similar to other personality-like traits), Goldsmith et al. (2011) examines brand engagement in self-concept using the eight-item scale developed by Spratt et al. (2009). Results from the study show, as hypothesised, that the more a consumer sees a brand/product as a means of expressing self-concept, the more likely they are to engage. For marketers, Goldsmith et al.'s (2011) findings can be applied to develop more effective marketing campaigns, emphasising how engagement with their particular brand/product can shape identity.

The concept of CE, and the importance of engaging customers at every touchpoint has been realised by both academics and managers alike, with engagement considered diverse and multidimensional by many (Dessart et al., 2016; Gambetti et al., 2012;

Vivek et al., 2014). Behavioural, cognitive, emotional and social dimensions of CE are commonly cited and applied, as examined by Rosado-Pinto & Loureiro (2020), across a range of industries. Alternatively, CE has been considered unidimensional by some, examining CE from the behavioural perspective only, underpinned by social exchange theory (Rasool et al., 2021). Despite these variances, studies have concurred on a range of antecedents to CE, some of which related to customers and others of which related to brand, with Kosiba et al. (2018) and Rasool et al (2021) noting the importance of the needs, desires and expectations of consumers being met to build CE within the banking and finance industry to build a long-term relationship.

Thus, this study aims to investigate the relationship between an individual's financial literacy, materialism, compulsive buying tendencies, and the effect of normative influence on brand attitude and CE through examination of the following hypotheses in the credit card market:

H6: Normative influence has a positive effect on brand attitude.

H7: Normative influence has a positive effect on customer engagement.

H8: Compulsive buying has a negative effect on brand attitude.

H9: Compulsive buying has a negative influence on customer engagement.

H10: Materialism positively influences brand attitude.

H11: Materialism positively influences customer engagement.

H12: Financial literacy positively influences brand attitude.

H13: Financial literacy positively influence customer engagement.

2.8.2 Relationship between Brand Attitude, Customer Engagement and Credit Card Uptake

As noted, previous studies identify a relationship between brand attitudinal loyalty and preference, and the uptake of a product or service (Rundle-Thiele & Mackay, 2001). From this it can be ascertained that the attitude of a consumer towards a financial service provider's brand or credit card product can model brand allegiance, resulting in increased engagement and use. Credit cardholders' brand attitudes can also provide

understanding relating to future engagement and acceptance of the product as their preferred payment method. In addition, brand attitude and consumer engagement may be affected by the individual's intended spending and payment behaviours, with revolvers more likely than transactors to acquire a credit card through a financial services provider towards which they feel favourably. This notion results from the ongoing relationship that a revolver has with the provider—frequently carrying the balance owing forward over statement cycles. As transactors pay their outstanding balance in full each month—thus incurring little or no interest fees—it is observed these individuals possess minimal brand attitudinal loyalty, commonly acquiring consumer credit products with appealing reward programs and frequently switching between providers when programs with greater appeal or perceived benefits are presented (Commonwealth of Australia, 2015; Financial Conduct Authority, 2014; Fiorio et al., 2014). However, brand attitudes and preferences in the credit card market may not have been fully established in new entrants to the consumer credit card market, who are not yet aligned to a repayment market segment, providing the opportunity for providers to shape brand preference through acquisition marketing techniques (Norvilitis, 2002; Norvilitis et al., 2003).

Based on these relationships between brand attitude, CE and credit card uptake, the following hypotheses for the study are formulated:

H14: Brand attitude positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market.

H15: Customer engagement positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market.

2.9 Consumer Credit Card Purchase Intention and Product Uptake

The academic literature details a long interest in consumer and purchase intentions and use of intent as an explanatory or dependent measure in research on the behaviour of consumers. Warshaw (1980) notes the importance of intent, identifying it as an intervening variable between attitude and brand choice behaviour that outperforms beliefs and other cognitive measures as behavioural correlates. In a product-related setting, intent to purchase as a variable can be examined via an expansion of the prescriptive cognitive theory of planned behaviour, noting that consumers perform a

specific behaviour action if that is what they plan/intend to do (De Cannière et al., 2009; Howard & Sheth, 1969; Sheth, 1985; Warshaw, 1980). However, as noted by De Cannière et al. (2009), the direct relationship between purchase intention and buying behaviour can also be influenced by non-attitudinal factors, including intrapersonal and situational factors to which consumers are subjected throughout the consumer decision-making process. These non-attitudinal factors can hinder the desired fulfilment of intentions with implications for marketers attempting to predict consumer behaviours.

In the financial services industry, behavioural biases also exist that may influence purchase intention and financial product/services uptake. The most commonly observed behavioural biases are heavier weighting of immediate benefits of acquisition over future costs; overconfidence leading to underestimation of the likelihood of incurring interest charges and fees; and anchoring to the most recent/prevalent product or services because of excess offerings/information available and limited attention spans (Agrawal, 2012; Ritter, 2009). While the notion of behavioural biases in financial services is considered still in its infancy, awareness of behavioural biases and cognitive reflection undertaken by individuals when making financial decisions should be recognised.

Empirical research demonstrates the significance of purchase intentions in relation to advertising receptiveness, noting that consumers with an intent to purchase a particular good or service are more likely to read advertisements about them (Morrison, 1979; Warshaw, 1980). The receptiveness of consumers to advertising and promotion plays an important role in achieving desired outcomes and driving specific consumer behaviours in the financial services market, as documented by Xiao (2008).

2.10 Other Factors Influencing Credit Card Adoption and Use

As mentioned above, the decision to acquire a consumer credit card and utilise the product as a payment method is driven by a number of factors, not all of which are examined in this study. Factors not examined but identified in the academic literature as possessing the ability to influence credit card attitudes, payment and spending behaviours can be categorised as personal, cultural and societal or psychological.

2.10.1 Other Personal Factors

Categorisation of consumer credit card users typically stereotypes them as younger, educated professionals who are more favourable to borrowing, more fashion conscious and more risk orientated, with a higher desire for achievement, relative to non-credit card users (Tokunaga, 1993). This typecasting of users is affirmed in the academic literature, with Roberts and Jones (2001) affirming that the ability to acquire a credit card is associated with coming of age. This is also supported by the confirmation that credit card product holdings decline with age; that is, older consumers perform a reduced amount of transactions using credit cards, which is attributed to greater discretionary income and propensity to utilise cash for payments (Mathur & Moschis, 1994).

The role of gender in credit card use remains debatable. Studies conducted by Mottola (2013) and Robb and Sharpe (2009) show that gender differences exist, with females more likely to possess a credit card and typically more debt than their male counterparts; however, this finding is contested by Meier and Sprenger (2010) and Norvilitis et al. (2003), who find no gender difference in credit card debt. These differing findings in relation to gender differences in credit card acceptance might result from ambiguity surrounding gender roles in financial decision making, with gender appropriateness no longer a consideration in financial decisions, as noted by Powell and Ansic (1997).

The role of income in facilitating lifestyle is highlighted, for example, in the lifecycle hypothesis of savings, with consumers tending to adopt resources (i.e., credit card products) that provide efficiency in the attainment of desired way of life (Chien & Devaney, 2001; Feinberg, 1986). Thus, younger consumers with lower incomes are more willing to finance current consumption desires through use of future income via the uptake of credit card product offerings, relative to younger consumers with higher income. Studies also affirm that higher levels of disposable income increase the likelihood of credit card use, with consumers with high income more likely to utilise credit cards to attain goods/services that supplement their lifestyles and to keep up with societal trends (Chien & Devaney, 2001). Seminal studies conducted by Plummer (1971) and Slocum Jr. and Mathews (1970) examine the propensity of consumers with higher incomes and professional occupations to utilise credit cards for payments on a recurring basis; identifying a positive relationship between the constructs of income and

credit card acceptance. In this study, income is not examined as a variable influencing attitude towards credit card product acquisition, with the invitation to participate revoked for individuals identified as undergoing financial difficulties.

2.10.2 Other Cultural and Societal Factors

An examination of the effect of cultural factors on credit card acceptance and use incorporates a broad spectrum of influences that determine the direction of the individual's behaviour and are derived from learned beliefs, values and customs. The influence of culture can be viewed as dynamic, with shifts in cultural norms evolving over time. Therefore, when establishing product offerings and advertising, marketers must carefully monitor and take into consideration the sociocultural environment in which they operate, to effectively develop campaigns (Schiffman et al., 2008). On a supranational and national level, cultural factors including religion, region and ethnicity play an integral role in shaping consumer behaviours and the attitude/willingness of the consumer. On a group or subculture level, cultural factors may include memberships or reference groups that shape the behaviour of an individual, with subcultural factors and reference groups being related to social trends and normative influences on consumer decision making and buying behaviours.

Social class and social status are also considered prominent factors influencing the acceptance and use of consumer credit card products, with individuals with a higher social class standing considered to utilise consumer credit cards for the attainment of goods/services that further promote social standing (Sienkiewicz, 2001). Slocum Jr. and Mathews (1970) identify different credit card spending behaviours for lower- versus upper-class consumers, with the former being more likely to utilise consumer credit for regular payments/instalments, whereas consumers of a higher social class display credit card use patterns indicative of spending behaviour directed towards larger one-off purchases. In noting this, the relationship between social class and income also plays a prominent role in dictating credit card use patterns. This finding is supported by Bernthal et al. (2005), who find that the use of credit cards facilitates desired lifestyles.

In a relatively short period, credit card consumption and merchant acceptance resulted in credit cards becoming the preferred payment method for many consumers in Western cultures (Sienkiewicz, 2001). The acceptance and use of credit cards and

consumer credit products in Australia reflects a culture of indebtedness and preference towards convenience, with the *Consumer Payments Survey 2017* showing a decline in the number of cash payments, and card-related payments exceeding 52% of all Australian domestic transactions (Doyle et al., 2017). When determining preferred payment method and credit card adoption/use, consumers are influenced by societal reference groups, with the behaviour, opinions, values and beliefs of those surrounding them influencing their decision making and purchasing behaviours. In addition, social values and norms, as well as rules and regulations, dictate the development of attitudinal and behavioural tendencies towards the use of consumer credit cards, which can lead to the endorsement of materialistic values or compulsive buying (Phau & Woo, 2008).

2.10.3 Other Psychological Factors

Aside from motivation and knowledge, psychological factors influencing credit card uptake and engagement include product perceptions and underlying attitudes and beliefs that contribute to the development of an individual's personality type. Consumer perceptions of convenience, risk and security all play influential roles in consumer credit card product uptake and engagement, with the perception of these factors affecting the attractiveness of utilisation of the medium to facilitate payments and consumer preferences (Feinberg, 1986; Hirschman, 1979; Wong & Carducci, 1991). Throughout the literature, the perceived convenience of credit card products is considered a key determinant in the uptake of consumer credit facilities in both Western and Eastern cultures (Khare et al., 2012; Pulina, 2011). However, it is also evident that developing acquisition and engagement marketing campaigns based on convenience alone may not be compelling to the audience if the individual perceives attainment of the product and the likelihood of accumulating credit card debt as an intrinsic risk. If a risk is perceived as high, the individual will consider alternative solutions (Dholakia, 2001; Stone & Grønhaug, 1993). In contrast, Wong and Carducci (1991) note that where a consumer is seeking fulfilment of extrinsic motives or seeking particular sensation satisfaction, they are more likely to take on risk; with the benefit perceived to outweigh any negative repercussions. Therefore, the development of persuasive consumer credit acquisition and engagement campaigns should aim to promote the benefits of holding a credit card product, outweighing any perceived risks.

The psychological concepts of self-esteem and self-control are also noted in consumer research and considered valuable constructs in shaping the likelihood to adopt and utilise consumer credit cards products. The concept of self-control has been conceptualised as a personality trait referring to the capacity of an individual to alter their own states or responses (Mansfield et al., 2003). Studies note that individuals with high levels of self-control tend to manage money more efficiently and are less likely to engage in impulsive spending, whereas individuals with lower levels of self-control are more likely to experience higher levels of indebtedness (Mansfield et al., 2003; Norvilitis et al., 2003; Pirog & Roberts, 2007). Further, it is considered that the attitude towards oneself formed by an individual’s environment and life experiences can play a significant role in the uptake and use of financial products and services, with low self-esteem related to credit card misuse, compulsive spending tendencies and higher indebtedness (Pinto et al., 2004).

2.11 Hypotheses to be Tested

As per detailed throughout the chapter, this study explores the 15 hypotheses which have emerged throughout examination of scholarly literature and industry studies as they relate to student credit card motives. These hypotheses have been outlined in Table 1 below.

Table 1: Hypotheses Tested in the Study

#	<i>Hypothesis</i>
H1	Personal shopping values have a positive influence on consumer credit card product uptake/acceptance in the Australian tertiary student market
H2	Personal shopping values positively influence normative influence in the credit card market segment
H3	Personal shopping values positively influence compulsive buying tendencies in the credit card market
H4	An individual’s personal shopping values have a positive influence on materialism
H5	Personal shopping values negatively influence financial literacy
H6	Normative influence has a positive effect on brand attitude
H7	Normative influence has a positive effect on customer engagement

H8	Compulsive buying has a negative effect on brand attitude
H9	Compulsive buying has a negative influence on customer engagement
H10	Materialism positively influences brand attitude
H11	Materialism positively influences customer engagement
H12	Financial literacy positively influences brand attitude
H13	Financial literacy positively influences customer engagement.
H14	Brand attitude positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market
H15	Customer engagement positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market

2.12 Conclusion

This chapter has presented a review of the literature of the main concepts examined in the current research, including the relationships between credit card adoption and motivation. The literature sets the foundation for the conceptual model presented in Figure 4 and results in the proposed research hypotheses reiterated in Table 1. These hypotheses stem from the literature as it relates to the Australian credit card market, and provide a means to address the research questions and objectives.

Chapter 3 describes the research methodology employed, including the theoretical framework, research design and procedures.

Chapter 3: Research Methodology

3.1 Introduction

In the previous chapter, the relevant literature in the fields of consumer behaviour and motivation was examined, and an overview of the Australian credit card industry was presented. This examination highlighted the value of the contribution of this study to industry and theory based on the key research questions, and the formulated hypotheses (detailed in Table 1).

This chapter describes the research methodology followed as the research problem is explored through a quantitative methodology underpinned by the positivist paradigm. Cross-sectional survey design was employed in this research, and is discussed in detail in this chapter, including sampling design, measurement and procedure, as shown in Figure 5. The chapter details the paradigmatic stance and research design before describing the population of interest, sample size, sampling strategy and ethical considerations. The cross-sectional survey data collection was administrated by an external research company to ensure access to a broad and representative sample in a cost-effective, time saving and confidential manner. This chapter also describes the operationalisation of constructs examined in the study, and how structural equation modelling (SEM) was utilised to test the hypotheses.

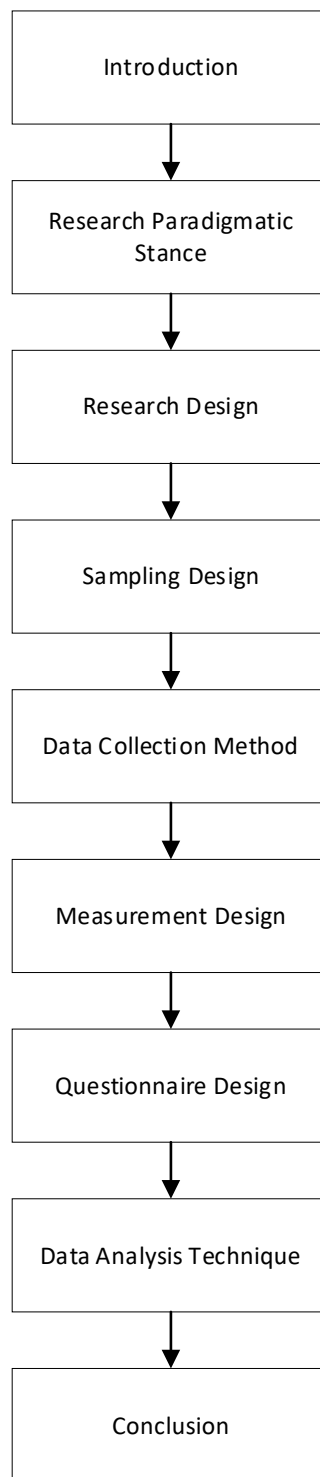


Figure 5: Outline of Chapter 3

3.2 Research Paradigmatic Stance

Research paradigms have been defined as ‘the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed’ (Kuhn, 1963), and further defined by Guba and Lincoln (1994, p. 107) who

note that a research paradigm is a ‘worldview that defines, for its holder, the nature of the world, the individual’s place in it, and the range of possible relationships to that world and its parts’. Paradigms inform and guide the reader on the research approach and establish how the research design will be assessed in terms of validity and credibility, removing subjectivity (Creswell & Miller, 2000). Theoretical paradigms about the nature of reality are crucial as they form the underlying basis used to construct the investigation, and are therefore central to understanding the overall perspective from which a study is designed and carried out (Krauss, 2005; Wahyuni, 2012).

In social sciences research, the four most common research paradigms identified are positivism, post-positivism, critical theory and constructivism (Guba & Lincoln, 1998), which are characterised on the basis of their ontology, epistemology, axiology, and methodologies, as summarised in Table 2.

Analysis of the literature relating to the fields of consumer behaviour and shopping motivations identifies the application of an array of research paradigms. The application of differing paradigms in the literature may be attributed to the complex nature of the field, with a constantly evolving payments environment and numerous external influences shaping both the prediction and understanding of consumer buying preferences.

After reviewing the various research paradigms, it was decided that the most relevant paradigm for the conduct of this research is the theoretical research paradigm of positivism, as the research aims to address the research questions posed and verify the propositional hypotheses detailed in the conceptual model. The adoption of positivism was considered appropriate in terms of ontology, epistemology, axiology, and methodology (as specified below) because the study is focused on theory testing as opposed to theory building; and because a deductive hypothesis testing logic has been applied.

Table 2: Research Paradigms

	<i>Positivism</i>	<i>Post-positivism</i>	<i>Critical Theory</i>	<i>Constructivism</i>
<i>Ontology: the position on the nature of reality</i>	External and objective; there is a single reality or truth	External and objective; there is a single reality or truth, but this only exists imperfectly and can be interpreted though social conditioning	There is no single reality or truth; reality is shaped by social, political, economic, and cultural influences over time	There is no single reality or truth; reality is socially constructed by individuals in specific groups
<i>Epistemology: the view on what constitutes acceptable knowledge</i>	Reality can be measured using reliable and valid tools	Reality can be measured with a focus on explaining within a context	Reality and knowledge are socially constructed and influenced by society	Reality is subjective and needs to be interpreted to discover the underlying meaning of events
<i>Axiology: the role of values in research and the researcher's stance</i>	Value free; the researcher is independent of the data and maintains an objective stance	Value laden; the researcher is biased by cultural experiences and worldviews	Value bound; the researcher is linked to what is being researched and the inquiry is considered influenced	Value bound; the researcher is part of what is being researched and cannot be separated
<i>Methodology: the model behind the research process</i>	Quantitative	Quantitative or qualitative	Qualitative	Qualitative

Adapted from Guba and Lincoln (1998), and Wahyuni (2012)

Ontology: It is assumed that an apprehensible reality exists in the field of consumer shopping motivations, and is driven by undeniable natural laws and mechanisms as prescribed in studies of hedonic and utilitarian influences (Babin et al., 1994; Guido, 2006; Jones et al., 2006). Motivational influences on user experiences and engagement in the credit card product category may be summarised as cause-and-effect

relationships, and information detailing these relationships may ultimately be used to understand the underlying motives of consumers when making financial decisions and their propensity to undertake credit card product offerings, as well as credit card providers, to predict the target market's behaviour (Bernthal et al., 2005; Department of Justice—Consumer Affairs Victoria, 2008; Kara et al., 1996).

Epistemology and axiology: An investigation of internal and external factors influencing a consumer's credit card motivations was undertaken independently, with inquiry taking place without the values or biases of the researcher influencing the study's outcome. As a positivist approach was employed, the results of the study are able to be replicated to confirm outcome validity and credibility, and the results should confirm the truth of the reality. Undertaking the study via the application of valid and reliable measurement tools enables the application of results across the field, thus making a greater contribution to both theory and practical application in the Australian credit card industry.

Methodology: As further detailed below, the research questions posed, and hypotheses developed in relation to the study were subjected to verification through the adoption of experiential testing consisting of a cross-sectional quantitative survey designed to develop/understand correlations between key buying motives and credit card product uptake in the Australian tertiary student market. The empirical framework for the study was developed through adaptation of previously established quantitative frameworks examining factors influencing consumer buying motives.

The decision to adopt a positivist paradigmatic stance rather than a phenomenological approach resulted from the main aim of the study to uncover the causality and motivations of credit card acquisition. A phenomenological approach, which is commonly inductive in nature and concerned with the generation of new theory, was therefore considered unsuitable. Inductive research is commonly aligned with exploring new phenomena through qualitative research (Gabriel, 2013). The next section discusses in greater detail the research design and methodological approach selected for this research.

3.3 Research Design

As detailed in the previous section, a positivist paradigmatic stance was adopted to uncover the causality and motivations for credit card acquisition. Positivism, as a research method approach, is preferred by many for predicting and understanding customer behaviour because of the structural and controlled methods employed to identify themes (Hudson & Ozanne, 1988). Below, this section discusses the methodological choice and research design for the study.

This thesis adopts deductive reasoning, a ‘top down’ approach to adding to (or contradicting) theory (Creswell & Plano Clark, 2007) using current theories to develop a theoretical framework for the cultivation of hypotheses, data collection and analysis, and validation. Deductive reasoning proposes that theory will lead from broad generalisations to specific observations and conclusions, unlike inductive reasoning aligned to exploring new phenomena, moving from a specific observation to generalisation to develop theory (Gabriel, 2013). As this thesis is built around theory testing rather than theory development, this research design approach was considered appropriate.

As described by Chrysochou (2017, p. 412), ‘the choice of a primary research method mainly depends on whether the study attempts to measure behaviour or explore opinions’. In research conducted in social sciences, there are two principal methodologies—qualitative and quantitative—the choice of which depends on which effectively addresses the research problem (Saunders et al., 2016). Qualitative research aims to explore and provide in-depth understanding of a problem under investigation using a small sample; whereas quantitative methods aim to test hypotheses through a larger population and utilise structured data to make generalisations about the population of interest (Chrysochou, 2017). Based on the premise of validating the proposed hypotheses relating to credit card intent and validating theory, quantitative research was the favoured research design approach for this thesis.

With the aim of quantifying data through statistical analysis, the quantitative data collection methods most commonly deployed in the social sciences are surveys, experiments, physiological measures, and panel and scanner data (Chrysochou, 2017; Malhotra et al., 2012). In consumer behaviour research, cross-sectional surveys, and longitudinal and experimental research designs have dominated; with cross-sectional

surveys most common because of the ease of operationalisation and interpretation of data, and the researcher's ability to measure several variables. Cross-sectional survey research is commonly adopted in the marketing literature (Rindfleisch et al., 2008). Thus, quantitative cross-sectional surveys were considered the most appropriate for this research.

The study examines the behaviours, intentions, beliefs and attitudes of participants to address the research questions, making a cross-sectional survey approach a suitable strategy for data collection and examination of the research model and proposed hypotheses (Saunders et al., 2016). In contrast to a longitudinal approach where data are gathered over an extended period, cross-sectional studies are conducted at one specific point in time. While the cross-sectional design method may suffer from biases such as common method bias, this design method does not suffer from additional overheads related to time and money that arise through the application of longitudinal approaches (Rindfleisch et al., 2008). The quantitative cross-sectional survey design method, as used in this research, is further described in the following sections, adding context to the sampling design, measurement and procedural application.

3.4 Sampling Design

Sampling is defined by Sekaran and Bougie (2013, p. 240) as 'the process of selecting the right individuals, objects or events as representatives for the entire population'. Blumberg et al. (2008) notes there are several decisions to be made in securing a sample, requiring unique information including what is the relevant population?; what are the parameters of interest?; what is the sampling frame?; what is the type of sample?; what size sample is required?; and how much will it cost?. This section discusses the sampling strategy pertaining to these decisions as set forth for this research.

3.4.1 Relevant Population, Parameters of Interest and Sampling Frame

The precise definition of the target population is the first step in sampling, with the target population being defined in terms of elements, geographical boundaries, and time relevant to the study (Sekaran & Bougie, 2013). In many instances, the definition

of the population may be apparent from the research question(s), as was the case with this study.

In this study, the target population was Australian university tertiary students aged 18–25 years, as new entrants to the consumer credit market, with the purpose of examining their credit card acquisition and utilisation intentions. Based on this criterion, the target population consists entirely of consumers aged 18–25 years, with 18 years being the minimum age at which a consumer can apply for credit, and 25 years considered the upper age cut-off because of the probability of consumers possessing a credit product by this time. Because of the location of the research (Australia); the researcher's background knowledge and understanding of the payments landscape; and where this thesis was completed, the population of interest to be examined is considered to reside in Australia. The population was enrolled at an Australian university, with regional students excluded because of financial vulnerability, as further detailed below.

According to the Australian Bureau of Statistics (ABS), the Australian population as at 30 September 2019 was around 25.5 million people, making Australia the fifty-second most populous country in the world. Australia has an average population density of 3.3 persons per square kilometre, with the vast majority of the population concentrated in urban areas. Consumers aged 18–25 years make up approximately 13% of Australia's general population (52% male:48% female) (ABS, 2019).

As noted previously, limited research has been undertaken specifically on new entrants in relation to consumer credit card adoption and use in Australia, and the segment is considered under-represented in the market. When examining motivations for credit card adoption and use, access to disposable income plays a role, especially for this age demographic in the current economy. It is noted that access to disposable income can vary significantly between consumers aged 18–25 years undertaking tertiary study, unlike for those employed full time in the workforce or undertaking an apprenticeship, which may affect a consumer's overall ability to access consumer credit. Consequently, a decision to focus on Australian tertiary university students as new entrants to the market was made for this phase of research. Based on the above, the qualifying criteria, as defined for the study, ensured participants were:

- (1) Aged 18–25 years at the time of undertaking the survey; and
- (2) Currently enrolled in a program of study at an Australian university.

Because of the nature of consumer credit in Australia; prescribed regulations stating that a consumer cannot be issued credit deemed unsuitable based on the ability of the individual to meet repayments; and ethical concerns, a further qualifying criterion was established to ensure no harm to participants. Students considered susceptible to financial difficulties were excluded from participation. To ensure compliance with the exclusion of consumers who were, or were susceptible to, facing financial difficulties, the following measures were incorporated into the study:

- (1) A filtering question was adopted to determine the location of university enrolment, and students enrolled at a regional-based Australian university were excluded from participation. Regional students are considered to face higher levels of financial stress because of higher living expenses, as reported in findings of the *2017 Universities Australia Student Finances Survey* (Universities Australia, 2017). The survey showed that 38% of regional undergraduate students had expenses exceeding their estimated income, and students from low socioeconomic backgrounds and regional areas were more likely to be worried about their finances. Based on these findings and the increased likelihood of being deemed unsuitable for consumer credit under the *National Consumer Credit Protection Act 2009* in Australia, regional students enrolled at the universities listed in Table 3 were excluded.

Table 3: Excluded Universities

<i>Excluded Universities</i>	
Australian Catholic University	Carnegie Mellon University
Central Queensland University	Charles Sturt University
Federation University Australia	Flinders University
James Cook University	Southern Cross University
Torrens University Australia	University of Adelaide
The University of Canberra	University of New England
University of Notre Dame Australia	University of South Australia
University of Southern Queensland	University of Sunshine Coast
University of Tasmania	

- (2) The Commonwealth Bank of Australia and Melbourne Institute's *Reported Financial Well-Being Scale* (Comerton-Forde et al., 2018) was adopted to ensure that participants were not considered financially vulnerable at the time of completing the survey. Participants reporting poor financial wellbeing (score lower than median of students: 49/100) were omitted and the survey terminated.

The application of such measures to exclude those who were, or were susceptible to become, financially vulnerable was noted to result in the likelihood that participants may be employed on a full time, part time or casual basis in addition to undertaking tertiary study. Individuals who were employed in the banking, financial services or

insurance sectors were excluded from the study to remove biases towards consumer credit cards chosen with the help of industry sector experience.

3.4.2 Sample Type and Sampling Strategy

On the basis of its appropriateness for meeting the research objective and developing an initial understanding of the credit card motivations of the population of interest, in addition to convenience, a non-probability sampling design—purposive sampling—was adopted. Purposive sampling, also referred to as judgmental sampling, allows the researcher to meet their objectives satisfactorily with sample members conforming to set criteria (Blumberg et al., 2008; Saunders et al., 2016). For the purposes of this study, homogeneous purposive sampling, focusing on undergraduate university students only, was deemed appropriate for exploring the topic in depth.

The sample aimed to encompass a range of educational disciplines and modes of attendance to ensure it was representative in terms of the nature of the Australian student cohort and allow generalisations to be made about Australian tertiary students' attitudes and motivations towards credit cards. In Australia, bachelor and other undergraduate degrees represent almost 65% of university student enrolments, with students typically progressing to tertiary education immediately following completion of high school, as reflected in the fact that 61% of tertiary students are aged 25 years or younger (Department of Education and Training, 2018). Based on the substantial size of the population and the research objective of gathering understanding of influences on new entrants to the consumer credit market, the sampling strategy was designed to be purposive in nature, examining the student cohort aged 18–25 years, who have a higher probability of not having held consumer credit products previously. Purposive sampling was considered a suitable approach based on this knowledge of the target population and the study objectives (Wilson, 2014), and was achieved through the adoption of filtering questions in terms of age and study prior to the commencement of the survey.

The utilisation of homogeneous purposive sampling enabled recruitment of participants during an open period until a set number of participants was reached, resulting in quick and affordable data collection. However, as noted in the literature, including studies into sampling techniques by Farokhi and Mahmoudi-Hamidabad (2012) and Etikan et al. (2016), non-probability sampling techniques have limitations

including the likelihood of biased responses because of subject selection and those willing to participate, and the potential for results to be affected by outliers. These limitations were taken into consideration in the research design and analysis, with an independent and renowned panel company adopted to ensure subjectivity and eliminate possibility for bias in subject selection. Invitation to participate was sent to potential respondents identified through the panel company, Qualtrics, resulting in voluntary response sampling. The utilisation of a panel company was also aimed to ensure representativeness, as opposed to sourcing participants directly through a small number of Australian universities. The engagement of Qualtrics also ensured randomisation of the sample across educational disciplines and attendance modes, minimising bias in participant selection.

Another consideration in sampling design and strategy that should be made by any researcher is self-selection bias. Self-selection bias occurs when participants who volunteer for a study differ in demographic characteristics from those who do not, and the researcher fails to recognise observed differences in groups as a result of self-selection (or a participant's individual control) (Saunders et al., 2016). In a bid to avoid self-selection bias, the invitation to participate in the survey for this study was generic in nature and did not include specific details about the topic of interest.

3.4.3 Sample Size

As described by Sekaran and Bougie (2013), when determining a suitable sample size, the researcher must consider the research objective, extent of precision desired (confidence interval), confidence level, variability in the population, time and cost restraints and size of the population itself. Reliable and valid samples should enable a researcher to generalise from the sample to the population of interest; in this case, consumers aged 18–25 years and enrolled in undergraduate tertiary degrees at Australian universities. As noted in the previous section, purposive sampling was adopted.

There are several approaches to determining a sample size, in particular when using random sampling, as noted by Israel (1992). These include using a census for small populations, employing sample sizes used in similar studies, using published tables, or applying formulae to calculate the desired sample size. The population of

Australian university students is comprised of around 1.3 million students, with an approximate 71% domestic student population (Department of Education and Training, 2018). Given the vast population size, a complete census of the population of interest was infeasible and therefore this approach was dismissed. Seeking guidance from sample sizes in similar studies was also deemed inappropriate for the purposes of this research as the review of the relevant literature did not identify a similar study for the population of interest. The third approach noted by Israel (1992) is the utilisation of published tables, simplifying the size decision using generalised scientific guidelines. Krejcie and Morgan (1970) publish an effective table for determining sample size given the size of the population, noting a sample of $n = 384$ is deemed appropriate for populations exceeding 1 million.

The above method for determining sample size assumes a simple random sampling design; however, as this study adopted convenience sampling, other considerations regarding the sample size were made to determine the required sample size to be collected. These considerations included the number needed for planned data analysis; accommodation for non-responses to reach the desired level of confidence and precision; and adjustments to accommodate any future subgroup comparative analysis. As SEM was selected as the data analysis technique, the required sample size for SEM was considered for the research findings to be considered representative and meaningful. As recommended by Bagozzi and Yi (2012) and Hair et al. (2013), the rule of thumb or minimum recommended ratio of sample size to number of parameters estimated is 10:1. This ratio was adopted, resulting in a minimum sample of $n = 600$. Accommodation for non-responses was also made, in addition to adjustments for any future subgroup comparative analysis; thus, a sample of $n = 800$ was selected to partake in the study.

3.4.4 Sampling Costs

Participants for the survey were sourced through a paid panel company, Qualtrics, who maintained responsibility for ensuring respondents met the qualifying criteria. Qualtrics provides online research samples and is bound by the International Chamber of Commerce/European Society for Opinion and Marketing Research Code principles, in addition to the Australian Privacy Principles as per the *Privacy Act 1988* (Cth). Participants were recruited by Qualtrics from traditional, actively managed, double-opt-

in market research panels used for corporate and academic market research only. These services were paid for through funding received by the researcher from Charles Sturt University.

Participants recruited by Qualtrics who completed the survey in its entirety were eligible for payment in the form of incentives, provided by Qualtrics. The specific type of rewards offered were in the form of points redeemable via gift cards, supermarket rewards or frequent flyer points, to the value of \$4–\$5 per completed response. The incentive for participation was not considered inducement for participation; rather reimbursement for the time taken by the respondent to partake.

3.4.5 Ethical Considerations

Because of the nature of the research, Charles Sturt University's Human Research Ethics requirements were required to be adhered to, and approval of the project by the Human Research Ethics Committee was obtained prior to the engagement of any participants and the commencement of data collection activity.

All participants invited to partake in the survey through Qualtrics were provided with the information statement (refer Appendix A: Informed Consent and Information Sheet) and asked to provide their consent to participate in the research prior to commencing the survey. In light of the sensitive nature of consumer credit, the information statement provided details of where participants could seek free financial counselling if they were facing times of financial difficulty or burden.

Participants accessed the survey online through Qualtrics, with low risk or inconvenience to participants anticipated. While the sampling strategy was purposive in nature, participation was voluntary and responses were anonymised prior to being saved to the database. Participants were given the opportunity to withdraw from the survey at any time.

3.5 Data Collection Method

Data collection in research is defined as the process of gathering and measuring information on specific variables to answer research questions and test hypotheses based on data from relevant and reliable sources (Saunders et al., 2016). The choice of data collection method is driven by the (1) characteristics of the population of interest; (2) importance of reaching a particular population; (3) size of the sample required for analysis by the researcher; and (4) types and numbers of questions the researcher needs to ask. It is also influenced by the time available to complete data collection; financial implications; and availability for data collection and entry. In business and management research, one of the most frequently utilised data collection methods is self-completed questionnaires, commonly referred to as surveys (Blumberg et al., 2008). As detailed further in the next section, surveys were determined to be a viable and reliable data collection method for the purposes of this study.

3.5.1 Survey Method

A cross-sectional study design was used to investigate the motivations for credit card acquisition and use by Australian tertiary students, because of its ability to access a representative sample at a single point in time with each participant being surveyed once. Recruitment took place between May and July 2020. Cross-sectional studies are renowned for being quicker, easier, and cheaper to perform, increasing the attractiveness of adopting a cross-sectional survey for this study. Participants in the study were not followed longitudinally to assess changes in their propensity to acquire and utilise credit cards, reducing loss where participants were unreachable or unwilling to participate more than once. The literature on data collection methods also notes the suitability of cross-sectional studies for estimating the prevalence of behaviours, confirming the suitability of the chosen survey method in light of the developed hypotheses (Sedgwick, 2014a).

The adoption of a longitudinal design was not considered favourably, but use of a cross-sectional survey can result in non-response bias if respondents who consent to participating in a study differ systematically from those who do not, resulting in the

sample not being representative of the general population, as noted by Sedgwick (2014a).

3.5.2 *Self-administered Online Survey*

The administration of the survey to participants was handled by the panel company, with surveys sent to respondents online. This survey mode has become increasingly popular over the past two decades, because of an immense increase in internet use and computer-mediated communications, and a significant expansion of online communities. Since its conception, the use of online surveys has become an increasingly popular method compared with conventional survey modes (i.e., face-to-face, telephone or mail) because of the ability to instantaneously gather responses; cheaper conduct costs; and higher response rates. It was therefore considered an appropriate mode for the purposes of this study (Fricker & Schonlau, 2012; Wright, 2017).

In addition to the recognised advantages of timeliness, cost efficiency and increased response rates, one of the key advantages of adopting self-administered online surveys is the ability to access individuals in distant locations, as well as people who share specific interests, attitudes, beliefs and values regarding an issue, problem, or activity (Wright, 2017). As the study focused on the opinions and motivations of Australian tertiary students towards credit card acquisition and utilisation, the ability to access a sample ($n = 800$) spread geographically across Australia via computer-mediated communication was advantageous. The application of self-administered surveys also helps address potential biases that may arise through the application of other methods; in particular potential biases arising from interviewer-administrated methods. De Leeuw (2008) notes that interviewers can act as both an asset and a liability during data collection. While they have the ability to convince reluctant respondents or provide additional instruction, their presence can also influence responses provided, especially when sensitive issues are being discussed (such as finances). This view is supported by Gnambs and Kaspar (2015, p. 1237), who note that ‘individuals tend to misreport behaviours that are in contrast to prevalent social norms’, and that self-administrated surveys elicit more truthful responses.

The use of Qualtrics online survey software was also considered appropriate because of the reduction in time and effort required to develop and conduct the survey, and the convenience of having automated data collection. The ability to develop the survey directly into Qualtrics software removed the requirement for familiarity with web authoring programs or HTML code, thus increasing the overall speed to market and the automation of data collection, allowing data to be directly exported to SPSS statistical analysis software as responses were accrued. The ability to automate data entry not only saved time, but reduced the potential for human error in the handling of data.

3.5.3 Data Collection by an External Research Firm

As noted in previous sections, the data collection was undertaken by an external research firm. This decision was made due to a number of factors including physical constraints in accessing a broad and representative sample, cost effectiveness, time savings and administration capability including ensuring the confidentiality of participants (Callegaro et al., 2014; Yoro, 2016). Following the decision to engage an external research firm, a procurement activity was undertaken with quotes obtained from three reputable and leading research firms in the Australian market. Throughout the procurement process, the firms were carefully considered based on their costings, confidence in obtaining the required sample in a time-efficient manner and administration capabilities. These benefits were also weighed up against limitations faced through the use of external research firm engagement, including strategies in place to prevent respondent fraud or bias, or panel misrepresentation, as recommended by Yoro (2016). Following the extensive procurement activity, Qualtrics was selected as the provider to assist in the data collection process.

Throughout the data collection phase, Qualtrics utilised four general population panels to ensure data quality and representation of the market. General population panels are the most common panel type and tend to be vast in size, recruited to include diversity representative of the general population (Callegaro et al., 2014). Qualtrics utilised the general population panel as a frame from which to draw the sample based on the requirements of the study.

A survey link embedded within the invitation email sent by Qualtrics lead respondents to a website to complete the survey. The invitation email was generic in nature to prevent self-selection bias and provided guidelines to help respondents complete the questionnaire. A consent form was designed to ensure participants were voluntarily participating in the study, with consent for participation in the survey gathered prior to commencement (as per Appendix A: Informed Consent and Information Sheet). Requiring informed consent meant that participants entered the online survey with full knowledge of the intent for use of the information, with information disclosed aimed at ensuring the participant was making an informed decision and no harm was caused. As the study is cross-sectional in nature, the questions developed were aimed to capture the opinions, beliefs, motivations, and intentions of the individual participant at the point in time.

The survey consisted of 57 questions as detailed in Appendix B: Online Survey Questions. No confidential or personal information was captured during questioning and all participants remain un-identifiable. Individuals partaking in the survey were provided with information pertaining to free financial counselling services at the commencement and throughout the survey, should a respondent feel they were experiencing financial difficulties or if the questions asked resulted in participant discomfort. Following completion of the survey, participants were also issued an electronic debriefing statement by the external research firm (as per Appendix C: Debrief Statement).

3.6 Measurement Design

This research examines credit card uptake and engagement in the Australian tertiary student market, evaluating motivating factors including shopping motivations, normative influence, financial literacy, and materialism. The internal validity and reliability of data collected, and the participant response rate to a large extent rely on the design and structure of the survey, and rigour applied throughout construct operationalisation (Saunders et al., 2016). The measurement items for each construct for this study are discussed next, and the questionnaire format detailed.

3.6.1 Construct Operationalisation

To operationalise the variables in the conceptual model, adaptations of published scales were utilised, with the exception of items for credit card product uptake and intention to purchase, which utilised an industry scale commonly used to measure interest, attitude, and propensity towards product acquisition. The items, as listed in the following subsections, were presented to participants in the online survey as detailed in Appendix B: Online Survey Questions. Items were measured utilising a five-point Likert scale, a psychometric response scale used to obtain a participant's agreement with a statement or set of statements, as further detailed in the following subsections (Nemoto & Beglar, 2013).

3.6.1.1 Credit Card Product Uptake/Intention to Purchase

The propensity to acquire a credit card and the intended utilisation of the financial product was measured by the individual's expressed likelihood, financial attitudes, and behaviours. The survey explicitly explored attitudes towards consumer credit product offerings and explicitly explored intended use, adopting frequently used items from industry practice, recording responses to the items as detailed in Table 4.

These applied scale items are used frequently within industry practice to measure financial product utilisation, and are similar in nature to the credit card use items utilised by Roberts and Jones (2001) and Norvilitis et al. (2006) throughout scholarly literature demonstrating a conceptual fit. Fit of the scale was also empirically tested through CFA, demonstrating the items hang together as a single construct (refer Chapter 4 - Results).

Table 4: Measurement Items for Credit Card Product Uptake

<i>Statement</i>	
1	I pay a lot of attention to anything related to credit card products/offerings
2	Credit cards offered by my main financial institution provide good value for money
3	I rarely look at other brands/financial institutions for credit card products
4	Shopping using a credit card allows me to make the purchases I want, when I want
5	I spend/would spend more money when using a credit card for purchases
6	I am/would be less concerned about prices when shopping using a credit card
7	I intend to make purchases with a credit card in the next month
8	I am aware of the fees and charges that may apply to credit cards

3.6.1.2 Brand Attitude

As noted by Spears and Singh (2004), attitudes are a popular research topic in marketing studies because of their usefulness in predicting customer behaviour. Attitude towards a brand is considered an ‘enduring state that endures for at least a short period of time and presumably energizes and directs behaviour’ (Eagly & Chaiken, 1993, p. 7). For the purposes of this study, attitude was examined in terms of affective attitude utilising an adaptation of the framework developed by Spears and Singh (2004). The survey included a five-item scale collecting the respondent’s perceptions about their current main financial institution (MFI) as ‘very good/very bad’, ‘very nice/very awful’, ‘very attractive/very unattractive’, ‘very desirable/very undesirable’ and ‘extremely likeable/extremely unlikeable’. These items are detailed within Table 5.

Table 5: Measurement Items for Brand Attitude

<i>Statement</i>	
1	My financial institution is a very good financial institution to bank with
2	It is nice to bank with my financial institution
3	My financial institution provides attractive products and services
4	My financial institution is very desirable within the Australian market
5	My financial institution is extremely likeable

3.6.1.3 Customer Engagement

The process of CE is conceptualised as related to an end state of customer loyalty, promoting an ongoing relationship between an organisation and an individual and enhancing profitability (Bowden, 2009). The application of measurement of CE

throughout the study was adapted from the CE scale developed Vivek et al. (2014), as detailed in Table 6.

Table 6: Measurement Items for Customer Engagement

<i>Statement</i>	
1	I like to know about different financial products and services offered
2	Anything related to financial products and services grabs my attention
3	I like to learn more about financial products and services
4	I pay a lot of attention to anything about new financial products and services

3.6.1.4 Hedonic and Utilitarian Motives

The hedonic and utilitarian motives of the respondents were assessed using adaptations of the PSV scale developed by Babin et al. (1994) and the shopping motivation scale developed by Arnold and Reynolds (2003). The items were presented on a five-point scale indicating the respondent’s level of agreement with the statement. Items assessed the key motivations driving purchase decisions and shopping behaviours as detailed in Table 7, identifying six broad categories of shopping motivations:

- (1) adventure shopping—shopping for stimulation, adventure and the feeling of being in another world;
- (2) social shopping—shopping for the enjoyment of socialising while shopping, and spending time bonding with friends and family;
- (3) gratification shopping—shopping to alleviate a negative mood, as stress release, or to treat oneself;
- (4) idea shopping—shopping to keep up with trends and new fashions, and to be the first to see new products or innovations;
- (5) role shopping—obtaining enjoyment from shopping for other people; and
- (6) value shopping—shopping for sales, looking for discounts and hunting for bargains.

As documented by Picot-Coupey et al. (2021), the PSV scale considers both hedonic and utilitarian dimensions as integrated outcomes of shopping experiences and is ubiquitous in marketing literature (Babin et al., 1994; Babin & Darden, 1995; Hirschman & Holbrook, 1982; Wolfenbarger & Gilly, 2000), therefore it was considered the appropriate for the operationalisation of hedonic and utilitarian motives as a construct within this study.

Table 7: Measurement Items for Personal Shopping Values

<i>Statement</i>
<i>Adventure shopping items</i>
1 To me, shopping is an adventure
2 I find shopping stimulating
3 Shopping is a thrill to me
4 Shopping makes me feel like I am in my own universe
<i>Value shopping items</i>
5 For the most part, I go shopping when there are sales
6 I enjoy looking for discounts when I shop
7 I go shopping to take advantage of sales
<i>Role shopping items</i>
8 I like shopping for others because when they feel good, I feel good
9 I feel good when I buy things for the special people in my life
10 I enjoy shopping for my friends and family
11 I enjoy shopping around to find the perfect gift for someone
<i>Idea shopping items</i>
12 I go shopping to keep up with the trends
13 I go shopping to keep up with new fashions
14 I go shopping to see what new products are available
15 I go shopping to experience new things
<i>Social shopping items</i>
16 I go shopping with my family and friends to socialise
17 I enjoy socialising with others when I shop
18 To me, shopping with family and friends is a social occasion
19 Shopping with others is a bonding experience
<i>Gratification shopping items</i>
20 When I am down, I go shopping to make myself feel better
21 To me, shopping is a way to relieve stress
22 I go shopping when I want to treat myself something special

Upon examination of the construct, it was identified the category of value shopping was considered a poor fit, and items relating to value were removed from the construct. Aligning to literature positing that both hedonic and utilitarian value can be obtained from shopping and are not mutually exclusive (Babin et al., 1994), and the study's intended application of the shopping motivation dimensions as a single PSV construct, a review of the second-order model was undertaken. The review of the fit indices for the model suggested a second-order (reflective first-order, reflective second-order) model presented an appropriate explanation of personal shopping value, and therefore was adopted for this study. As noted within Chapter 4, second-order models have several advantageous features including the ability to achieve model parsimony through the reduction in the number of path model relationships (Byrne, 2016; Hair et al., 2013; Podsakoff et al., 2016; Sarstedt et al., 2019). It was considered the reflective

first-order, reflective second-order model is theoretically appropriate as all measures (shopping values) are assumed to be equally reliable, interchangeable, and valid indicators of PSV, aligning with the criteria for distinguishing between formative and reflective indicator models outlined by Jarvis et al. (2003).

3.6.1.5 Normative Influence

Susceptibility to normative influence and its effect on buying behaviours utilising consumer credit card products was measured by asking the respondents to nominate the importance of factors influencing purchase decision making on a scale. The items drew from the susceptibility to normative influence scale outlined by Batra et al. (2001), as shown in Table 8.

The survey captured an additional measure of peer influence by utilising the Doney (2004) scale, as detailed in Table 8. For the purpose of this study, these items were considered most appropriate, and therefore the peer influence items were utilised in the final model for this study.

Table 8: Measurement Items for Normative Influence

<i>Statement</i>	
<i>Susceptibility to normative influence items</i>	
1	If I want to be like someone, I often try to buy the same brands they buy
2	I like to know what brands and products make good impressions on others
3	I rarely purchase the latest fashion styles until I am sure my friends approve of them
4	It is important that others like the products and brands I buy
5	When buying products, I generally purchase brands that I think others will approve of
6	If other people can see me using a product, I often purchase the brand they expect me to buy
7	I achieve a sense of belonging by purchasing the same product and brands that others purchase
8	I often identify with other people by buying the same products and brands they purchase
<i>Peer influence items</i>	
9	If I don't have a lot of experience with a product, I often ask my friends about it
10	I often ask my friends to help me choose the best product
11	I often get information about a product from friends before I buy
12	To make sure I buy the right product or brand, I often look at what my friends are buying and using
13	I prefer going shopping with friends

3.6.1.6 Materialism

A vast number of scales designed to measure aspects of materialism are described in the literature. For the purposes of this study, the 15-item materialism scale developed by Richins and Dawson (1992) and used by Fitzmaurice and Comegys (2006) was adopted, as detailed in Table 9. This scale was selected to explore materialism in this study because of the holistic psychometric view the scale provides of materialism as a variable. The scale views materialism as a personal value and includes items pertaining to acquisition centrality (acquisition is at the centre of their lives), acquisition as the pursuit of happiness (possessions are viewed as essential to satisfaction and wellbeing) and possession-defined success (their own and others' successes are judged by the number and quality of possessions held).

Table 9: Measurement Items for Materialism

<i>Statement</i>
<i>Acquisition centrality items</i>
1 I usually buy only the things I need
2 I try to keep my life simple, as far as possessions are concerned
3 The things I own are not all that important to me
4 I enjoy spending money on things that are not practical
5 Buying things gives me a lot of pleasure
6 I like a lot of luxury in my life
7 I put less emphasis on material things than most people I know
<i>Acquisition as the pursuit of happiness</i>
8 I have all the things I really need to enjoy life
9 I would be happier if I could afford to buy more things
10 It sometimes bothers me quite a bit that I cannot afford to buy all the things I would like
<i>Possession defined success</i>
11 I admire people who own expensive homes, cars, and clothes
12 Some of the most important achievements in life include material possessions
13 The things I own say a lot about how well I am doing in life
14 I like to own things that impress people
15 I do not pay much attention to the material objects other people own

Similar to the PSV construct, materialism was tested as both a unidimensional and a second-order model throughout CFA. Based on fit, the results indicated that materialism was best captured as a unidimensional construct made up of 4 items

(detailed in Table 27), aligning with other scholarly literature and materialism scales noting materialism is unidimensional (Srikant, M., 2013). The final items utilised in the model span across all three dimensions identified by Richins and Dawson (1992) and Fitzmaurice and Comegys (2006): acquisition centrality, acquisition as the pursuit of happiness, and possession defined success.

3.6.1.7 *Compulsive Buying*

Existing scales for measuring compulsive buying tendencies were adopted in the online questionnaire instrument. To understand compulsive buying behaviours, respondents were asked to respond to items derived from the compulsive buying: original measurement scale developed by Valence et al. (1988). The items originating from this scale aimed to uncover the respondents' predispositions to compulsive buying behaviours; they included, 'I have often bought a product that I did not need, while knowing I have very little money left' and 'When I have money, I cannot help but spend part or the whole of it', as detailed in Table 10.

Table 10: Measurement Items for Compulsive Buying

	<i>Statement</i>
1	When I have money, I cannot help but spend part or the whole of it
2	I am often impulsive in my buying behaviour
3	For me, shopping is a way of facing the stress of my daily life and of relaxing
4	I sometimes feel that something inside pushed me to go shopping
5	There are times when I have a strong urge to buy
6	At times, I have felt somewhat guilty after buying a product, because it seemed unreasonable
7	There are some things I buy that I do not show to anybody for fear of being perceived as irrational in my buying behaviour
8	I often have an unexplainable urge, a sudden and spontaneous desire, to go and buy something in a store
9	I have often bought a product that I did not need, while knowing that I have very little money left
10	In the event that I had some financial problems, I know that I could rely on somebody to help me out

3.6.1.8 Financial Literacy

The variable of financial literacy in the conceptual model was examined through the application of items in the Organisation for Economic Co-operation and Development's (2018) *Toolkit for Measuring Financial Literacy and Financial Inclusion*, hypothesising that a consumer's financial literacy is comprised of influences from their external environment, socioeconomic background, and personal characteristics, as well as financial experiences.

Examining the concept of financial literacy across the respondent's attitude towards money, financial self-efficacy, and financial behaviours, the personal characteristic of financial self-efficacy was considered the most appropriate measure for financial literacy for the purposes of this study; providing insight into the belief that one can deal effectively with their financial situation. Therefore, the scale items developed by Lown (2011) were utilised in the study (detailed in Table 11) and thus will be reflected as financial self-efficacy from here on in.

Table 11: Measurement Items for Financial Self-Efficacy

	<i>Statement</i>
1	It is hard to stick to my spending plan when unexpected expenses arise
2	It is challenging to make progress towards my financial goals
3	When unexpected costs arise, I usually have to use credit
4	When faced with a financial challenge, I have a hard time figuring out a solution
5	I lack confidence in my ability to manage my finances
6	I worry about running out of money

In addition, items developed by Potrich et al. (2016) to measure financial attitudes and behaviours, were captured in the survey. While not utilised in this study, these items provide insight into the knowledge and understanding of financial matters, including the use of consumer credit to assist in attainment of financial goals, which can be applied to gain understanding of the relationship between the financial literacy and spending behaviours of the selected cohort as a pathway for future studies. Additional questions were included to profile the respondents' attitudes towards consumer credit card products in general, including whether the individual currently possessed credit card products or whether the respondent may be considered credit adverse. Items were also introduced for those determined to currently hold credit card products to determine whether the respondent demonstrated the usage behaviours of a revolver or transactor.

3.6.1.9 Summary of Conceptual and Operational Definitions

Each variable within the conceptual model was examined by applying the conceptual definitions and operational definitions summarised as per Table 12 below. In addition, the comprehensive Construct Measurement Table detailed in Table 13 outlines the survey items employed in the final examination of each variable.

Table 12: Conceptual and Operational Definitions

<i>Construct</i>	<i>Conceptual Definition</i>	<i>Operational Definition</i>
1. Credit Card Product Uptake / Intention to Purchase	The propensity for an individual to acquire a credit card and the intended utilisation measured by the individual's expressed likelihood, financial attitudes and behaviours.	The respondent's expressed interest in credit card products and offerings, in addition to their intended utilisation, measured using a unidimensional interval industry scale reduced to 5 items based on EFA and reliability analysis.
2. Brand Attitude	An individual's internal evaluation of the brand which is enduring and presumably drives behaviour (Spears & Singh, 2004).	The respondent's perceived attitude towards their main financial institution measured using the unidimensional 5-item interval scale developed by Spears and Singh (2004).
3. Customer Engagement	An individual's participation in and connection with an organisation's offerings or activities (Vivek, et. al., 2014).	The respondent's interest towards the financial products and services offered in the market measured using the 4-item unidimensional interval scale developed by Vivek et al. (2014).
4. Hedonic and Utilitarian Motives	Utilitarian motives are task orientated, cognitive and non-emotional (Sakar, 2011). Whereas, hedonic motives are for the reason of obtaining a sense of enjoyment, and are driven by the individual's desire for fun, entertainment and satisfaction (Sakar, 2011). PSV is a parsimonious measure capturing these two values in relation to shopping attitudes (Babin & Krey, 2020).	The respondent's PSVs comprised of shopping for adventure, socialization, gratification, enjoyment in purchasing for others (role), and shopping to keep up with trends (idea). This construct is measured utilising Arnold and Reynolds (2003) multi-dimensional interval scale and analysed using a reflective first order, reflective second order model to achieve model parsimony through the reduction of path model relationships (Podsakoff et al., 2016).

<i>Construct</i>	<i>Conceptual Definition</i>	<i>Operational Definition</i>
5. Normative Influence	Influence derived from an anticipation to ‘conform to the expectations of another person or group’ (Burnkrant & Cousineau, 1975).	The influence of the respondent’s peers on buying behaviours examined by Doney (2004) 6-item interval scale items and reduced to a 4-item unidimensional construct through CFA.
6. Materialism	Materialism can be categorised as a personality-trait-like motivating factor, influencing purchase decisions and motivating individuals to shop on a subconscious level based on how importance material goods are to a person’s life (Goldsmith, 2011).	The respondent’s perceived materialistic values measured using Fitzmaurice and Comegys (2006) interval scale items and reduced to a 4-item unidimensional construct based on EFA and CFA.
7. Compulsive Buying	Chronic tendency to spend beyond one’s needs or means and akin to an urge to buy (Palan et al., 2011).	The respondent’s predisposition to compulsive buying tendencies examined by Valence et al. (1988) interval scale items and measured using a 5-item unidimensional model.
8. Financial Self-Efficacy	An individuals’ ability to obtain, understand and evaluate financial information (Khan et al., 2017).	The respondent’s belief that they can effectively deal with their financial situation (financial self-efficacy) measured using Lown (2011) interval scale items and reduced to a 5-item unidimensional model through CFA.

Table 13: Final Construct Measurements

<i>Variable</i>	<i>Survey item (s)</i>
Credit Card Product Uptake / Intention to Purchase	<ol style="list-style-type: none"> 1. I pay a lot of attention to anything related to credit card products/offerings 2. Credit cards offered by my main financial institution provide good value for money 3. Shopping using a credit card allows me to make the purchases I want, when I want 4. I spend/would spend more money when using a credit card for purchases 5. I intend to make purchases with a credit card in the next month
Brand Attitude	<ol style="list-style-type: none"> 1. My financial institution is a very good financial institution to bank with 2. It is nice to bank with my financial institution 3. My financial institution provides attractive products and services 4. My financial institution is very desirable within the Australian market 5. My financial institution is extremely likeable
Customer Engagement	<ol style="list-style-type: none"> 1. I like to know about different financial products and services offered 2. Anything related to financial products and services grabs my attention 3. I like to learn more about financial products and services 4. I pay a lot of attention to anything about new financial products and services
Hedonic and Utilitarian Motives	<p><i>Adventure shopping items</i></p> <ol style="list-style-type: none"> 1. To me, shopping is an adventure 2. I find shopping stimulating 3. Shopping is a thrill to me 4. Shopping makes me feel like I am in my own universe <p><i>Role shopping items</i></p> <ol style="list-style-type: none"> 5. I like shopping for others because when they feel good, I feel good 6. I feel good when I buy things for the special people in my life 7. I enjoy shopping for my friends and family 8. I enjoy shopping around to find the perfect gift for someone <p><i>Idea shopping items</i></p> <ol style="list-style-type: none"> 9. I go shopping to keep up with the trends 10. I go shopping to keep up with new fashions 11. I go shopping to see what new products are available <p><i>Social shopping items</i></p> <ol style="list-style-type: none"> 12. I go shopping with my family and friends to socialise 13. I enjoy socialising with others when I shop 14. To me, shopping with family and friends is a social occasion 15. Shopping with others is a bonding experience <p><i>Gratification shopping items</i></p> <ol style="list-style-type: none"> 16. When I am down, I go shopping to make myself feel better 17. To me, shopping is a way to relieve stress

<i>Variable</i>	<i>Survey item (s)</i>
Normative Influence	18. I go shopping when I want to treat myself something special 1. If I don't have a lot of experience with a product, I often ask my friends about it 2. I often ask my friends to help me choose the best product 3. I often get information about a product from friends before I buy 4. To make sure I buy the right product or brand, I often look at what my friends are buying and using
Materialism	1. I like a lot of luxury in my life 2. My life would be happier if I could afford to buy more things 3. Some of the most important achievements in life include material possessions 4. The things I own say a lot about how well I am doing in life
Compulsive Buying	1. I am often impulsive in my buying behaviour 2. I sometimes feel that something inside pushed me to go shopping 3. There are times when I have a strong urge to buy 4. At times, I have felt somewhat guilty after buying a product, because it seemed unreasonable 5. I have often bought a product that I did not need, while knowing that I have very little money left
Financial Self-Efficacy	1. It is hard to stick to my spending plan when unexpected expenses arise 2. When unexpected costs arise, I usually have to use credit 3. When faced with a financial challenge, I have a hard time figuring out a solution 4. I lack confidence in my ability to manage my finances 5. I worry about running out of money

3.6.2 Scaling Format

Saunders et al. (2016) notes closed-ended questions are usually quicker and easier to respond to, and are thus considered practical for self-administered questionnaires, maximising the response rate. Closed-ended questions provide the respondent with a number of alternative answers from which they can choose, making it easier to interpret and analyse, unlike open-ended questions, which allow respondents to answer the question in their own way. Thus, in this study, closed-ended questions were adopted.

For the measurement of scale items, rating questions were adopted, and data collected throughout the survey utilising a five-point Likert scale format, one of the most frequently utilised scale formats. The Likert scale, an interval scale developed in 1932, is considered useful for gathering respondents' feelings, opinions, and attitudes, by asking them how strongly they agree or disagree with a statement. Because of its popularity, a Likert scale format provides respondents with familiarity, making a

questionnaire user friendly (Sekaran & Bougie, 2013; Willits et al., 2016). Throughout this study, Likert scales were adopted to capture both agreement and description, as shown in Table 14.

Table 14: Response Categories for Rating Questions

<i>Type of Rating</i>	<i>Five Categories</i>
Agreement	Strongly agree Somewhat agree Neither agree or disagree Somewhat disagree Strongly disagree
Description	Describes me extremely well Describes me very well Describes me moderately well Describes me slightly Does not describe me

In addition to increased user friendliness, the use of Likert scales facilitates the use of factor analysis, item-to-item correlations, and reliability measures to assess the extent to which items are assessing an attitude dimension, making Likert scale formats popular across multiple disciplines, and appropriate for this study (Willits et al., 2016).

3.6.3 Ensuring Data Quality

Tayi and Ballou (1998) define the term ‘data quality’ as the data’s ‘fitness for use’, implying that data quality is relative to the objectives of the study. Thus, the quality of data captured for a study is a concern for the researcher, and techniques and procedures for ensuring data quality have evolved over time. Three dimensions of data quality are commonly identified in academic research: (1) accuracy; (2) completeness; and (3) consistency. This section details the techniques and procedures adopted to ensure the quality of data captured for the purposes of this study, many of which were deployed via the external research firm, Qualtrics.

Accuracy refers to the precise recording of responses to ensure the record can be used as a reliable source of information. One of the most commonly identified causes of data inaccuracy is manual data entry, where there is a chance of entering incorrect details by mistake (Saunders et al., 2016). To prevent this error occurring in this study, collected responses were collected and simultaneously processed directly into a

database. This simultaneous entry and automation via Qualtrics eliminated the chance of human error in data entry and ensured the collected data were appropriate for analysis.

Completeness of responses was also considered through data quality checks, with missing/incomplete responses removed from the final dataset. Any responses that presented one or more of the following characteristics were not captured in the dataset and were excluded from analysis based on their completeness:

- (1) participants who intentionally skipped an entire block of questions
- (2) blank data exceeding 15% of the questionnaire
- (3) participants who intentionally withdrew from the survey prior to completion.

To prevent the occurrence of unintentional missing data or skipped responses, front-end validation was added in the survey to mandate the response of participants prior to submission.

The third dimension of data quality, consistency, was considered during the questionnaire design. Headings and subheadings were adopted to help participants focus on the questions being asked; introductory text was added to ensure transparency on each of the constructs measured; and closed-ended questions were adopted, allowing respondents to select from a number of alternative responses, providing consistency in response.

To ensure the provision of high-quality data, Qualtrics adopted a number of techniques to ensure data quality and replaced respondents where the response provided presented as unwillingness to participate or lack of interest. Techniques to identify acquiescence bias, straight-line patterns or the provision of the same answer for a high proportion of questions were deployed, in conjunction with speed tests.

3.6.4 Mitigating Bias

Bias is defined by Smith and Noble (2014, p. 2) as, ‘a systemic distortion of statistical results due to a factor not allowed for in their derivation’. Even when taking the utmost precautions to minimise bias, risk is present in both qualitative and quantitative studies and can arise at each stage of the research process including sampling, data collection and measurement, and analysis.

Selection bias relates to both the study inclusion criteria and process of recruiting participants (Smith & Noble, 2014). As noted, this study engaged an external research firm to recruit participants that satisfied the aims of the study, being tertiary students studying at Australian metropolitan universities. The engagement of an external firm to recruit the sample was aimed to recruit participants from a range of universities, fields of study, backgrounds, and locations, to ensure a representative sample and mitigate selection bias.

Non-response bias can occur when there is a systemic difference in characteristics between responders and non-responders (Sedgwick, 2014b). It is acknowledged that questionnaires are prone to such bias, but this is difficult to quantify as there is limited information pertaining to the characteristics, attitudes, and behaviours of those who do not respond. While such bias is almost impossible to eliminate, procedural techniques to mitigate non-response bias were deployed in the study design, including questionnaire pre-testing and the use of incentives to motivate participation. The use of the Qualtrics survey platform ensured a professional, well-structured, and designed questionnaire that was rendered appropriately to mobile devices. As noted in section 3.4.4 detailing sampling costs, participants who completed the survey in its entirety were eligible for incentives. The specific type of reward offered was in the form of points that could be redeemed according to the respondent's choice (e.g., gift cards, Woolworths Rewards, Qantas Points) with a value of \$4–\$5 per completed response. This incentive for participation was not considered inducement for participation, but reimbursement for the time taken by the respondent to complete the survey.

In quantitative studies such as the present study, measurement bias can occur in the form of common method bias (CMB). The concept of CMB is attributed to Campbell and Fiske (1959) who identified that variance in their study may have been a result of the methods used, with CMB occurring when the estimates of the relationships between constructs were biased because of the same method of measurement being applied (Jordan & Troth, 2019; MacKenzie & Podsakoff, 2012). CMB can occur because of similarities in the wording and structure of survey questions that generate similar responses, the proximity of items in the survey, or the location in which data are collected (Fuller et al., 2015; Jordan & Troth, 2019; MacKenzie & Podsakoff, 2012; Podsakoff et al., 2003). As all items are collected simultaneously in a cross-sectional survey, as deployed in this study, and with the consistent use of Likert scales, CMB was a topic of interest. To mitigate CMB, procedural approaches were deployed. Procedural

strategies to minimise CMB utilised throughout the study included providing the context of the research purpose and detailing instructions to respondents; using clear and concise language in questions; improving scale item clarity to reduce natural response tendency; and including reverse-coded items (MacKenzie & Podsakoff, 2012). These strategies focused on ensuring respondents could answer without systematic bias. In addition to the preventative measures, post hoc statistical detection measures were undertaken, through the application of Harman's single-factor test. This procedure, undertaken using SPSS, aims to identify CMB through the emergence of a single factor when all variables examined are loaded into an EFA and examined on an unrotated factor solution (Aguirre-Urreta & Hu, 2019; Podsakoff et al., 2003).

3.7 Questionnaire Design

Malhotra et al. (2006, p. 336) notes that questionnaire design is an important step in formulating the research design, and the process can be depicted as a series of simple steps as shown in Figure 6. The final questionnaire design is shown in Appendix E: Flowchart of Questionnaire Design.

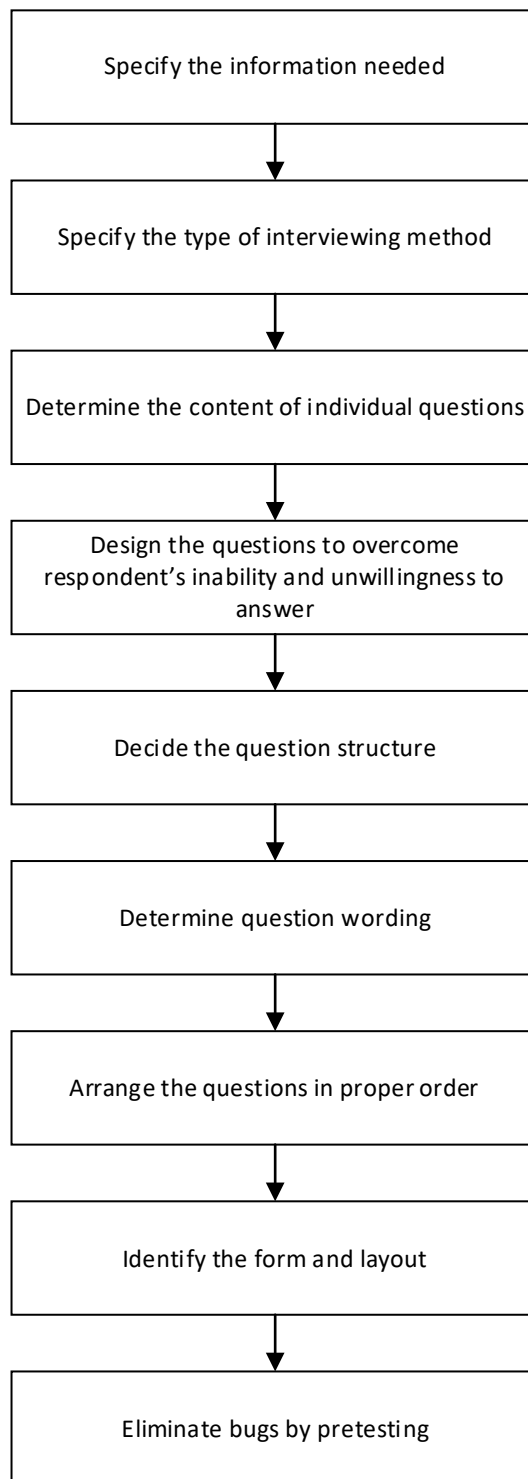


Figure 6: Questionnaire Design

3.7.1 Information Needed

Specifying the information needed is the first step in questionnaire design, and is defined through the research questions and hypotheses to be addressed by the study. As

detailed earlier, this study aims to address the following research questions in the Australian tertiary student market:

RQ1: Does brand attitude and customer engagement affect a consumer's credit card acquisition intentions?

RQ2: What influence do factors including personal shopping values (hedonic and utilitarian motivations), materialism, normative influence, compulsive buying tendencies, and financial literacy (naming the personal characteristic of financial self-efficacy) have on a brand attitude and customer engagement, and how does this influence credit card product acquisition intentions?

RQ3: Do the above listed factors influence the buying motives of an individual and their propensity towards credit card use?

These questions are addressed through examination of the 15 hypotheses detailed in Table 1.

Malhotra et al. (2006) also notes the importance of having a clear understanding of the characteristics of the target population when specifying the information needed for the questionnaire design, to ensure its appropriateness for respondents. As the relevant population for this study is Australian consumers aged 18–25 years currently enrolled in tertiary university studies, the target population was considered defined and characteristics of this demographic were taken into consideration throughout the questionnaire design.

3.7.2 Interviewing Method and Content of Questions

As mentioned previously, the data collection method adopted for this study was self-administered online surveys. The adoption of this method played a vital role in the questionnaire design and content of individual questions. To ensure the survey remained user friendly and did not deter respondents from completing it in its entirety, the questionnaire design took into consideration the amount of detail/instruction required for self-administration. Each question was carefully worded to ensure it contributed to the information needed, or established involvement and rapport. As the operationalisation of constructs employed previously published scales and questions

utilised in industry practice, the questions were adapted to ensure their appropriateness for self-administration by the target market and fluidity. Questions deemed to not significantly contribute were deleted from the survey.

3.7.3 Overcoming Inability or Unwillingness to Answer

The third step in the development of the survey was the consideration of strategies to overcome a respondent's inability to answer. This step involved ensuring the respondent was informed about the topic to be explored prior to the commencement of the survey. This was achieved through informed consent detailing (1) why the research was being conducted; (2) who was conducting the research; (3) what the respondent was being asked to do; (4) what were the perceived risks in partaking in the survey; (5) what were the expected benefits of the study; (6) how the confidentiality of participants was to be protected; (7) what consenting to the survey meant in terms of participation; and (8) the contact details of the researcher and university. A copy of the informed consent information provided to the respondent prior to commencement is provided in Appendix A: Informed Consent and Information Sheet.

To ensure respondents are likely to be informed about the topic of interest, have the ability to answer the questions and are part of the target population, N. Malhotra et al. (2006) recommends the inclusion of filter questions in the questionnaire design. Questions 1–15 of the survey served this purpose in this study. These questions ensured respondents were part of the target population and were not experiencing financial hardship (and therefore may have been adversely affected by inclusion in the study). The survey was terminated, and a termination message relevant to the reason for the participant being ineligible provided, for those who did not meet these criteria. These messages are shown in Appendix D: Survey Termination Message.

Survey participants are often unwilling to answer questions if they perceive that responding requires significant effort, the context appears inappropriate or for no legitimate purpose, or the information is perceived to be sensitive in nature. To overcome unwillingness based on context, scripting was added to each page/screen of the survey to detail to what the questions pertained. The scaling format adopted—being closed-ended questions and predominately Likert scales—ensured responses to questions were quick and easy to supply, in an attempt to maximise the response rate

(Saunders et al., 2016; Sekaran & Bougie, 2013; Willits et al., 2016). To reduce unwillingness to participate based on sensitivity, questions deemed sensitive in nature (i.e., those pertaining to gender, employment, income and dependents) were placed at the end of the survey, and participants presented with the option to elect not to respond, as per the recommendation of Malhotra et al. (2006).

3.7.4 Question Structure and Wording

As noted, closed-ended (also commonly referred to as structured) questions were adopted for the purpose of this study. These questions specified the set of response alternatives and response format, helping mitigate unwillingness to respond by ensuring responses were fit for purpose. This enabled the completion of factor analysis, item-to-item correlations, and reliability measures to be undertaken as part of data analysis (Tayi & Ballou, 1998; Willits et al., 2016). Most of the questions adopted a five-point Likert scale and did not allow for multiple responses to be selected. Dichotomous questions pertaining to current credit card holdings and usage were integrated to allow for any future study of credit card intentions and segmentations.

Malhotra et al. (2006) and Saunders et al. (2016) suggest that survey questions should use ordinary words that match the vocabulary of respondents, not be ambiguous, avoid leading respondents and avoid implicit alternatives or assumptions. These principles were considered and applied in the development of the question wording for this study and the adaptation of previously developed scales.

3.7.5 Question Ordering, Form and Layout

The questionnaire developed contained both basic and classification information questions. A number of branching questions were also deployed for respondents who already held a credit card product versus those who did not, to enable further segmentation if desired. Basic information questions were presented to the respondents first, as these questions directly related to the research problem. Classification information questions were predominately reserved for the end of the survey, as these questions may be perceived as sensitive in nature to the respondent. Some classification

questions were asked first, as these were critical for determination of eligibility for the study. A flowchart including the ordering of questions is provided in Appendix E: Flowchart of Questionnaire Design.

The utilisation of Qualtrics survey software ensured the layout, spacing and positioning of questions was user friendly, and the questionnaire was divided into several parts making the coding of questions easier. As noted by Cameron et al. (2018), mobile phones are an increasingly accessible avenue for people to participate in research; in particular those in the younger demographic who are the target population for this research. Therefore, when considering the form and layout of the questionnaire, facilitating completion of the survey via mobile phone was at the forefront, and the questions were developed, divided, previewed and tested on both mobile and web interfaces.

In addition to ensuring questionnaire flow and usability across mediums, the form and layout of questions were considered when developing the scale rating format. The questionnaire adopted five-point Likert scales for all scale questions, rather than using differing scales, to ensure the questionnaire was user-friendly, reduced effects on response distribution and enabled easier data analysis. These scales were also fully labelled reducing the cognitive load on participants, leading to higher net acquiescence response style, lower extreme response style and minimal mis-response to reversed items (Weijters et al., 2010).

3.7.6 Pre-testing the Questionnaire

To eliminate potential problems with the questionnaire, pre-testing via pilot tests on a sample of 100 respondents was conducted. The pilot testing was considered to allow observation and understanding of how participants interacted with the survey and how this may affect the data quality, as recommended as best practice by numerous scholars (Geisen & Murphy, 2020; Malhotra et al., 2006). The responses provided throughout the pre-testing enabled the identification of gaps in response logic and assisted in the identification of areas for respondent drop-off. Questions with high rates of non-response are considered to indicate that participants did not understand the question or were unwilling to provide a response (Geisen & Murphy, 2020), and the wording of those questions was reviewed accordingly. Pre-testing of the questionnaires

also enabled a trial of logic checks to be deployed by Qualtrics to ensure data quality (including techniques to identify acquiescence bias, straight-line patterns and speed tests). Responses obtained from the pre-tests that were complete in nature were included in the final analysis of the study.

3.8 Data Analysis Technique

As noted in the previous section, to eliminate errors throughout the data collection process, questionnaire responses were collected and processed concurrently using online survey software. The data were collected over an 11-week period between May and July 2020 utilising Qualtrics, a global market research firm, as the research panel provider company and questionnaire platform.

As part of the initial phases of data collection, a quality check (pre-test) was performed following capture of the first 100 valid responses to detect response bias and outliers prior to collecting the full dataset of 832 responses. The data output was organised and processed through SPSS 26.0, a leading statistical software platform. The next step was the preparation of the data for testing and analysis, to ensure the reliability and validity of the study. Additional data quality checks and data cleansing activities were performed to ensure completeness, which resulted in 37 responses being removed from the final dataset, culminating in 795 valid responses used for analysis.

Preliminary data analysis was performed using SPSS 26.0 and SPSS AMOS 26.0. Following preliminary data analysis, data analysis for hypothesis and validity testing was performed using SEM. The data analysis procedure used in this research is further detailed below, with Chapters 4 and 5 presenting the detailed analysis and discussion of results accordingly.

3.8.1 Preliminary Data Analysis

In empirical studies, descriptive statistics including frequency, percentage, mean, range, variance and standard deviation are commonly used to summarise variables (Malhotra et al., 2012). In this study, the descriptive statistics provide an overview of the total dataset and guide to conducting analysis.

3.8.2 Factor Analysis

Fruchter (1954, p. 3) describes factor analysis as ‘a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables’. There are two types of factor analysis: (1) exploratory and (2) confirmatory. As implied by its name, exploratory factor analysis (EFA) is an exploratory method used to develop a smaller set of latent factors to represent the larger set of variables, whereas CFA is used to test theory when a strong rationale exists regarding which factors should be included in the dataset (Fruchter, 1954; Henson et al., 2001; Yong & Pearce, 2013). In this study, both EFA and CFA were utilised in the evaluation of constructs and the research model. Both are based on the common factor model, which proposes that each observed response (measure) is influenced by underlying common factors and unique factors.

3.8.2.1 Exploratory Factor Analysis and Reliability

There are several ways to perform EFA, as noted by Hair et al. (2013), including principal component analysis, alpha factor analysis, principal factor analysis and maximum likelihood. As part of this study’s EFA process, a principal component analysis was applied using SPSS 26.0 in the preliminary analysis to establish and test unidimensionality. Prior to the extraction of factors, this study investigated the factor loadings of each item to determine if the item should belong to the factor or should be removed. For retention, a factor loading of 0.50 from EFA was used as the acceptance criterion (Hair et al., 2013).

Following this, Cronbach’s alpha was used to perform reliability testing and assess internal consistency. Items were evaluated based on their overall relevance, and any inter-item correlations were examined. As noted by Gliem and Gliem (2003), the closer is Cronbach’s alpha value to 1.0 the greater is the internal consistency of the items in the scale, with a Cronbach’s alpha value >0.7 indicating items are acceptably consistent with the scale construct.

3.8.2.2 *Confirmatory Factor Analysis and Validity*

While both EFA and CFA aim to reproduce the observed relationships with a smaller set of latent variables, they have some fundamental differences. As described by Brown and Moore (2012), CFA is used to verify the number of underlying dimensions of the factor and the pattern of item–factor relationships—commonly referred to as factor loadings—and is an important tool for construct validity. This study applied CFA as a precursor to SEM, to perform validity evaluation and evaluate convergent and discriminate validity. CFA was undertaken using AMOS 26.0, testing the model and the loading effect of items on the factor.

3.8.3 *Structural Equation Modelling*

For the purposes of this study, the complexity of relationships between variables was investigated using the SEM multivariate method of statistical analysis. SEM is a modelling tool designed to explore relationships between dependent and independent variables; as noted by Byrne (2016) it has become a popular methodology for non-experimental research. SEM is designed to find and confirm reliability and consistency between theoretical models and an estimated model based on the overall model fit indices (Hair et al., 2013).

Byrne (2016) notes several advantages of the adoption of SEM compared with other multivariate techniques. First, when using SEM, researchers employ a confirmatory method of analysis to analyse the pattern of inter-variable relationships through an a priori model. In contrast, Byrne (2016) notes the difficulties faced when conducting hypothesis testing using other multivariate methods that are descriptive in nature. Second, SEM allows for the assignment of error term covariances, avoiding the inaccuracies of traditional multivariate methods caused by ignoring error. Third, the relationship between both observed and unobserved variables can be measured by SEM when combined with covariance analysis, allowing a large number of endogenous and exogenous variables to be handled. Conclusively noted, there are no widely utilised or widely applied alternate methods for estimating indirect effects or model multivariate relationships to replace SEM (Byrne, 2016).

There are two widely used methods of SEM; being Covariance Based Structural Equation Modelling (CB-SEM) and Partial Least Squares based Structural Equation Modelling (PLS-SEM). As discussed by Dash & Paul (2021), the distinction between the two SEM methods is based on the research objective; with PLS-SEM appropriate when the research objective is theory development or prediction, and CB-SEM considered appropriate when the research objectives are theory testing and confirmation. Given the research objectives of this study, being to further examine the underpinning values and motivations which shape credit card purchase intentions within the Australian tertiary student market, CB-SEM is considered the appropriate method and was applied.

3.8.4 Model Fit Assessment

As noted above, one of the strengths of SEM is the ability to test models that represent a complex set of theoretical hypotheses. To determine the adequacy of model fit to the data, model fit indices including chi-square tests, Goodness-of-fit Index (GFI), Adjusted Goodness-of-fit Index (AGFI), Comparative Fit Index (CFI), Tucker–Lewis Index (TLI) and root mean square error of approximation (RMSEA) are commonly considered. However, as there are numerous ways to assess overall model fit, many researchers claim there is no way to ensure model fit unconditionally. Thus, it is recommended that at least four conditions are considered (Byrne, 2016; Hair et al., 2013). For the purposes of this study, the approach of Bagozzi and Yi (2012, p. 29) was adopted: ‘Hence, the received view at this time is to rely on the χ^2 statistic and the RMSEA, Non-Normed Fit Index (NNFI), CFI and Standardised Root Mean Square Residual (SRMR)’.

The model fit indices adopted in this study for CFA and SEM tests are detailed in Table 15.

Table 15: Model Fit Assessment

<i>Model Fit Indices</i>	<i>Recommended Value</i>
CMIN/DF	<3 good; <5 permissible
GFI	>0.95 acceptable
AGFI	>0.80 acceptable
TLI	>0.90 acceptable
CFI	>0.95 great; >0.90 traditional; >0.80 permissible
RMSEA	<0.05 good; <0.05–0.10 moderate; >0.10 bad

Note: CMIN/DF = minimum discrepancy divided by degrees of freedom.

3.8.5 Hypothesis Testing

The final step was to test the hypotheses using SEM; analysing the structural relationships between the variables and latent constructs, combining factor and multiple regression analyses. These equations can confirm a relationship between independent and dependent variables. For the purpose of this study, the hypotheses were examined based on standardised estimates, critical ratio (*t*-value) and critical value (*p*-value), using SEM.

3.9 Conclusion

This chapter has dealt specifically with the research design and methodology. Cross-sectional quantitative surveys were chosen for this study because of their appropriateness and alignment with theory, the research paradigm, and the research objectives. The survey was administered to a sample population via Qualtrics, with a total of 832 responses collected. The chapter details the statistical techniques selected for data analysis and hypothesis testing, including details of data cleansing, preliminary data analysis, EFA, CFA and SEM.

Chapter 4 presents the data analysis in detail.

Chapter 4: Results

4.1 Introduction

The previous chapter detailed the analytical procedure undertaken to derive the results of this study, including preliminary data analysis, measurement model assessment involving EFA and CFA, structural model assessment and hypothesis testing.

The hypotheses of the study were tested in SPSS AMOS 26.0 software using CB-SEM. The results are presented in this chapter, for which the structure is summarised in Figure 7.

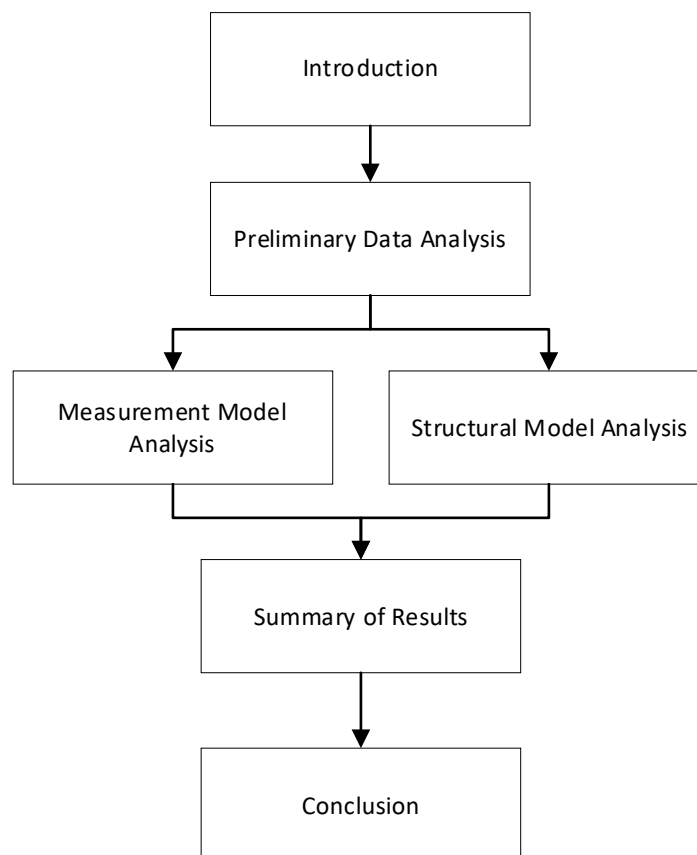


Figure 7: Outline of Chapter 4

4.2 Preliminary Data Analysis

As detailed in Chapter 3, responses to the items in the questionnaire were concurrently collected and processed using Qualtrics survey software. The data were collected over an 11-week period between May and July 2020, with a total of 832 responses captured.

4.2.1 Data Quality Checks and Cleansing Activities

Tayi and Ballou (1998) note that ensuring data accuracy is an important step that must be undertaken in any study as errors may affect the analysis results. Following their recommendations, data screening and cleansing activities were performed prior to analysis to ensure errors are eliminated.

The use of Qualtrics survey software to administer the questionnaire resulted in only complete responses being recorded and stored. Responses in progress were not stored in the database until the participant completed the survey; hence no incomplete or partially completed responses were provided in the final dataset for analysis. Further, to identify errors and missing data, a frequency distribution was constructed to screen the data, as Saunders et al. (2016) identify that a commonly identified error in data is missing values. Missing data are defined as information that is missing about a data record, which may be a result of the respondent accidentally skipping a question, refusing to answer a question or having no answer or opinion (de Vaus, 2014). In this study, 37 respondents had left questions unanswered. These responses were discarded because of non-completion. Only surveys with complete responses were used in the analysis, totalling 795 responses.

Additionally, as part of the data screening process, additional logic checks were deployed by Qualtrics to maximise data quality; these checks involved techniques to identify acquiescence bias, straight-line patterns or the provision of the same answer for a high proportion of questions. These techniques were deployed in conjunction with speed tests, excluding responses that did not take an appropriate length of time to complete the survey.

To round out the data screening and cleansing activities prior to the commencement of analysis, Sekaran and Bougie (2013) recommend checks for outliers are completed. An outlier is defined as ‘an observation that is substantially different from other observations’ (Sekaran & Bougie, 2013, p. 297). Such differences may arise because the respondent is not part of the anticipated population, or because of missing value indicators or data input errors. Checks and controls deployed by Qualtrics in the administration of the survey resulted in no outliers being identified relating to missing value indicators or respondents outside the expected population. The likelihood of the occurrence of outliers because of data input errors was also mitigated through system controls with raw data being transferred directly to SPSS from the Qualtrics database. Therefore, no outliers were identified in the data for this study. Accordingly, as mentioned above, 795 responses were used in the final analysis.

4.2.2 Nature of Sample Collected

Following the completion of the data quality checks and cleansing activities outlined in the previous section, demographic profiling of the 795 responses was completed. Sekaran and Bougie (2013) note the importance of collecting and understanding demographic data for a sample, even if the theoretical framework does not involve such variables, as it enables practitioners to ameliorate implications derived from the study. Table 16 encapsulates the demographic profile of the sample obtained in this study.

The sample consisted of 59.5% female participants, with 68.8% of participants identifying as full-time students. As noted, because of the nature of consumer credit and susceptibility of students in regional communities to financial difficulties, the sample represents larger metropolitan universities in Australia, with 18.8% of respondents undertaking tertiary education at the Australian National University. Of the respondents, 17.7% were studying in the fields of business, law or commerce, closely followed by students studying in the field of education, representing 16.6% of the sample. This sample was considered representative of higher education students in Australia, which in 2019 consisted of 56% females, noting that 76% identified as full-time students and 25% studied in the business, law, or commerce fields (Department of Education and Training, 2020).

Table 16: Demographic Profile

<i>Demographic</i>	<i>Number</i>	<i>Percentage (Approx.)</i>
Gender:		
Male	313	39.4%
Female	473	59.5%
Prefer not to say	9	1.1%
Employment status:		
Student	547	68.8%
Employed full time	67	8.4%
Employed part time	103	13.0%
Employed casual	53	6.7%
Other	17	2.1%
Prefer not to say	8	1.0%
Number of paid hours worked per week:		
0–8	16	2.0%
9–16	27	3.4%
17–24	37	4.7%
25–36	44	5.5%
>36	36	4.5%
Prefer not to say	635	79.9%
Number of dependents:		
0	284	35.7%
1	55	6.9%
2	62	7.8%
≥3	72	9.1%
Prefer not to say	322	40.5%
Household income per annum:		
<\$10,000	70	8.8%
\$10,001–\$20,000	36	4.5%
\$20,001–\$30,000	32	4.0%

\$30,001–\$40,000	36	4.5%
\$40,001–\$50,000	39	4.9%
\$50,001–\$60,000	48	6.0%
\$60,001–\$70,000	41	5.2%
\$70,001–\$80,000	72	9.1%
\$80,001–\$90,000	64	8.1%
\$90,001–\$100,000	73	9.2%
>\$100,001	139	17.5%
Prefer not to say	145	28.2%
<hr/>		
Currently own a credit card:		
Yes	287	36.1%
No	508	63.9%
<hr/>		

Respondents who were responsible for the day-to-day management of their own finances made up 87.5% of the sample, with 36.1% already in possession of a credit card product. Revolvers (consumers carrying an outstanding balance on their credit card month to month) accounted for 28.0% and only 6.7% of respondents who possessed a credit card noted their credit card product's primary purpose was for emergency spending. The average credit limit was \$2,000 and the most common product type was low rate. For 63.9% of respondents not in possession of a credit card product, there was a negative sentiment towards uptake of credit, and 42.5% of all respondents indicated they did not pay attention to credit card offers in the market.

4.2.3 Descriptive Analysis of Key Variables and Constructs

This research examined the variables of hedonic and utilitarian motives, normative influence, compulsive buying tendencies, materialism, financial self-efficacy, brand attitude, CE and credit card purchase intentions. The minimum, maximum, mean scores and standard deviation for these constructs are show in Table 17.

Table 17: Descriptive Statistics: Constructs

<i>Construct</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Personal shopping values	25.00	110.00	81.50	15.88
Normative influence	6.00	30.00	19.33	6.08
Compulsive buying	10.00	50.00	32.25	10.05
Materialism	22.00	75.00	47.07	12.88
Financial self-efficacy	6.00	30.00	17.57	6.46
Brand attitude	5.00	25.00	19.87	3.74
Customer engagement	4.00	20.00	12.70	4.56
Credit card intentions	8.00	40.00	25.53	7.50

An item-by-item descriptive analysis for each variable is provided in Tables A1–A7 in Appendix F. Hedonic and utilitarian motives were examined using adaptations of the PSV scale developed by Babin et al. (1994) and the shopping motivation scale developed by Arnold and Reynolds (2003). The minimum, maximum, mean, and standard deviations were used to measure six categories of shopping motivations: (1) adventure shopping; (2) social shopping; (3) gratification shopping; (4) idea shopping; (5) role shopping; and (6) value shopping. As detailed in Table A1, the mean scores for all 22 items were positive, with the item ‘I enjoy looking for discounts when I shop’ having the highest mean score ($M = 4.28$; $SD = 0.81$). The lowest mean score was attributed to the item ‘I go shopping to keep up with the trends’ ($M = 3.18$; $SD = 1.31$). In the six shopping value categories, value shopping had the highest average mean score ($M = 4.12$), followed by role shopping ($M = 3.96$), social shopping ($M = 3.74$), adventure shopping ($M = 3.58$) and gratification shopping ($M = 3.51$). Idea shopping had the lowest average mean score ($M = 3.38$).

The items contained in the normative influence scale adopted from Batra et al. (2001) and Doney (2004) had positive mean scores, with the item ‘If I don’t have a lot of experience with a product, I often ask my friends about it’ having the maximum mean score ($M = 3.49$; $SD = 1.15$) (see Table A2 in Appendix F).

Table A3 in Appendix F shows descriptive statistics for the compulsive buying items. The highest mean score was for the item ‘I have often bought a product that I did not need, while knowing that I have very little money left’ ($M = 3.42$; $SD = 1.43$), and

the lowest, 'In the event that I had some financial problems, I know that I could rely on somebody to help me out' ($M = 2.80$; $SD = 1.32$).

Materialism in the study was examined via adoption of Fitzmaurice and Comegys's (2006) scale, with items relating to acquisition centrality, acquisition as the pursuit of happiness and possession-defined success. As detailed in Table A4 in Appendix F, of the 15 items measured in the scale, 'I have all the things I really need to enjoy life' had the highest mean score ($M = 3.64$; $SD = 1.12$). In the materialism dimensions identified, acquisition as the pursuit of happiness had the highest average mean score ($M = 3.36$), followed by acquisition centrality ($M = 3.17$) and possession-defined success ($M = 2.96$).

The variable of financial self-efficacy in the conceptual model was examined through the application of items developed by Lown (2011) to measure financial self-efficacy. As detailed in Table A5 in Appendix F, the item producing the highest mean was 'It is hard to stick to my spending plan when unexpected expenses arise' ($M = 3.31$; $SD = 1.20$) and the lowest, 'When unexpected costs arise, I usually have to use credit' ($M = 2.56$; $SD = 1.47$).

Table A6 in Appendix F contains the minimum, maximum, mean and standard deviation scores for items relating to brand attitude and CE variables. The highest mean score was for the item 'It is nice to bank with my financial institution' ($M = 4.04$; $SD = 0.87$). The lowest mean score was for the item 'I like to know about different financial products and services offered' ($M = 3.03$; $SD = 1.29$).

Finally, of the items examined to understand credit card purchase intentions, 'I am aware of the fees and charges that may apply to credit cards' had the highest mean score ($M = 3.87$; $SD = 1.18$), and the items 'I pay a lot of attention to anything related to credit card products/offers' and 'I intend to make purchases with a credit card in the next month' had the equal lowest ($M = 2.82$; $SD = 1.15$; and $M = 2.82$; $SD = 1.53$ respectively) as shown in Table A7 in Appendix F.

4.2.4 Common Method Bias and Validity Analysis

In order to detect and examine the presence of CMB, Harman's Single-Factor Test was adopted. This procedure has extensive use throughout behavioural research, and examines the results of an EFA performed, with all observed variables loaded, to

detect whether the first extracted factor explains >50% of the variance (Aguirre-Urreta & Hu, 2019; Podsakoff et al., 2003). The results of Harman's Single-Factor Test indicated the first variable accounted for 25.99% of the variance, and therefore the CMB detection test was satisfied.

4.2.5 Exploratory Factor and Reliability Analysis

The principle of internal consistency as detailed by Hair et al. (2013) is that each item under the same measurement scale or structure should be highly related to other items. It is widely used for testing the reliability of variables. Reliability can be assessed by measuring and examining several indicators: item-to-total correlation, inter-item correlation and Cronbach's alpha. Item-to-total correlation was used to examine the correlation between items and the score for the total scale, with a score of 0.50 considered optimum. Subsequently, inter-item correlation was examined to test the correlation between items, with optimal results considered those exceeding 0.30. The final, and most commonly used reliability indicator, Cronbach's alpha, was calculated to assess the consistency of the entire scale, with an expected result exceeding 0.70, indicating items were acceptably consistent with the scale construct, with all constructs being unidimensional aside from PSV where a composite value is shown (Gliem & Gliem, 2003). The EFA and reliability tests undertaken as part of this study were satisfied, meeting the above recommended results.

The majority of item values in the item-to-total and inter-item correlations were greater than 0.50 and 0.30 respectively. The original scales indicated factors of Cronbach's alpha exceeding 0.70, as shown in Table 19. Gliem and Gliem (2003) note that the closer Cronbach's alpha value is to 1.0, the greater the internal consistency of the items in the scale.

Following completion of the reliability tests, EFA was conducted via principal component analysis (PCA). PCA is a variable-reduction technique that aims to reduce the number of variables with a large number of items to a smaller set that accounts for the majority of the variance in the original scale. A PCA with varimax rotation was applied to the variables proposed in the research and the factors determined using the following criteria: eigenvalues >1; loading factor scores >0.50; and meaningfulness of

each dimension (Sung et al., 2015). The results of the EFA are provided in Tables 19–21.

Table 18: Cronbach’s Alpha Values

<i>Construct</i>	<i>Alpha Reliability</i>	<i>Number of Items</i>
Personal shopping values	0.94	22
Normative influence	0.88	6
Compulsive buying tendencies	0.91	10
Materialism	0.91	13
Financial self-efficacy	0.90	6
Brand attitude	0.88	5
Customer engagement	0.90	4
Credit card product uptake	0.86	8

The PSV scale consisting of 22 items identified four dimensions each with an eigenvalue ≥ 1 . This is inconsistent with the PSV scale proposed by Arnold and Reynolds (2003), which identified six components: adventure shopping, role shopping, idea shopping, social shopping, gratification shopping and value shopping. As noted by Sung et al. (2015), in addition to the eigenvalue, the retention of factors should also consider the loading factor scores and meaningfulness of each dimension; based on this, the six dimensions identified by Arnold and Reynolds (2003) were retained. Most variables loaded strongly at >0.50 on the factors, as shown in Table 19; however, the item ‘I go shopping to experience new things’ had a factor loading of 0.50. As its loading factor was >0.40 and the item-to-total correlation >0.50 , the item was deemed acceptable and retained in the scale.

Table 19: Summary of Exploratory Factor Analysis: Personal Shopping Values

<i>Item</i>	<i>Factor Loadings</i>	<i>Corrected Item–Total Correlation</i>	<i>Cronbach’s Alpha if Item Deleted</i>	<i>Cronbach’s Alpha</i>
<i>Adventure shopping items</i>				0.88
To me, shopping is an adventure	0.79	0.74	0.85	

I find shopping stimulating	0.79	0.75	0.85	
Shopping is a thrill to me	0.73	0.78	0.84	
Shopping makes me feel like I am in my own universe	0.63	0.72	0.86	
<i>Value shopping items</i>				0.77
For most part, I go shopping when there are sales	0.82	0.59	0.70	
I enjoy looking for discounts when I shop	0.77	0.59	0.71	
I go shopping to take advantage of sales	0.80	0.63	0.66	
<i>Role shopping items</i>				0.83
I like shopping for others because when they feel good, I feel good	0.67	0.62	0.81	
I feel good when I buy things for the special people in my life	0.78	0.65	0.79	
I enjoy shopping for my friends and family	0.77	0.71	0.77	
I enjoy shopping around to find the perfect gift for someone	0.76	0.68	0.78	
<i>Idea shopping items</i>				0.87
I go shopping to keep up with the trends	0.82	0.76	0.81	
I go shopping to keep up with new fashions	0.84	0.79	0.80	
I go shopping to see what new products are available	0.65	0.70	0.84	
I go shopping to experience new things	0.50	0.64	0.86	
<i>Social shopping items</i>				0.88
I go shopping with my family and friends to socialise	0.80	0.76	0.84	
I enjoy socialising with others when I shop	0.78	0.72	0.85	

To me, shopping with family and friends is a social occasion	0.80	0.75	0.84	
Shopping with others is a bonding experience	0.73	0.73	0.85	
<i>Gratification shopping items</i>				0.83
When I am down, I go shopping to make myself feel better	0.71	0.76	0.69	
To me, shopping is a way to relieve stress	0.72	0.79	0.66	
I go shopping when I want to treat myself something special	0.69	0.56	0.89	

The EFA conducted on the scale for materialism consisting of 16 items generated three dimensions, which is consistent with the scale proposed by Fitzmaurice and Comegys (2006) who identified acquisition centrality, acquisition as the pursuit of happiness and possession-defined success. However, upon further analysis of factor loadings and reliability, the scale for materialism was reduced to a single materialism dimension for the purposes of this study, as shown in Table 19. Three items identified as having a low correlation (factor loading <0.50 and item-to-total correlation <0.50) were removed from the study: ‘I usually buy only the things I need’, ‘I try to keep my life simple, as far as possessions are concerned’ and ‘I have all the things I really need to enjoy life’.

Similarly, EFA was conducted for normative influence, compulsive buying tendencies, materialism, financial self-efficacy, brand attitude, CE, and credit card product uptake (as per Table 21). Items that had a low correlation were deleted. Thus, the following items were deleted from their respective scales: ‘In the event that I had some financial problems, I know that I could rely on somebody to help out’ was removed from the compulsive buying tendencies scale; and ‘I rarely look at other brands / financial institutions for credit card products’ and ‘I am aware of the fees and charges that may apply to credit cards’ were deleted from the credit card product uptake scale.

Table 20: Summary of Exploratory Factor Analysis: Materialism

<i>Item</i>	<i>Factor Loadings</i>	<i>Corrected Item–Total Correlation</i>	<i>Cronbach’s Alpha if Item Deleted</i>	<i>Cronbach’s Alpha</i>
<i>Materialism</i>				0.91
I usually buy only the things I need	0.47	0.43	0.91	
I try to keep my life simple, as far as possessions are concerned	0.48	0.46	0.91	
The things I own are not all that important to me	0.65	0.61	0.90	
I enjoy spending money on things that are not practical	0.69	0.63	0.90	
Buying things gives me a lot of pleasure	0.66	0.59	0.90	
I like a lot of luxury in my life	0.74	0.67	0.90	
I put less emphasis on material things than most people I know	0.57	0.53	0.91	
I have all the things I really need to enjoy life	0.37	0.33	0.91	
I would be happier if I could afford to buy more things	0.73	0.65	0.90	
It sometimes bothers me quite a bit that I cannot afford to buy all the things I would like	0.75	0.68	0.90	
I admire people who own expensive homes, cars, and clothes	0.75	0.67	0.90	
Some of the most important achievements in life include material possessions	0.82	0.76	0.90	
The things I own say a lot about how well I am doing in life	0.82	0.76	0.90	
I like to own things that impress people	0.81	0.76	0.90	

I do not pay much attention to the material objects other people own.	0.47	0.74	0.91
---	------	------	------

Table 21: Summary of Exploratory Factor Analysis: Normative Influence, Compulsive Buying, Financial Literacy, Brand Attitude, Customer Engagement, and Credit Card Product Uptake

<i>Item</i>	<i>Factor Loadings</i>	<i>Corrected Item–Total Correlation</i>	<i>Cronbach’s Alpha if Item Deleted</i>	<i>Cronbach’s Alpha</i>
<i>Normative influence</i>				0.88
If I don’t have a lot of experience with a product, I often ask my friends about it	0.78	0.66	0.87	
I often ask my friends to help me choose the best product	0.85	0.76	0.85	
I often get information about a product from friends before I buy	0.85	0.75	0.85	
To make sure I buy the right product or brand, I often look at what my friends are buying and using	0.84	0.76	0.85	
I prefer going shopping with friends	0.74	0.64	0.87	
I spend more money when I shop with friends than when I shop alone	0.70	0.59	0.88	
<i>Compulsive buying tendencies</i>				0.91
When I have money, I cannot help but spend part or the whole of it	0.74	0.67	0.90	
I am often impulsive in my buying behaviour	0.77	0.70	0.90	
For me, shopping is a way of facing the stress of my daily life and of relaxing	0.74	0.66	0.90	

I sometimes feel that something inside pushed me to go shopping	0.85	0.80	0.89
There are times when I have a strong urge to buy	0.83	0.77	0.89
At times, I have felt somewhat guilty after buying a product, because it seemed unreasonable	0.66	0.59	0.90
There are some things I buy that I do not show to anybody for fear of being perceived as irrational in my buying behaviour	0.78	0.77	0.90
I often have an unexplainable urge, a sudden and spontaneous desire, to go and buy something in a store	0.80	0.73	0.89
I have often bought a product that I did not need, while knowing that I have very little money left	0.79	0.73	0.89
In the event that I had some financial problems, I know that I could rely on somebody to help me out	0.39	0.33	0.92
<i>Financial self-efficacy</i>			0.90
It is hard to stick to my spending plan when unexpected expenses arise.	0.78	0.68	0.89
It is challenging to make progress towards my financial goals	0.83	0.74	0.88
When unexpected costs arise, I usually have to use credit.	0.80	0.70	0.89
When faced with a financial challenge, I have a hard time figuring out a solution	0.86	0.79	0.87
I lack confidence in my ability to manage my finances	0.85	0.77	0.87

I worry about running out of money	0.78	0.68	0.89	
<i>Brand attitude</i>				0.88
My financial institution is a very good financial institution to bank with	0.82	0.71	0.85	
It is nice to bank with my financial institution	0.82	0.71	0.85	
My financial institution provides attractive products and services	0.82	0.71	0.85	
My financial institution is very desirable within the Australian market	0.81	0.69	0.86	
My financial institution is extremely likeable	0.83	0.73	0.86	
<i>Customer engagement</i>				0.90
I like to know about different financial products and services offered	0.84	0.72	0.90	
Anything related to financial products and services grabs my attention	0.90	0.81	0.87	
I like to learn about financial products and services	0.90	0.81	0.87	
I pay a lot of attention to anything about new financial products and services	0.90	0.80	0.87	
<i>Credit card product uptake</i>				0.86
I pay a lot of attention to anything related to credit card products/offerings	0.78	0.67	0.83	
Credit cards offered by my main financial institution provide good value for money	0.77	0.68	0.83	
I rarely look at other brands/financial institutions for credit card products	0.47	0.38	0.86	

Shopping using a credit card allows me to make the purchases I want, when I want	0.81	0.72	0.82
I spend/would spend more money when using a credit card for purchases	0.73	0.62	0.84
I am/would be less concerned about prices when shopping using a credit card	0.77	0.67	0.83
I intend to make purchases with a credit card in the next month	0.81	0.71	0.82
I am aware of the fees and charges that may apply to credit cards	0.43	0.35	0.86

Upon completion of the EFA, CFA was undertaken utilising AMOS 26.0 as detailed below.

4.3 Measurement Model Assessment

4.3.1 Confirmatory Factor Analysis

Following the completion of preliminary data analysis, EFA and reliability analysis as described in the previous section, CFA was undertaken. As previously noted, the study was quantitative in nature, and thus a deductive method was used. Theory suggests that a deductive research process involves the development of theory that is subjected to rigorous tests, and involves the principle of reductionism to operationalise concepts in a way that enables facts to be measured and generalised (Saunders et al., 2016; Sekaran & Bougie, 2013). CFA plays an important role in this process, and is designed to test and validate a measurement theory. Unlike EFA, CFA can model the nature of relationships and provide evidence of the convergent and discriminant validity of the theoretical construct; as such it is seen as a vital precursor to SEM (Brown & Moore, 2012).

The CFA undertaken here involved unidimensional testing of each construct, perfecting the explanation of variables. This study validated the measurement model for all constructs as first-order (unidimensional) CFA models, with the exception of PSV, which was validated as a second-order (or higher-order) CFA model. The results of the CFA procedure for each construct are detailed below. As noted by Baistaman et al. (2020), once the requirements of the measurement model fit have been met, the following step is to ensure the validity and reliability of the model. Thus, construct validity and reliability were inspected prior to continuing with the structural model. The latent constructs of a measurement model should pass three types of validity tests: (1) construct validity, assessed through fitness indices (see Table 22); (2) convergent validity (CV), assessed through the average variance extracted (AVE); and (3) discriminant validity (DV), assessed through the development of a DV index summary. The results of this unidimensional testing for each construct are detailed below, including refinement through the deletion of items to ensure construct reliability and the ability to represent the overall model.

Table 22: Validity and Reliability Thresholds

<i>Validity</i>	<i>Category</i>			<i>Threshold</i>
Construct validity	Fitness indices	Absolute fit	GFI	>0.90
			AGFI	>0.80
			RMSEA	<0.08
	Relative fit	CFI	>0.90	
		TLI	>0.90	
		Parsimonious fit	CMIN/DF	<3.0 good <5.0 permissible
Convergent validity	AVE		AVE	>0.50
Discriminant validity (DV)	DV index summary			
Composite reliability (CR)	CR		CR	>0.70

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.1 Personal Shopping Value Scale

The model for PSV includes six factors to explain an individual's shopping values, as proposed by Arnold and Reynolds (2003): adventure shopping, idea shopping, value shopping, social shopping, role shopping and gratification shopping. As noted, for the purpose of this study PSV was considered as a parsimonious measure and the study does not look at the individual dimensions independently. However, to ensure the most appropriate fit for final analysis, CFA comparison testing between four proposed models (unidimensional model, six-factor model, five-factor model and a second order model) was undertaken. The CFA for each, and respective summaries of fitness measures (see Table 23) are detailed below.

Table 23: Model Fit Indices for the Measurement Models of Personal Shopping Value

<i>Fit Measure</i>	<i>Significant Level</i>	<i>Six-Factor Model</i>	<i>Five-Factor Model</i>	<i>Second-order Factor Model</i>	<i>Unidimensional</i>
CMIN/DF	<3 good <5 permissible	4.34	4.13	4.84	18.30
GFI	>0.90	0.91	0.93	0.92	0.93
AGFI	>0.80	0.88	0.91	0.89	0.84
TLI	>0.90	0.93	0.95	0.94	0.86
CFI	>0.90	0.94	0.96	0.94	0.92
RMSEA	<0.08	0.06	0.06	0.07	0.15

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

The first CFA tested the fit indices for the six-factor model, as originally prescribed in Arnold and Reynolds (2003). The fit indices displayed poor data fit, with CMIN/DF (4.34) and RMSEA (0.06), which are outside the acceptable fit thresholds. The results indicated that the model could be improved to better fit the data; thus, the model was modified based on factor loadings and modification indices, with the item 'I go shopping to experience new things' removed from the dimension of idea shopping, and the dimension of value shopping removed from the model in its entirety. A second

CFA was attempted (five-factor model), with the results of the model fit indices improving slightly, as shown in Table 23.

The next CFA test undertaken was for a second-order factor model. The model fit was assessed with CMIN/DF and GFI, which indicated poor fit. The standardised regression weights of all items were above the recommended 0.50. The factor loadings and modification indices were reviewed, with the item 'I go shopping to experience new things' removed. The CFA output was also reviewed in terms of factor loadings and modification indices. Based on low factor loading, the value shopping factor was removed in its entirety again, as shown in Figure 8, and the CFA re-ran. The results of the second CFA test on the second-order factor model, as detailed in Table 23, indicated a better model fit; thus, further reduction of items in the scale was not undertaken to ensure the premise of the scale developed by Arnold and Reynolds (2003) was upheld, and because a CMIN/DF <5.0 is considered permissible.

Finally, a unidimensional CFA model was tested, and the results indicated an unacceptable model fit (CMIN/DF = 18.30; GFI = 0.93; AGFI = 0.84; TLI = 0.86; CFI = 0.92; RMSEA = 0.15). The factor loadings and modification indices were reviewed, and items pertaining to value shopping deleted. Another CFA was undertaken on the modified unidimensional model fit, which indicated model fit was still deemed unacceptable (see Table 23); therefore, the use of a unidimensional model to measure PSV was considered inappropriate.

A review of the fit index results for the models suggested both the five-factor model and the modified second-order model provided an appropriate explanation for PSV, however for the purpose of this study examining PSVs collectively the second-order model was adopted. As noted in the literature, higher-order constructs have several advantageous features including the ability to achieve model parsimony through the reduction in the number of path model relationships, helping overcome the bandwidth-fidelity dilemma and providing a means for reducing collinearity (Byrne, 2016; Hair et al., 2013; Podsakoff et al., 2016; Sarstedt et al., 2019). Thus, the modified second-order model was used in this study.

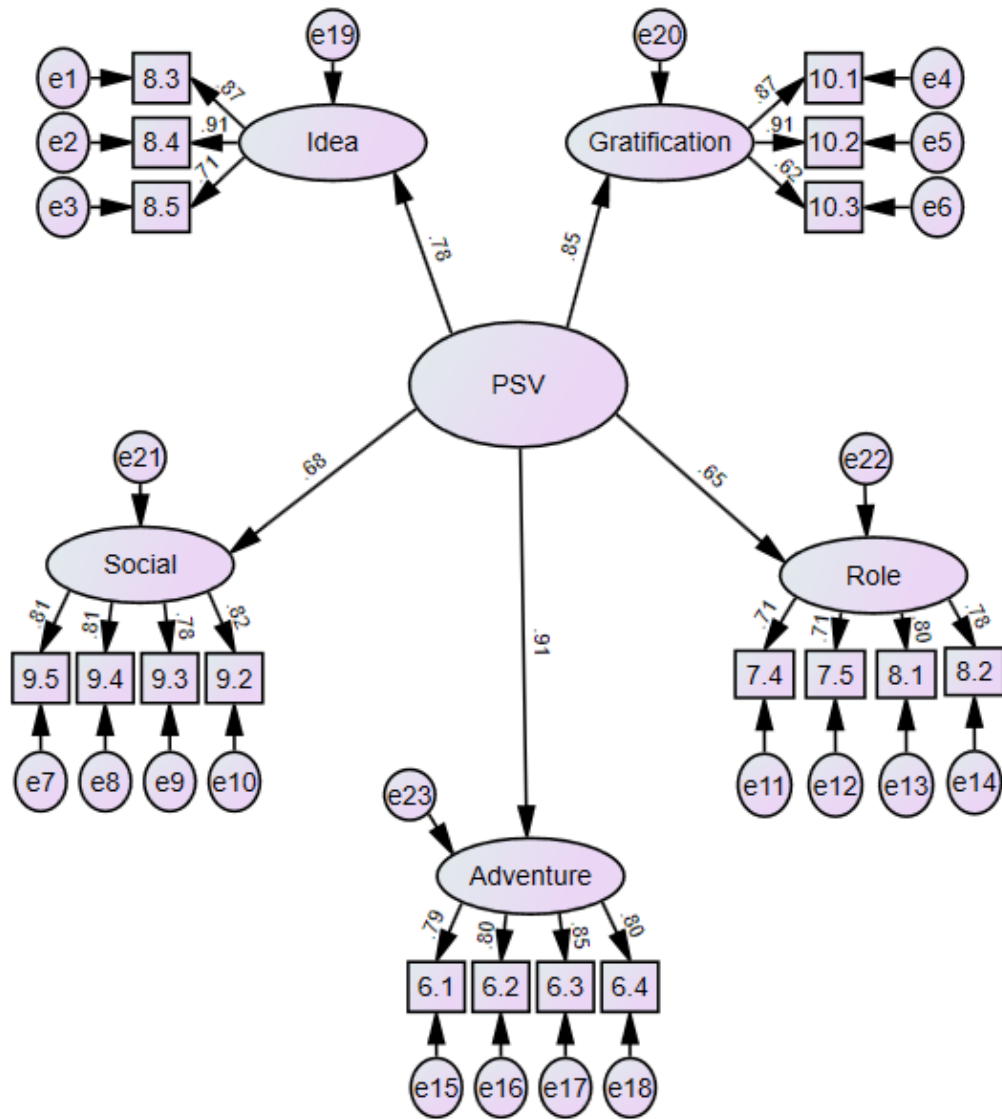


Figure 8: Personal Shopping Value Second-Order Model

4.3.1.2 Normative Influence Scale

The Doney (2004) scale adopted in this study measures normative influence using six items. The results of the CFA indicated four items were satisfactory in the measurement of the construct, as detailed below.

The first CFA test was undertaken with six items, and the results of the model fit indicated that CMIN/DF (13.02) and RMSEA (0.14) were not acceptable. The standardised regression weight of all items was reviewed and shown to score above 0.50. Therefore, the modification indices were examined, and the following items were deleted: ‘I prefer going shopping with friends’ and ‘I spend more money when I shop with friends than when I shop alone’.

Following deletion of the items, a CFA was undertaken on the model, as detailed in Figure 9, with results indicating good model fit (see Table 24).

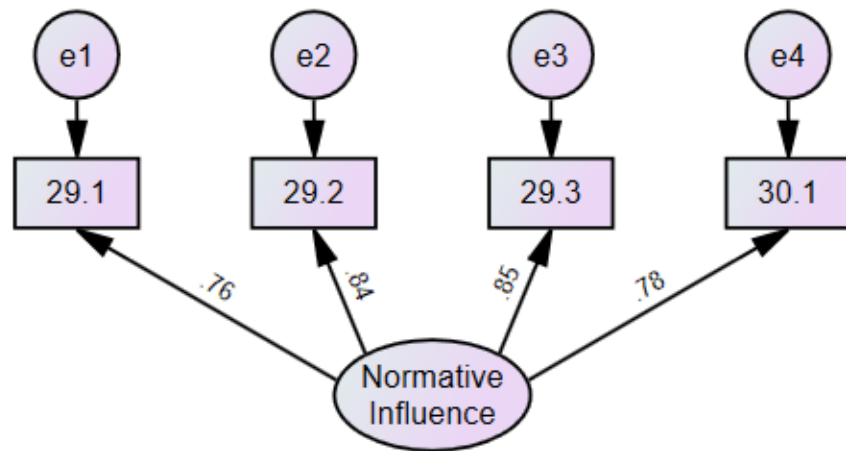


Figure 9: Normative Influence Model

Table 24: Model Fit Indices for Normative Influence

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	2.02	0.99	0.99	0.99	0.99	0.04

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.3 Compulsive Buying Tendencies Scale

Following the extraction of one item through the EFA process, a total of nine items were selected to measure compulsive buying tendencies. The results of the CFA showed that five items were satisfactory for measuring the construct.

The first CFA test was undertaken with nine items, and the results of the model fit indicated that several items were not acceptable (CMIN/DF = 17.39; RMSEA = 0.14; GFI = 0.88; AGFI = 0.80; TLI = 0.87; CFI = 0.90). The standardised regression weights for all items were >0.50. The CR was 0.07 and did not exceed the recommended 0.70; therefore, other diagnoses were considered and the modification indices were examined. The following items were considered and deleted: ‘When I have money, I can’t help spend part or the whole of it’, ‘For me shopping is a way of facing the stress of my daily life and of relaxing’, ‘There are some things I buy that I do not show to anybody for the fear of being perceived as irrational in my buying behaviour’ and ‘I often have an unexplainable urge, a sudden and spontaneous desire to buy something’.

Following the deletion of these items, a CFA was again undertaken. A high covariance between e1 and e5, and e4 and e5 was identified and the covariances were added to the model as detailed in Figure 10. The CFA test was rerun and as per the results shown in Table 25, the model fit was improved and found to be good.

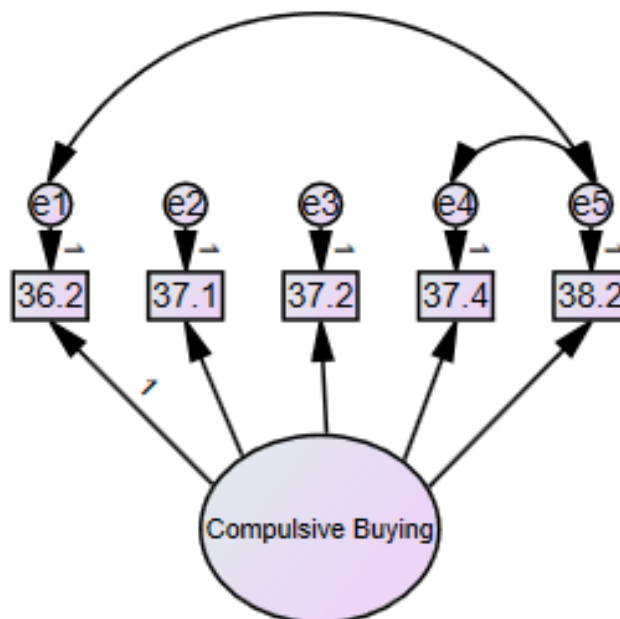


Figure 10: Compulsive Buying Model

Table 25: Model Fit Indices for Compulsive Buying

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	3.04	0.99	0.98	0.99	0.99	0.05

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.4 Materialism Scale

Following the removal of three items in the EFA process, materialism was measured by 13 items in the study. CFA results indicated four items were satisfactory to measure the construct, as shown in Figure 11 and detailed below.

The initial CFA test was undertaken with the 13 items captured to measure materialism; however, the model fit indices indicated a poor model fit and the model was deemed unacceptable (CMIN/DF = 13.46; GFI = 0.84; AGFI = 0.78; TLI = 0.82; CFI = 0.85; RMSEA = 0.13). The standardised regression weights of all items were reviewed and three items were identified as exhibiting standardised regression weights below the recommended minimum of 0.50: 'I have all the things I really need to enjoy life', 'I do not pay much attention to the material objects other people own' and 'I do not place much emphasis on the amount of material objects people own as a sign of success'. Following the deletion of these items, a CFA was performed with the remaining 10 items.

The results of the second CFA showed no improvement in model fit to an acceptable level (CMIN/DF = 12.97; GFI = 0.89; TLI = 0.89; RMSEA = 0.12). The modification indices were reviewed and the following five items deleted from the measure: 'The things I own are not all that important to me', 'I enjoy spending money on things that are not practical', 'Buying things gives me a lot of pleasure', 'It sometimes bothers me quite a bit that I cannot afford to buy all the things I would like', and 'I admire people who own expensive homes, cars and clothes'. A high error covariance was identified between the items 'I like a lot of luxury in my life' and 'I like to own things that impress people'; thus a correlation was added to the model.

CFA was undertaken on the model utilising the remaining five items, which indicated an acceptable model fit (CMIN/DF = 2.42; GFI = 1.0; AGFI = 0.98; TLI =

0.99; CFI = 0.98; RMSEA = 0.04). Because of the correlation between two items, these items were reviewed in terms of their appropriateness for the overall study and whether the deletion of one would result in a better fit. Following this, the item ‘I like to own things that impress people’ was deleted and a final CFA undertaken. The CFA results indicated a better model fit (see Table 26), so the four items shown in Figure 10 were determined the most appropriate measure of materialism in the study.

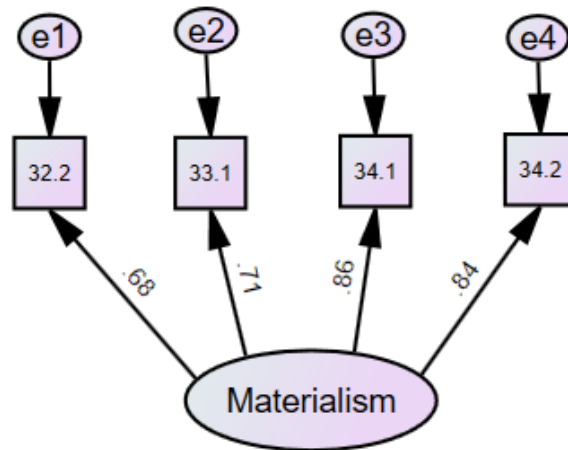


Figure 11: Materialism Model

Table 26: Model Fit Indices for Materialism

<i>Fit Measure</i>	<i>Significant Level</i>	<i>13 Item Model</i>	<i>10 Item Model</i>	<i>5 Item Model</i>	<i>4 Item Model</i>
CMIN/DF	<3 good <5 permissible	13.46	12.97	2.42	1.25
GFI	>0.90	0.84	0.89	1.0	1.0
AGFI	>0.80	0.78	0.83	0.98	0.99
TLI	>0.90	0.82	0.89	0.99	1.0
CFI	>0.90	0.85	0.91	0.98	1.0
RMSEA	<0.08	0.13	0.12	0.04	0.02

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.5 Financial Self-Efficacy Scale

The measurement of financial self-efficacy adopted the six-item scale developed by Lown (2011). As discussed below, the results of the CFA showed that five items were satisfactory to measure the construct.

The first CFA test was undertaken with the six items identified by Lown (2011), but several of the indices indicated an unacceptable model fit (CMIN = 10.18; RMSEA = 0.11). The standardised regression weights of all items were >0.50. After examination of the modification indices, the item ‘It is challenging to make progress towards my financial goals’ was deleted from the scale. Another CFA test was run, and the model fit for financial literacy improved. Although the CMIN/DF of 3.46 exceeded the threshold of 3, as it was less than 5 and all other indices were satisfactory, the model was deemed permissible and no further items were deleted, to ensure the model adequately reflected the premise of financial self-efficacy. The model was accepted as shown in Figure 12, with model fit indices as detailed in Table 27.

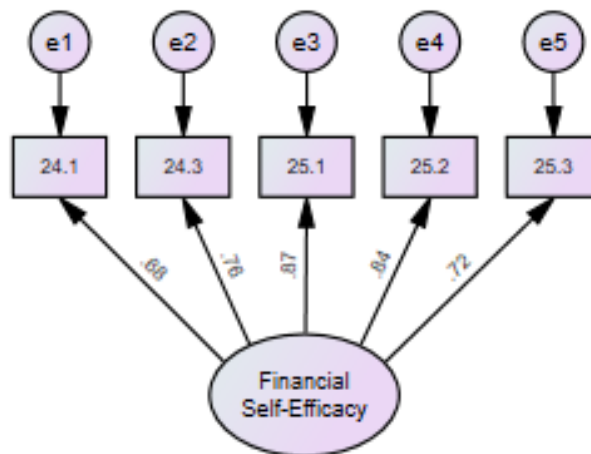


Figure 12: Financial Self-Efficacy Model

Table 27: Model Fit Indices for Financial Self-Efficacy Scale

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	3.46	0.99	0.98	0.99	0.99	0.06

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.6 Brand Attitude Scale

Brand attitude was measured in the study using five items, as described in section 3.6.1.2. The results of the CFA showed that all five items were satisfactory to measure the construct.

The first CFA test was undertaken with the five items, with non-acceptable model fit being indicated by CMIN/DF (13.56) and RMSEA (0.13). The standardised regression weights of all items were >0.50 . However, a high covariance between e_3 and e_4 , and e_4 and e_5 was identified. These covariances were added to the model as detailed in Figure 13 and CFA undertaken once more. The results of the CFA, as shown in Table 28, indicated the five-item model was a good fit.

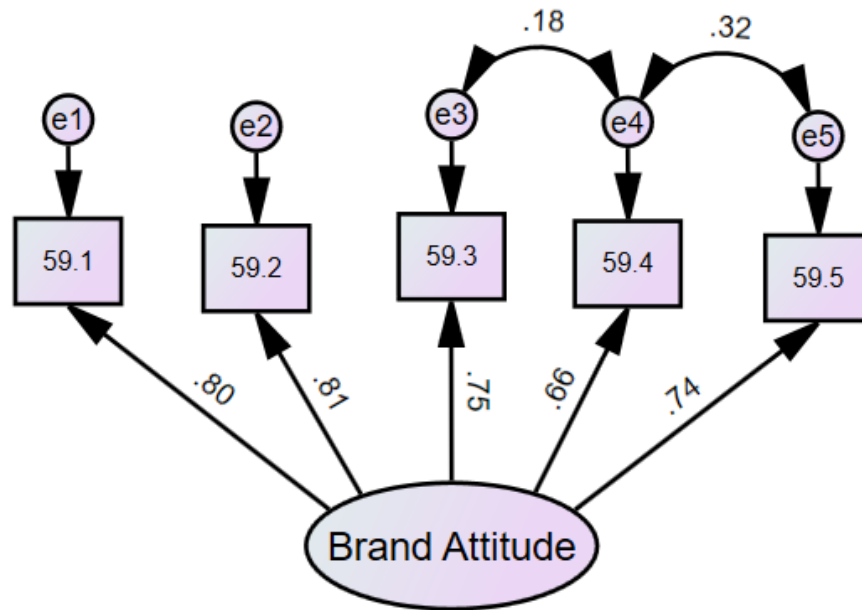


Figure 13: Brand Attitude Model

Table 28: Model Fit Indices of Brand Attitude

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	2.08	0.99	0.99	0.99	0.99	0.04

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.7 Customer Engagement Scale

Customer engagement was measured in the study using four items, as detailed by Vivek et al. (2014) The results of the CFA showed that all four items were satisfactory to measure the construct (see Figure 14), with good model fit indices as per Table 29.

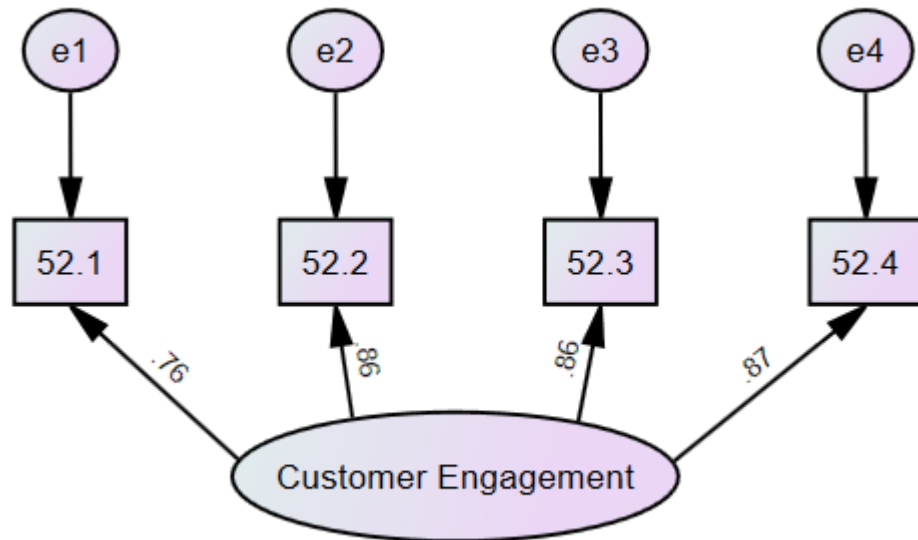


Figure 14: Customer Engagement Model

Table 29: Model Fit Indices for Customer Engagement

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	1.09	0.99	0.99	1.00	1.00	0.01

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.8 Credit Card Product Uptake/Purchase Intentions Scale

The construct for credit card product uptake was measured in the survey via eight items; however, as noted in the previous section two items were removed through the EFA process, resulting in six items being considered for the measurement of credit card product uptake in the first CFA test. The results of the CFA showed that only five items were satisfactory to measure the construct, as detailed below.

The results of the first CFA test undertaken with six items indicated non-acceptable model fit (CMIN/DF = 24.05; TLI = 0.85; RMSEA = 0.17). The standardised regression weights of the items were >0.50 . Upon examination of the modification indices the item 'I am/would be less concerned about prices when shopping using a credit card' was deleted from the scale. Another CFA test was run, which indicated an improvement in model fit. However, CMIN/DF and RMSEA were considered only permissible. The model was reviewed and a high covariance between e2 and e4 was identified. The covariance was added to the model as detailed in Figure 15, and CFA was run for a third time. The addition of the covariance resulted in good model fit, as shown in Table 30.

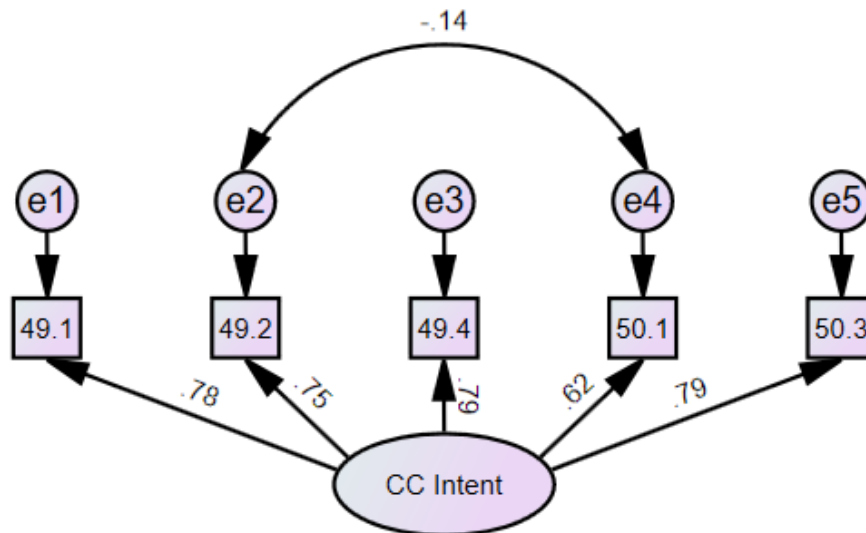


Figure 15: Credit Card Product Uptake/Purchase Intention Model

Table 30: Model Fit Indices for Credit Card Product Uptake

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Default model	1.51	0.99	0.99	0.99	0.99	0.03

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.1.9 Confirmatory Factor Analysis Summary

Table 31 presents a summary of the results of the CFA undertaken, indicating each construct's reliability against the significance level shown. Item-by-item standardised factor loadings are detailed in Table A8 in Appendix G.

Table 31: Model Fit Index Summary

<i>Construct</i>	<i>CMIN/D F</i>	<i>GFI</i>	<i>AGF I</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSE A</i>
Significance level	<3	>0.90	>0.8 0	>0.90	>0.90	<0.08
Personal shopping values (second-order)	4.84	0.92	0.89	0.94	0.94	0.07
Normative influence	2.02	0.99	0.99	0.99	0.99	0.04
Compulsive buying	3.04	0.99	0.98	0.99	0.99	0.05
Materialism	1.25	0.99	0.99	1.0	0.99	0.02
Financial self-efficacy	3.46	0.99	0.98	0.99	0.99	0.06
Brand attitude	2.08	0.99	0.99	0.99	0.99	0.04
Customer engagement	1.09	0.99	0.99	1.0	1.0	0.11
Credit card intentions	1.51	0.99	0.99	0.99	0.99	0.03

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.3.2 Construct Validity Analysis

As noted by Carlson and Herdman (2012), the use of a variety of research methods to demonstrate robustness of study findings is viewed as best practice. Thus, this study also examined the structural validity of the measurement model based on the attributes of CV, CR and DV. CV reflects the extent to which a common construct is

captured by two measures; CR is an internal consistency reliability measure similar to Cronbach’s alpha that considers the indicator’s differential weights; and DV ensures that the construct in the model is not captured in other measures and is empirically unique (Carlson & Herdman, 2012; Hair et al., 2017; Henseler et al., 2015).

The CV of the model was tested using AVE and the square root of average variance extracted (SQRTAVE) was calculated as follows:

$$AVE = \frac{(the\ total\ of\ squared\ multiple\ correlations)}{(the\ number\ of\ indicator\ measurement\ errors)}$$

$$SQRTAVE = \frac{(the\ total\ of\ standardised\ regression\ weight)}{(the\ number\ of\ indicator\ measurement\ errors)}$$

As a rule of thumb, the AVE should be >0.50, indicating variance of more than 50% observed. A value >0.50 is also recommended for SQRTAVE, indicating a good CV (Hair Jr et al., 2017). CR >0.60 is recommended (Fornell & Larcker, 1981), and CR is calculated as follows:

$$CR = \frac{(\sum\ standardised\ loadings)^2}{(\sum\ standardised\ loadings)^2 + \sum\ measurement\ errors}$$

The results for CV (AVE and SQRTAVE) and CR for all constructs are shown in Table 32.

Table 32: Convergent Validity and Composite Reliability of Constructs

Construct	CR	AVE	SQRTAVE
Personal shopping values	0.88	0.61	0.78
Normative influence	0.88	0.66	0.81
Compulsive buying tendencies	0.88	0.59	0.77
Materialism	0.86	0.61	0.78
Financial self-efficacy	0.88	0.60	0.78
Brand attitude	0.87	0.57	0.75
Customer engagement	0.90	0.70	0.84
Credit card product uptake	0.86	0.56	0.75

As discussed, DV is also measured to explain the extent to which each construct is distinct from other constructs in the study. The assessment of DV was undertaken using

Fornell-Larcker criterion, the most commonly method used throughout CB-SEM (Fornell & Larcker, 1981). Consideration was given to DV measurement Heterotrait-monotrait (HTMT) ratio of correlation, however under a Monte Carlo stimulation performed by Voorhees et al. (2016, p.131) noting whilst both methods perform well, “AVE-SV performs better when correlations are 0.75 and there is a single cross loading item”. The results for DV are shown in the correlation matrix in Table 33. Where the correlation is significant, the DV of the model is satisfied (Fornell & Larcker, 1981). As the correlations between constructs in this model were less than the SQRTAVE, as shown in the table, DV was satisfied and the measures valid.

Following completion of measurement model assessment, the structural model was further explored using SEM. The following section details the results of SEM and hypothesis testing undertaken.

Table 33: Correlation Matrix

<i>Construct</i>	<i>Mean</i>	<i>SD</i>	<i>AVE</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. Personal shopping values	3.55	0.85	0.61	<i>0.78</i>							
2. Normative influence	3.22	1.06	0.66	0.45**	<i>0.81</i>						
3. Compulsive buying	2.71	1.18	0.59	0.41**	0.32**	<i>0.77</i>					
4. Materialism	2.94	1.17	0.61	0.55**	0.58**	0.70**	<i>0.78</i>				
5. Financial self-efficacy	2.86	1.13	0.60	0.49**	0.57**	0.46**	0.70**	<i>0.78</i>			
6. Brand attitude	3.98	0.75	0.57	0.30**	0.23**	0.10**	0.16**	0.14**	<i>0.75</i>		
7. Customer engagement	2.78	1.14	0.70	0.29**	0.35**	0.47**	0.35**	0.34**	0.11**	<i>0.84</i>	
8. Credit card uptake	3.06	1.10	0.56	0.51**	0.51**	0.38**	0.62**	0.61**	0.27**	0.37**	<i>0.75</i>

Note: ** $p < 0.01$; *SQRTAVE* estimates are shown in italicised bold along the diagonal.

4.4 Structural Model Assessment

As detailed previously, SEM consists of two major components: (1) the measurement model, specifying the number of factors and how various indicators are related (i.e., the CFA model); and (2) the structural model, specifying how the various factors are related to one another (Byrne, 2016; Hair et al., 2017; MacLean & Gray, 1998). The previous section detailed the development and testing of the measurement model, while this section explores the assessment of the structural model.

4.4.1 Overall Model Fit Results

The factor scores for each of the measures developed were calculated and utilised to facilitate model fit. For the second-order model of PSV, the scores for the second-order factor were utilised in the model to achieve a better fit.

The results from the SEM test on the initial model showed a poor model fit, with CMIN/DF and RMSEA exceeding acceptable levels (8.78 and 0.10, respectively), and TLI below the significance level (0.88). Modification indices and other diagnoses were examined, noting high covariance between measurement errors for role shopping and social shopping, normative influence and financial literacy, and financial literacy and compulsive buying. Theoretically, an inter-relationship between normative influence and financial literacy is indicated, with Isomidinova et al. (2017) noting the key role played by socialisation agents such as friends, family and schooling in the development of an individual's financial literacy, and Triwidisari et al. (2017) concurring, noting an individual's peer group affects their financial literacy in terms of both consumption patterns and use of existing funds. Triwidisari et al. (2017) also notes that individuals possessing high financial literacy have a tendency to make long-term financial plans and can minimise compulsive buying urges. While this study was not interested in examining the inter-relationships among normative influence, financial literacy and compulsive buying, the constructs were allowed to be correlated through the specification of covariances on their error term in the next iteration of the model (see Figure 16), and SEM was performed again.

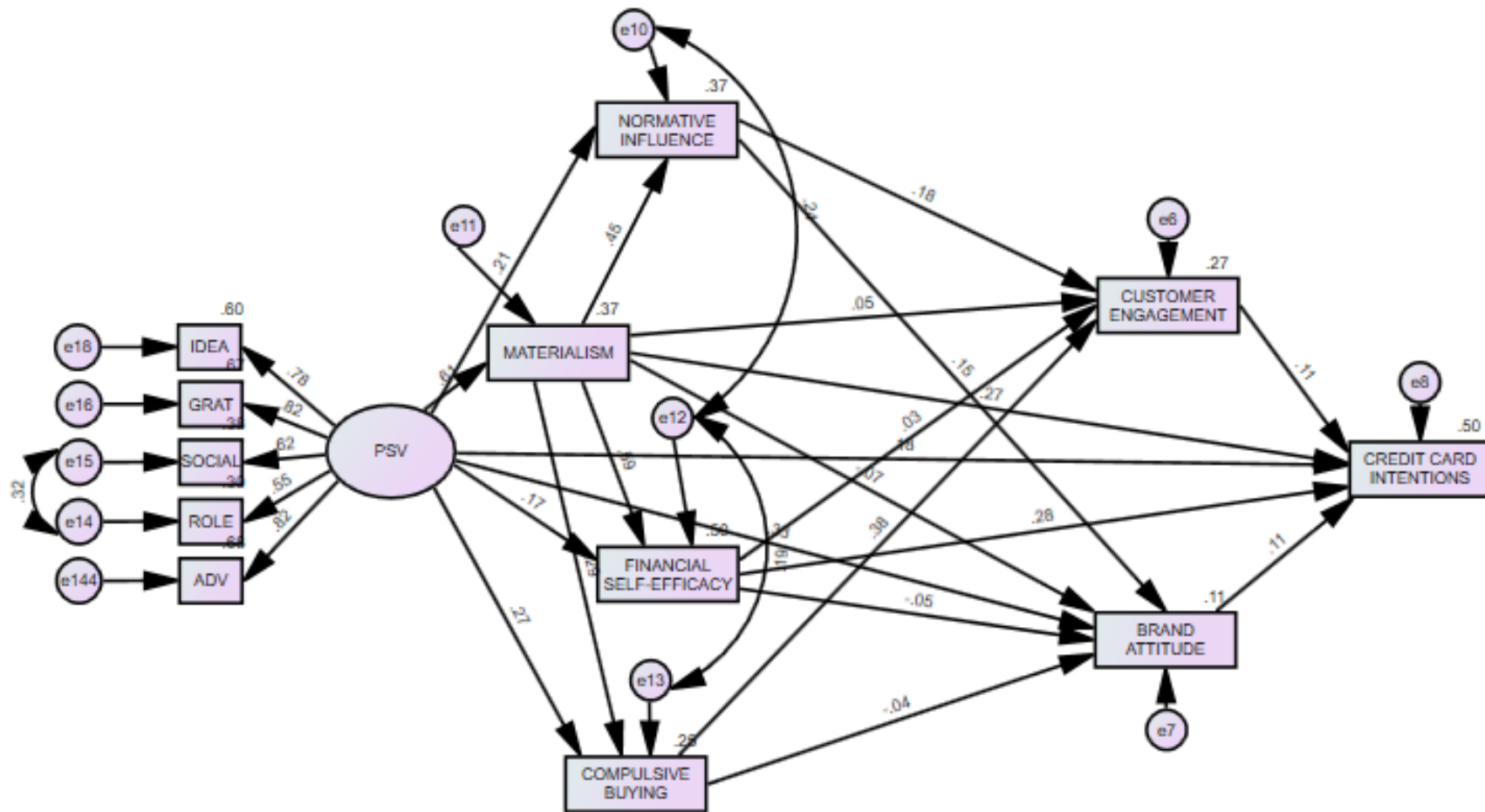


Figure 16: Structural Model

The second running of SEM on the structural model showed better model fit (as detailed in Table 34), yielding RMSEA <0.08 and TLI >0.90. The CMIN/DF still exceeded the acceptable level for acceptable (<3) in the model, but the CMIN/DF showed borderline permissible (or reasonable) fit. Further modification of the model was considered in an alternative model, with the removal of items pertaining to role shopping from the PSV construct, The alternative model resulted in a better model fit; however, the removal of role shopping items was considered to substantially change the meaning of the PSV construct, and the alternative model was rejected.

As noted by Hooper et al. (2008), modification of a model based on a single troublesome index is not recommended. Because of the ample sample size in this study (>200), other model fit indices indicating good model fit (including RMSEA = 0.08, GFI = 0.96, AGFI = 0.91, CFI = 0.96 and TLI = 0.93) in the second model iteration, and due to a bid to avoid changing the substantive meaning, the model was accepted (Hooper et al., 2008).

Table 34: Model Fit Indices for the Structural Model

<i>Model</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>
Significance level	<3 good					
	<5 permissible	>0.90	>0.80	>0.90	>0.90	<0.08
Final model	5.43	0.96	0.91	0.96	0.93	0.08
Initial model	8.78	0.93	0.86	0.93	0.88	0.10
Alternative model	3.62	0.98	0.95	0.98	0.96	0.06

Source: Fornell & Larcker, 1981; Hair et al., 2013; Hoe, 2008; Hooper et al., 2008.

4.4.2 Hypothesis Testing

Using path estimates and critical ratios, the 15 hypotheses (see Table 1) of this research were assessed utilising the structural model detailed in Figure 16. In total, 7 of the 15 proposed hypotheses had a critical ratio (*t*-value) >1.96 and critical value (*p*-value) below the significance level of 0.05 as recommended by Hair et al. (2011) and Kock (2016), as shown in Table 35.

Table 35: Hypothesis Testing

<i>Hypothesis</i>	<i>Variables</i>	<i>Estimate</i>	<i>t-value</i>	<i>CR</i>	<i>P</i>
H1	PSV → Credit card product uptake/purchase intentions	0.45	0.10	4.58	***
H2	PSV → Normative influence	0.52	0.10	5.11	***
H3	PSV → Compulsive buying	0.73	0.12	5.88	***
H4	PSV → Materialism	1.63	0.13	13.05	***
H5	PSV → Financial self-efficacy	0.44	0.10	4.66	***
H6	Normative influence → Brand attitude	0.11	0.03	3.37	***
H7	Normative influence → Customer engagement	0.19	0.04	4.59	***
H8	Compulsive buying → Customer engagement	0.37	0.03	10.86	***
H9	Compulsive buying → Brand attitude	-0.03	0.03	-1.02	0.31
H10	Materialism → Brand attitude	-0.05	0.04	-1.33	0.18
H11	Materialism → Customer engagement	0.05	0.04	1.06	0.29
H12	Financial self-efficacy → Brand attitude	-0.03	0.03	-0.96	0.34
H13	Financial self-efficacy → Customer engagement	0.03	0.05	0.75	0.46
H14	Brand attitude → Credit card product uptake/Purchase intentions	0.17	0.04	4.28	***
H15	Customer engagement → Credit card product uptake/Purchase intentions	0.11	0.03	4.07	***

Note: Estimate = path estimate (regression weights); SE = standard error; t-value = critical ratio; P = critical value (significance value); where *** $p < 0.001$.

As shown in Table 35, seven of the tested hypotheses were supported, as indicated by a t -value > 1.96 and p -value < 0.05 . These results are discussed in further detail below.

H1: Personal shopping values have a positive influence on consumer credit card product uptake/acceptance in the Australian tertiary student market. The relationship between PSV and credit card product uptake was significant, as the critical ratio was > 1.96 ($t = 4.58$) and the critical value < 0.05 ($p < 0.001$). Therefore, H1 was supported.

This supports the findings of Babin et al. (1994) and Arnold and Reynolds (2003), and identifies PSV as an antecedent that may influence a consumer's credit card product acquisition motives.

H2: Personal shopping values positively influence normative influence in the credit card market segment. Normative influence was found to be significantly positively related to PSV, with a t -value of 5.11 and p -value of <0.001 . This aligns with the findings of Batra et al. (2001) and Doney (2004), that consumers who shop in groups are more likely to make purchase decisions that coincide with the expectations of others. H2 was accepted.

H3: Personal shopping values positively influence compulsive buying tendencies in the credit card market. The relationship between PSV and compulsive buying tendencies was found to be positive and significant ($t = 5.88$; $p < 0.001$); thus, this hypothesis was supported. This coincides with findings of previous academic research into the relationship between compulsive buying tendencies and the use of credit cards, which finds that credit cards provide compulsive shoppers the ability to purchase in times of disposable income shortfalls (Deshpande & Krishnan, 1980; Kalla & Arora, 2011; Khare, 2013; Maccarrone-Eaglen & Schofield, 2020; Palan et al., 2011; Youn & Faber, 2000).

H4: An individual's personal shopping values have a positive influence on materialism: The relationship between PSV and materialism was positive as indicated by a t -value exceeding 1.96 ($t = 13.05$). This aligns with the finding of Fitzmaurice and Comegys (2006) that materialistic values are influential in the consumer decision-making process. The relationship was deemed significant, as the p -value was less than the significance level of 0.05, aligning with the conception that materialistic values can lead to ongoing engagement and overall profitability, even in the credit card market. As this relationship was significant, H4 was rejected.

H5: Personal shopping values negatively influence financial self-efficacy. PSV was determined to be positively and significantly related to financial self-efficacy ($t = 4.66$; $p < 0.001$), aligning with the suggestion that consumers' financial product acquisition intentions are driven by intrinsic or extrinsic motivations (Mandell & Klein, 2007), and contrasting with the impression that there is no clear relationship between the two (Hancock et al., 2013; Robb & Sharpe, 2009). Therefore, H5 was rejected.

H6: Normative influence has a positive effect on brand attitude. The relationship between normative influence and brand attitude was found to be positive and significant ($t = 3.37$; $p < 0.001$), indicating the importance of considering reference groups when developing brand communications to develop brand attitudinal loyalty (Batra et al., 2001; Orth & Kahle, 2008). Thus, H6 was accepted.

H7: Normative influence has a positive effect on customer engagement. The hypothesis of a positive relationship between normative influence and CE was supported, with the critical ratio exceeding 1.96 ($t = 4.59$). The relationship was also considered significant ($p < 0.001$). These findings align with those of Orth and Kahle (2008) and Makgosa and Mohube (2007) for products consumed by young adults, and H7 was supported.

H8: Compulsive buying has a negative effect on brand attitude. H8 was rejected. Although the relationship between compulsive buying and brand attitude was negative—aligning with the finding of Šeinauskienė et al. (2015) that compulsive buyers have a lower degree of brand attitudinal loyalty because of their variety-seeking nature, and indicated in this study by a critical ratio of -1.02 —the relationship was not significant ($p = 0.31$).

H9: Compulsive buying has a negative influence on customer engagement. The results of the study indicated that CE was positively and significantly related to compulsive buying; therefore, H9 was rejected. This refutes Kalla & Arora (2011) claim that compulsive purchases are psychological impulses associated with thoughtless acts, and provides evidence that the desire to buy is influenced by CE following an encounter with the object (e.g., stimulated sensory inputs at point of sale), resulting in difficulty in resisting the urge to purchase (Kalla & Arora; 2011).

H10: Materialism positively influences brand attitude. A negative, non-significant relationship was revealed between materialism and brand attitude ($t = -1.33$; $p = 0.18$). Thus, H10 was rejected. This contrasts with the finding of Singh (2016) of a strong likelihood that materialistic values build a strong attitude towards shopping and brand.

H11: Materialism positively influences customer engagement. The relationship between materialism and CE was positive, but insignificant, as the critical ratio was 1.06 (i.e., <0.96) and the critical value was 0.29. Thus, H11 was not supported. This

differs from the finding of Goldsmith et al. (2011) that the more materialistic the consumer, the more they want to shop and the more engaged they become.

H12: Financial self-efficacy positively influences brand attitude. H12 was not supported as the relationship between financial self-efficacy and brand attitude was negative and non-significant ($t = -0.96$; $p = 0.34$). This finding contrasts with recent findings by Rozikin and Sholekhah (2020) in relation to financial literacy positively shaping a consumer's brand attitude and influencing financial product acquisition intentions for savings products, however noting the Robzikin and Sholekhah (2020) study examines financial literacy across attitudes, self-efficacy, and behaviours. However, it aligns with the finding of Dogra and Sharma (2019) that financial literacy does not have a significant effect on the financial product purchase.

H13: Financial self-efficacy positively influence customer engagement: The relationship between financial self-efficacy and CE was found to be positive and non-significant ($t = 0.75$; $p = 0.46$); therefore, this hypothesis was supported. This supports conclusions of the academic literature and the banking industry, and implies that banks may wish to consider their engagement strategies with consumers. However, increased financial literacy, financial risk tolerance and responsible financial behaviours prevail in financial decision-making processes (Braunstein & Welch, 2002; Commonwealth of Australia, 2016; Farrell et al., 2016).

H14: Brand attitude positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market. The results of hypothesis testing revealed a positive relationship between brand attitude and credit card product uptake/acceptance, indicated by a critical ratio exceeding 1.96 ($t = 4.28$); further, the relationship was significant ($p < 0.001$) and thus H14 was rejected. This supports the idea that brand attitude may be influenced by an individual's intended spending and payment behaviours (Commonwealth of Australia, 2015; Fiorio et al., 2014), but contradicts the belief that new entrants' brand attitudes and preferences in the credit card market have not been fully established (Norvilitis et al., 2003).

H15: Customer engagement positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market. H15 was accepted as the critical ratio and critical value indicated a positive and significant relationship ($t = 4.07$; $p < 0.001$). This aligns with the findings of Jones (2010) and Ho et al. (2021), who report that CE in the financial services market builds trust and deepens relationships,

resulting in customer retention, loyalty, and increased likelihood of further product acquisitions.

4.4.3 Variance Explained

The multiple correlation coefficient, commonly referred to as squared multiple correlations (R), is deemed a useful goodness-of-fit measure for models based on the proportion of variance unexplained. Similar to a correlation coefficient, which indicates the strength of the linear relationship between two variables, the coefficient of determination provides the percentage of variation in one variable explained by another. As a final step in the structural model assessment, the squared multiple correlations were calculated. Effect ranges close to 1 indicate complete predictive accuracy (Hair et al., 2014). As a guide, Hair et al. (2014) considers the values in Table 36 acceptable.

Table 36: Levels of Predictive Accuracy

<i>Squared Multiple Correlation (R)</i>	<i>Level of Predictive Accuracy</i>
1.0	Complete
≥ 0.75	Substantial
$\geq 0.25 < 0.75$	Moderate
< 0.25	Weak

Overall, the structural model moderately predicted all variables except brand attitude, which had a weak predictive accuracy. The R values are shown in Table 37.

Table 37: Squared Multiple Correlations

<i>Variable</i>	<i>R</i>	<i>Level of Predictive Accuracy</i>
Personal shopping values		
Adventure shopping	0.61	
Idea shopping	0.60	Moderate
Gratification shopping	0.67	
Social shopping	0.38	
Role shopping	0.30	
Normative influence	0.37	Moderate
Compulsive buying	0.25	Moderate
Materialism	0.37	Moderate
Financial self-efficacy	0.50	Moderate
Brand attitude	0.12	Weak
Customer engagement	0.27	Moderate
Credit card product uptake/purchase intentions	0.51	Moderate

4.5 Summary of Results

Based on the results of SEM analysis, a summary of the hypothesis testing and the final research model is provided in Table 38.

Table 38: Summary of Results

#	Hypothesis	Outcome
H1	Personal shopping values have a positive influence on consumer credit card product uptake/acceptance in the Australian tertiary student market	Accepted
H2	Personal shopping values positively influence normative influence in the credit card market segment	Accepted
H3	Personal shopping values positively influence compulsive buying tendencies in the credit card market	Accepted
H4	An individual's personal shopping values have a positive influence on materialism.	Rejected
H5	Personal shopping values negatively influence financial self-efficacy	Rejected
H6	Normative influence has a positive effect on brand attitude	Accepted
H7	Normative influence has a positive effect on customer engagement	Accepted
H8	Compulsive buying has a negative effect on brand attitude	Rejected
H9	Compulsive buying has a negative influence on customer engagement	Rejected
H10	Materialism positively influences brand attitude	Rejected
H11	Materialism positively influences customer engagement	Rejected
H12	Financial self-efficacy positively influences brand attitude	Rejected
H13	Financial self-efficacy positively influence customer engagement.	Accepted
H14	Brand attitude positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market	Rejected
H15	Customer engagement positively influences consumer credit card product uptake/acceptance in the Australian tertiary student market	Accepted

4.6 Conclusion

As detailed in this chapter, the results of this study were derived from 832 survey responses collected from a sample of Australian university students, conducted via preliminary data analysis, measurement model assessment including EFA and CFA,

structural model assessment utilising SEM and finally, hypothesis testing. As noted, the results of analysis showed led to 7 of the 15 proposed hypotheses being accepted.

The final chapter provides a detailed discussion of the relationships examined within this study relative to theory and practice, including limitations and directions for future research in the field.

Chapter 5: Discussion and Conclusions

5.1 Research Findings

As noted above, this chapter provides a detailed discussion on the findings of this research, and how it addresses the research questions:

RQ1: Does brand attitude and customer engagement affect a consumer's credit card acquisition intentions?

RQ2: What influence do factors including personal shopping values (hedonic and utilitarian motivations), materialism, normative influence, compulsive buying tendencies, and financial literacy (naming the personal characteristic of financial self-efficacy) have on a brand attitude and customer engagement, and how does this influence credit card product acquisition intentions?

RQ3: Do the above listed factors influence the buying motives of an individual and their propensity towards credit card use?

These research questions framed the objectives of the study, and an extensive literature review was undertaken to develop the conceptual model detailed in Figure 18, as the research aimed to examine the effect of the values and motivations underpinning purchasing decisions on the tertiary student market's credit card purchase intentions. Based on the study findings, it seems that credit card selection and use behaviour is more complex and varied than originally thought, even that of young consumers about to enter a transformative part of their lives.

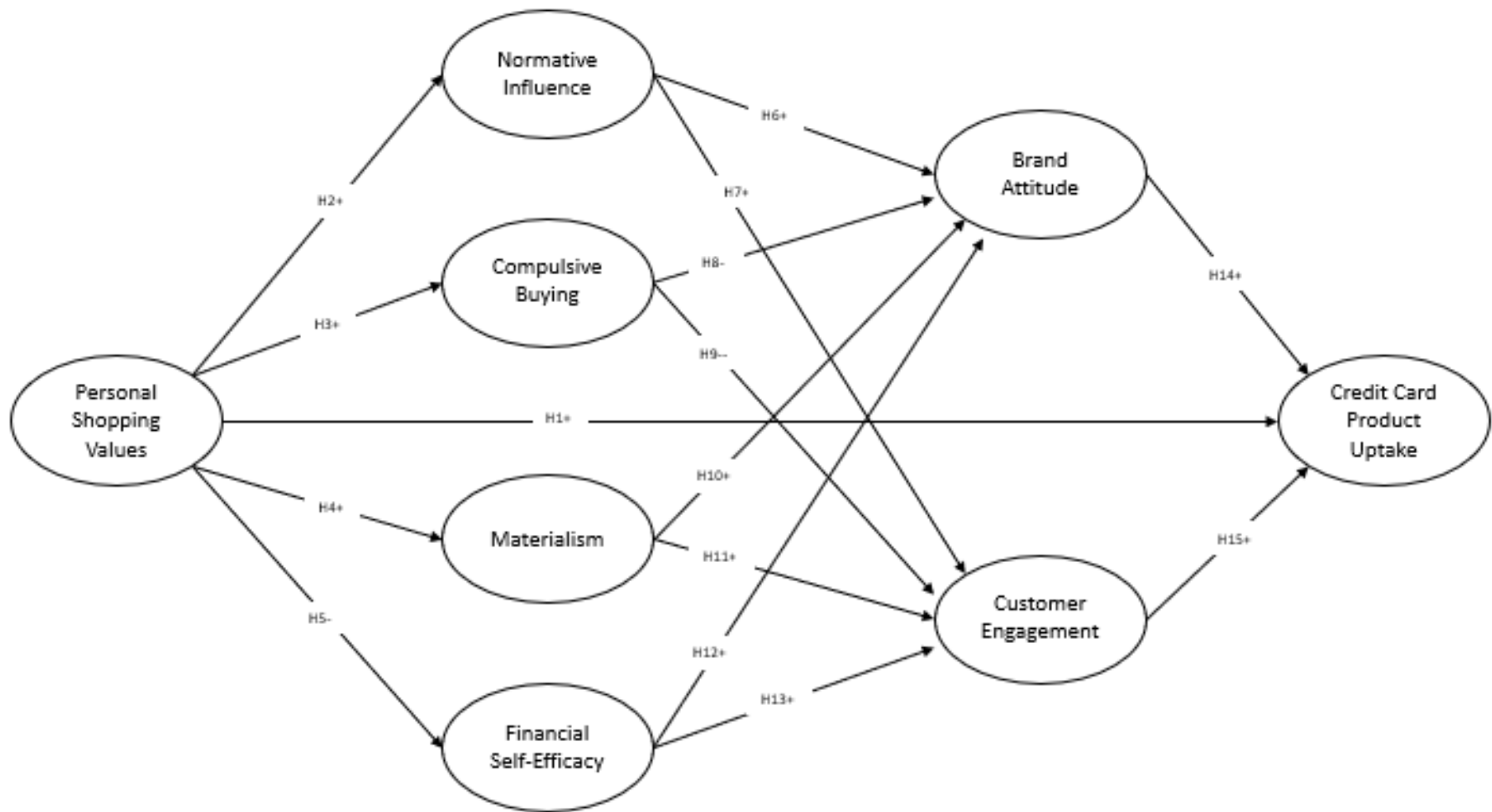


Figure 18: Conceptual Model

5.2 Introduction

Chapter 4 presented the results of the study, with data analysis consisting of preliminary data cleansing and descriptive analysis, measurement model assessment (including EFA, CFA and construct validity analysis), and hypothesis examination using SEM.

This final chapter of the thesis presents the findings and their implications for both research and practice, identified limitations and future research directions, as detailed in Figure 17.

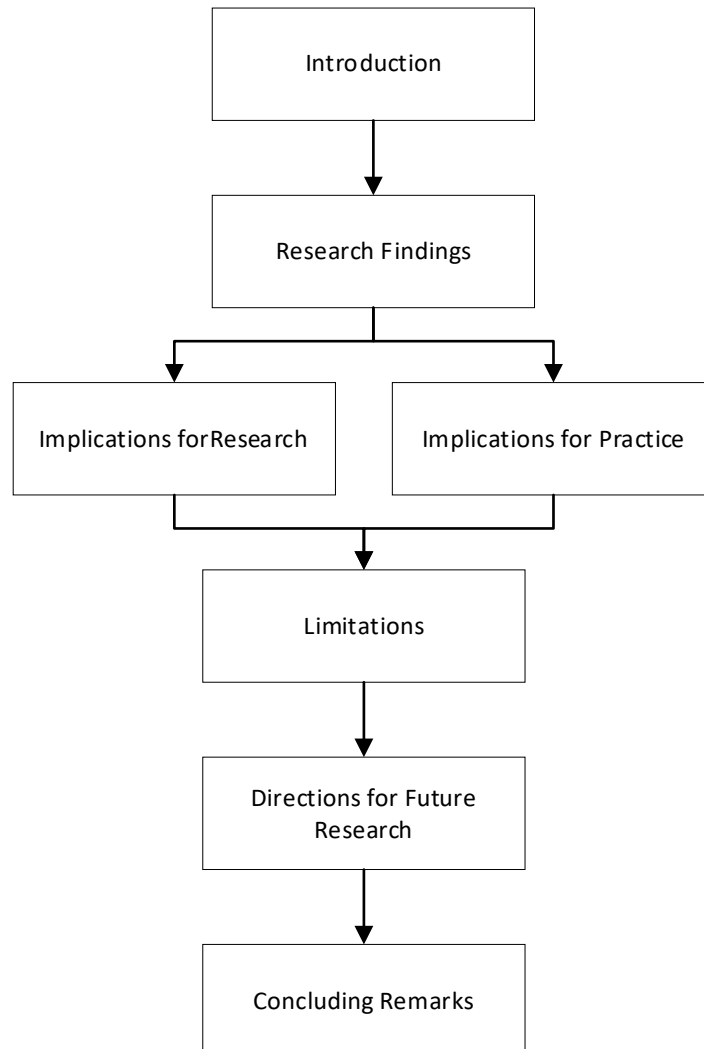


Figure 17: Outline of Chapter 5

5.2.1 Effects of Brand Attitude and Customer Engagement on Credit Card Acquisition Intentions

As noted, a plethora of consumer credit card products are available in the financial services industry in Australia, which is thus considered difficult to navigate by consumers and may present a barrier to entry for new entrants. However, the literature suggests that the development of positive brand attitude and attitudinal loyalty towards a particular brand may simplify the purchase decision, reduce the individual's prerequisites for an extended information search among alternatives and lead to the acquisition becoming habitual in nature (Rundle-Thiele & Mackay, 2001). Vivek et al. (2014) notes the importance of relationship marketing in developing positive brand attitude and strong ongoing engagement with a brand, product, or service. This research explored and investigated the effects of brand attitude and CE by tertiary credit card consumers via the brand attitude scale developed by Spears and Singh (2004) and the CE scale developed by Vivek et al. (2014), capturing attitude and engagement towards respondents' MFI and credit card product offerings.

The results demonstrated reliable and valid evidence of brand attitude and CE positively influencing consumer credit card product uptake and ongoing engagement with the product. The scales utilised to capture brand attitude and CE identified a strong relationship between a consumer and their MFI, with 68% of customers agreeing their current financial institution would be their first choice when taking out another financial service or product.

Studies of CE in the financial services market report that increased CE builds trust, resulting in customer retention and loyalty. Engagement is considered to include feelings of confidence, pride and passion for a brand, product, or service through a combination of rational and emotional bonds (Bowden, 2009). As a result, consumers are more likely to consider their financial institution for other products and/or services. This plays a crucial role in decreasing cost of customer acquisition for the financial institution, and increasing wallet share (Ho et al., 2021; Jones, 2010). The findings from this study, namely in relation to H15, demonstrate a positive and significant relationship between CE and credit card product uptake within the Australian tertiary student market. This aligns with findings of previous studies (Jones, 2010; Kini & Basri, 2022; Kosiba et al., 2018; Kumar et al., 2019; Monferrer et al., 2019) and therefore young consumers can be considered alike to other customer cohorts within the credit card

market. The finding validates the importance of the development of engagement programs for young consumers to develop confidence, pride, and passion for a financial services brand to increase likelihood of attaining MFI status and bolster further product acquisitions.

The findings recorded in relation to H14 indicate a positive and significant influence between brand attitude and credit card product uptake for new entrants to the market in Australia, supporting the idea that brand attitude is affected by an individual's intended spending and payment behaviours (Commonwealth of Australia, 2015; Fiorio et al., 2014). While theory suggests that a rational consumer will select a credit card to maximise net monetary benefit, reality demonstrates that consumers are subject to optimism bias and present bias based on a superficial premise about spending and payment behaviours (Doyle et al., 2017). The study findings also allude to allegiance with a consumer's MFI based on brand attitude having an influence on credit card acquisition and usage intentions, opposing the belief that credit card selection is driven by desire to maximise monetary benefit. Norvilitis (2002) and Norvilitis et al. (2003) observed that brand attitudes and preferences for credit cards in the United States college student market may not have been fully established, with consumers yet to align with a repayment market segment—offering credit card providers the opportunity to shape brand preference through acquisition marketing alone. However, as found in the current study in relation to H14 and H15, in the current Australian market, CE and brand attitude towards a tertiary student's MFI plays an influential role in the credit card decision-making process. Consequently, use of engagement strategies throughout an earlier stage of the consumer financial lifecycle may have irrefutable benefits, as discussed in Section 5.4.

5.2.2 The role Personal Shopping Values, Materialism, Normative Influence, Compulsive Buying Tendencies, Financial Self-Efficacy plays on Brand Attitude, Customer Engagement and Credit Card Product Uptake

The role PSV, materialism, normative influence, compulsive buying, and financial self-efficacy play on brand attitude and CE in the credit card market was examined via H6–H13 of this study. The results revealed multifarious associations, indicating that

behaviours in the credit card market are more complex and varied than originally thought, even among new entrants to the market.

H6 and H7 examined the relationships between normative influence, brand attitude and CE, deeming them positive and significant. As noted in the above section, when searching for and selecting a credit card product, a new entrant to the market commonly looks towards their current financial institution; therefore, it is important for the individual to feel engaged and to possess feelings of brand allegiance. Building on this, the connotation that normative influence significantly affects the development of brand attitude and CE—as noted in this finding—demonstrates the importance of considering the target market's reference groups in the development of brand communication and engagement strategies. These findings align and add to those of Batra et al. (2001), Orth and Kahle (2008) and Makgosa and Mohube (2007).

The relationship between compulsive buying tendencies, and brand attitude and CE, was also examined (H8 and H9), with varying results indicating the complexity of the relationship in the credit card market. While the relationship between compulsive buying and brand attitude was found to be negative—aligning with Šeinauskienė et al. (2015) who consider loyalty and brand attitude to be low because of the variety-seeking nature of impulsive and compulsive consumers—the relationship was not significant in the individuals surveyed. The findings of this study conclude that compulsive buying tendencies have a positive and significant influence on CE, contrasting with previous studies: for example, Kalla and Arora (2011) who note that compulsive purchases are psychological impulses associated with thoughtless acts. The current findings provide supporting evidence that desire to buy is influenced by CE following an encounter with the object, resulting in difficulty resisting the urge to purchase.

Singh (2016) identifies a strong likelihood that materialistic values build strong attitudes towards shopping and brand. However, the findings in this study in relation to H10 of a weak (non-significant) relationship are in contrast with this idea. These differing outcomes may result from the nature of the financial services and consumer credit in Australia, with the study also finding that materialism is influenced by financial literacy. These findings may also be derived from the conceptualisation of materialism within the study, noting that a unidimensional 4 item scale was utilised comprising of all three dimensions of materialism: acquisition centrality, acquisition as the pursuit of happiness, and possession defined success. Application of a multidimensional scale, or a single dimension of materialism, may result in findings

aligned with Singh's (2016) research outcomes. The results of this study may indicate that consumers with a higher degree of financial literacy are less likely to undertake a credit card product offering to fulfil materialistic urges because of heightened awareness of the effect that poor financial management may have on their credit rating and future borrowing capacity. This study did identify a positive relationship between materialism and CE when testing H11, although it was not significant in the cohort examined. This finding differs from those of Goldsmith et al. (2011), who note a positive and significant relationship in that the more materialistic the consumer, the more they shop and the more engaged they become. Whilst this differs from the hypothesized outcome, this may be a result of the conceptualisation of the construct, or may be an indication of the effect of this study's respondents' financial literacy and unwillingness to succumb to materialistic urges because of future effects, and a reflection of the current credit adverse consumer profile within Australia. Despite these findings, this study also uncovered a positive and significant effect of materialism on credit card product use, indicating that consumers possessing a credit card are willing to utilise this method of payment to facilitate their lifestyle when materialistic urges take hold, aligning with findings reported by Pinto et al. (2000) and Pradhan et al. (2018) and industry hypotheses relating to credit card consumers.

The study also examined the relationship between financial self-efficacy, brand attitude and CE, through H12 and H13. The relationship between financial self-efficacy, and brand attitude was found to be negative and non-significant, indicating the personal characteristic of financial self-efficacy does not shape an individual's attitude towards their main financial services provider. In financial services markets, a young consumer's MFI is often shaped by parental influence or school banking programs, with barriers to switching often considered high (Jones et al., 2002). This may have shaped the responses in this study, with length of banking relationship and/or banking selection influences not measured; however, this contrasts with recent findings by Rozikin and Sholekhah (2020) in relation to financial literacy, who note financial literacy (being made up of attitude towards money, financial self-efficacy, and financial behaviours) positively shapes a consumer's brand attitude and influences financial product acquisition intentions for savings products. Further research into this area is recommended to reconcile the contrast to recent findings, and non-significance of findings within this area of the study. This study also examined the relationship between financial self-efficacy and CE, revealing a positive and significant relationship between the two constructs in the credit card market, and supporting H13. As noted throughout

literature, increased financial literacy (including self-efficacy), financial risk tolerance and responsible financial behaviours will prevail in financial decision-making processes (Braunstein & Welch, 2002; Commonwealth of Australia, 2016; Farrell et al., 2016). This is considered consistent across consumer cohorts, with the significant positive relationship between financial literacy, and credit card product uptake revealed in this study. The findings of this study coincide with conclusions from the academic literature and the banking industry, noting that banks may wish to consider developing new or amending current engagement strategies with consumers as these play a mediating role in the decision-making process. It is however noted that for the purpose of this study financial literacy was considered through the application of Lown's (2011) financial self-efficacy scale, which examines financial literacy from a personal characteristic lens alone. The results of the relationships between financial literacy, brand attitude and CE may vary if financial literacy is further examined through the application of a scale capturing financial attitudes or behaviours of the individual.

5.2.3 Personal Shopping Values as an Antecedent on Factors Influencing Buying Motives and Propensity Towards Credit Cards

The third, and final, research question examined explored the influence of PSV as an antecedent on the motives of an individual and their propensity towards credit card product uptake and use. As noted, the product uptake and use of consumer credit cards by new entrants to the market in Australia has experienced a downfall over recent years because of shifting consumer payment preferences including the rise of the 'credit adverse' consumer, the expansion of BNPL providers and services and, in more recent times, the effects of the COVID-19 pandemic. Nonetheless, credit cards continue to play an important role in the Australian economy.

The literature identifies how a consumer's PSVs (consisting of hedonic and utilitarian motives) shape the consumer decision-making process, acting as an antecedent (Arnold & Reynolds, 2003; Babin et al., 1994; Guido, 2006; Picot-Coupey et al., 2021; Tauber, 1972). This study further explored this concept in regard to compulsive buying behaviour, subconscious materialistic urges, normative influence, and financial self-efficacy and its overall effect on credit card product uptake and use, through the examination of H1–H5. It was found that PSV has a positive influence on

consumer credit card product uptake and use, as well as on normative influence, compulsive buying behaviours, materialism and financial self-efficacy.

The finding from H1, that PSV has a positive influence on consumer credit card product uptake in Australia, supports the supposition that hedonic and utilitarian motives and values underpin consumer decision making and acquisition motives, bolstering the literature on consumer behavioural intentions (Arnold & Reynolds, 2003; Babin et al., 1994; Guido, 2006). While some studies also note that shopping orientation can vary over time and may be affected by differing shopping environments (Babin & Krey, 2020; Picot-Coupey et al., 2021; Scarpi, 2021), the ability to demonstrate an understanding of a consumer's shopping motives is considered beneficial in driving product acquisition within the consumer credit market, as supported within this examination.

This study examined the influences of PSV on normative influence, compulsive buying behaviours, materialism and financial literacy, and found that all these factors are shaped by a consumer's PSV in the credit card market; giving credence to the fact that a consumers' behaviour is underpinned by values, and organised around goal attainment. As noted by Batra et al. (2001) and Doney (2004), consumers who shop in groups are more likely to make purchase decisions that coincide with the expectations of others and align with their hedonic and utilitarian values. This theory can also be applied to the credit card market, as detailed in H2: consumers who are more susceptible to normative influence are more likely to undertake a credit card product offering that aligns with the expectations of their peers.

In addition to the significant positive influence of PSV on normative influence and its flow through to acquisition intentions, this study uncovered a relationship between PSV and compulsive buying by testing H3. It was determined that a consumer's hedonic and utilitarian shopping values influence compulsive buying tendencies in the credit card market, and that credit cards are still viewed favourably in providing impulse and compulsive shoppers the ability to purchase in times of disposable income shortfall, cementing the position of consumer credit cards in the Australian market in terms of accessibility and acceptance (Deshpande & Krishnan, 1980; Kalla & Arora, 2011; Khare, 2013; Maccarrone-Eaglen & Schofield, 2020; Palan et al., 2011; Youn & Faber, 2000).

The findings of the study also reinforce the literature on the relationship between PSV and subconscious materialistic urges, aligning with Fitzmaurice and Comegys (2006) and Goldsmith et al. (2011) in that materialistic values are influential in the consumer decision-making process. It is clear that the materialistic values of consumers can be subconsciously influenced by both hedonic and utilitarian values, and vice versa, leading to ongoing engagement and overall profitability (H4). Thus, the results of this study support a value–attitude–behaviour model in the young consumer market.

The influence of PSV on financial self-efficacy was the final factor examined. Based on the literature, no relationship was expected between an individual’s shopping motives and financial self-efficacy, with financial literacy (including the personal characteristics of financial self-efficacy) considered to be shaped by personal socio-demographic characteristics including age, gender, education and nationality, and attitudes (Firli, 2017); or between hedonic and utilitarian motives and financial product acquisition (Hancock et al., 2013; Robb & Sharpe, 2009). However, the significant positive relationship identified in this study between PSV and financial self-efficacy, in relation to H5, shows that intrinsic and extrinsic motives values may contribute to the formation of financial self-efficacy, and shape financial product acquisition intentions, concurring with Mandell and Klein (2007).

5.3 Implications for Research

This research set out on a path to contribute to both theory and industry practices; enriching understanding of how hedonic and utilitarian shopping motives, materialism, normative influence, compulsive buying behaviour, and financial self-efficacy influence brand attitude and CE, and how this shapes a young consumer’s intentions to acquire and utilise a credit card. The findings provide a range of implications and contributions to the consumer behaviour and financial services literature, as detailed below.

The study comprehensively integrated previous consumer behaviour theories, starting with the individual’s hedonic and utilitarian motives through PSV (Arnold & Reynolds, 2003; Babin et al., 1994), and examining how these values shape susceptibility to normative influence (Batra et al., 2001), materialistic urges (Richins & Dawson, 1992), compulsive buying tendencies (Valence et al., 1988), and financial self-efficacy (Lown, 2011). The study then examined the influences of all these factors on

brand attitude and CE utilising the frameworks developed by Spears and Singh (2004) and Vivek et al. (2014), and the overall propensity to acquire and use a credit card. The study utilised these theories to build a conceptual framework to explore the research issues; expanding the literature and making a significant theoretical contribution to the field of consumer behaviour in consumer credit. Moreover, this study has shown that understanding a consumers' hedonic and utilitarian motives as drivers for behaviour, and how these motives interplay with a consumers' goal pursuit, is significant for new entrants within the credit card market.

Most previous research conducted into consumer credit cards is comparative (Cakarnis & D'Alessandro, 2015; De Silva & Patabendige, 2021; Hancock et al., 2013; Lim et al., 2014; Singh et al., 2018); the current study is one of the few examining a plethora of factors influencing consumer acquisition intentions and ongoing engagement in the credit card industry. To the researcher's knowledge, this is the first study to examine how PSV, materialism, normative influence, compulsive buying, and financial self-efficacy shape CE and brand attitude, expanding this investigation to understand acquisition intentions and behaviours in a credit card market. Moreover, the study is the first to investigate these influences in an under-represented cohort—tertiary students, who are widely considered credit card adverse—in the context of Australia, a market saturated with consumer credit product choice.

The literature is enhanced through the exploration and extension provided in this study, including its demonstration that:

1. PSVs act as an antecedent in the consumer decision-making process, influencing a consumer's susceptibility to normative influences, subconsciously influencing the likelihood to succumb to materialistic urges and contributing to the formation of financial self-efficacy.
2. Brand attitude and CE can be shaped by normative influence, validating the importance of reference groups in the consumer decision-making process.
3. Brand attitude and CE positively influence consumer credit card decisions, including uptake and ongoing product engagement, strengthening the depth of the relationship between a consumer and a financial institution.

As forementioned, this research explored how brand attitude and CE is shaped by normative influence, supporting Burnkrant & Cousineau (1975) findings that one of the most pervasive determinants within the consumer decision-making process is the

influence of those around them, and also explored how CE and brand attitude shape a young consumer's intention within the credit card market. This research is a foundation into the dynamic interaction of people, environments, and behaviours, for new entrants and unfolds pathways for further research related to social influences, attitudes, and engagement in the service marketing context.

Furthermore, previous academic studies have attested to a strong association between CE and product acquisition, with engagement creating a deeper and more meaningful connection resulting in interaction and participation. Engaged consumers generate value through not only their purchases but referring prospects and providing feedback which can shape innovation/improvement (Kumar et al., 2010). This research thus empirically contributes to consumer research and literature by expanding the examination of CE within the student credit card market, and complementing findings accentuating the importance of engagement strategies for financial service providers.

It is considered, in general, consumers make purchases to fulfil both hedonic and utilitarian motives; this study, contrastingly, examined how these motives shape consumer's behaviours and experiences within the credit card market. The results support the influence of PSVs on a consumer's susceptibility to normative influence, likelihood to succumb to materialistic urges and contribution to financial self-efficacy; presenting a fresh perspective on the drivers for product acquisition within the financial services market. The results of this research strongly support the proposed hypothesis regarding the interplay of hedonic and utilitarian motives in regard to consumer credit card product acquisition and utilisation intentions. Therefore, this research can be considered complementary to the findings of Pulina (2011) and Commonwealth of Australia (2015), noting that credit card acquisition is driven by a desire to fulfil purchase intentions in times of disposable income shortfalls, and contributing to the academic use of the PSV scale in a variety of contexts. In addition, this research paves the way for further exploration into motivation and goal theory in the consumer credit card market.

5.4 Implications for Practice

This research has significant management implications, providing greater insight into factors shaping consumer credit card acquisition intentions for financial product

issuers, and helping ensure the suitability of product design and disclosure in an evolving credit card market. The findings can be used to develop constructive and competitive product offerings aligned with the needs and demands of new entrants to the market; in particular, the needs and demands of the Australian tertiary student cohort. However, the study identified multifarious associations, indicating that behaviours in the credit card market are more complex and varied than originally thought, even with new entrants to the market. Developing managerial understanding plays a vital role in ensuring the longevity of consumer credit card products and creating both immediate and long-term profitable customer relationships (Baumann et al., 2007).

Detailed further below, the key learnings from this study can be applied by credit card managerial and marketing practitioners through the following:

1. Develop targeted engagement programs to build confidence, pride and passion for the brand within the young consumer cohort, prior to the coming of age.
2. Align youth credit card product propositions and marketing strategies to the fulfillment of young consumer's financial goals.
3. Examine the target market's reference group and frame the company's product / brand in a favourable position.
4. Accommodate the likelihood of revolving credit within student credit card market, and ensure suitability of product offerings.
5. Implement ongoing CE strategies, underpinned by goal theory, that appeal to young consumers to increase wallet share, competitive advantage and profitability.

5.4.1 Targeted Engagement Programs prior to Coming of Age

In light of the finding of a positive influence of brand attitude and CE on credit card product acquisition and utilisation, financial institutions should invest in the development of engagement programs for young consumers to develop confidence, pride, and passion for the issuer's brand, prior to the coming of age, which will increase the likelihood of future product acquisitions. Studies of CE in the financial services market find that increased CE builds trust, resulting in retention (Bowden, 2009), with Monferrer et al. (2019) noting a customer's identification with the brand—matching their personality with brand values—contributes to loyalty. In this study, 68% of

respondents reported they would consider the product offerings of their current financial institution as a first choice when entering the credit card market.

Moreover, this study's findings indicate that adopting an intensive marketing strategy to strengthen engagement and brand attitudinal loyalty early on in the consumer banking lifecycle is imperative for developing customer relationships and embedding the brand's credit card product offerings in the consumer's evoked set. Likewise, the results of this study may be helpful for the development of customer relationships, resulting in acquisition of credit cards as well as other consumer banking products.

5.4.2 Alignment with the Fulfillment of Financial Goals

Through hypothesis one of this study, it was demonstrated that PSVs have a positive influence on credit card acquisition. Equipped with this understanding, practitioners may wish to consider the alignment of marketing communications, imagery, and product propositions, with the fulfilment of both hedonic and utilitarian desires which can be met through credit card acquisition. By aligning the product and brand with PSVs (i.e., adopting imagery which reflects shopping for adventure or social shopping experiences), credit cards can be viewed by the consumer as more than just a payment method, but as an integral part of goal accomplishment.

In addition, the study demonstrates the complexity of the relationship between compulsive buying tendencies, and credit card product acquisition, noting that the compulsive buying tendencies of an individual can have a significant influence on CE. This aligns with the credit card industry notion that compulsive consumers are an attractive and profitable target market, and are more likely to make purchases using the card and become revolvers. Therefore, credit card marketing communications could be framed to encourage desire for card use to accommodate impulse or compulsive purchases that the consumer otherwise may have had to go without.

Further, managers should consider the positioning of consumer credit card products for new entrants to the market, and the use of imagery reflecting the purchase of luxury goods to fulfil materialistic urges, which is common industry practice today. The current study indicates that consumers with a higher degree of financial self-efficacy are less likely to acquire a credit card to fulfil such urges, and therefore imagery reflecting the use of credit cards to obtain luxury goods may not trigger the

emotional response desired. However, once the product is acquired, a credit cards' use to fulfil materialistic urges can be detected, and therefore imagery reflecting luxury consumption may be best suited for spend engagement campaigns once the product has been obtained. Product acquisition campaigns for new entrants should instead focus on reflecting responsible product use, increasing all aspects of financial literacy, and aligning the product with the financial risk tolerance of the target market.

5.4.3 Favourable Positioning within Key Reference Groups

Managers should also consider the importance of their target market's reference groups when developing brand communications and engagement strategies: the current study findings support the idea that normative influence significantly affects consumer behaviour in the credit card market. By framing the financial institution, and use of their products, as favourable among reference groups in marketing communications, an organisation can effectively guide the development of brand attitude, increase CE, and consequently influence product acquisition and utilisation.

The phenomenon of normative influence on the development of brand attitude and engagement is also considered heightened in Western young consumer markets because of social media: peer communications through social media influence purchase intentions directly through conformity and indirectly through the reinforcement of product involvement (Wang et al., 2012). Thus, managers should consider how to leverage susceptibility to normative influence when using social media platforms to market financial services and products to consumers within this age demographic.

5.4.4 Suitable Product Offerings

By developing attractive and appropriate credit card product propositions for the market, the issuer can capitalise on this consideration, decrease the cost of customer acquisition, and increase wallet share. This will reduce costs, as the cost of retaining banking customers is significantly less than the cost of acquiring new customers (Ho et al., 2021). It is clear from this study that the detectible under-representation of tertiary students in the Australian credit card market is derived from variance in disposable

income, financial risk tolerance and perceived product benefits. As such, practitioners should attempt to uncover more about the target consumer throughout product development, and from which, consider more personalised product offerings such as personalised pricing (e.g., interest rate and fees based on the consumer's risk profile), fee-for-use models (e.g., customer only fees when debt is outstanding), or targeted rewards (e.g., where rewards / discounts are for items and locations where the consumer frequents).

In addition to the implications derived for consumer credit card product issuers, the outputs from this research contribute to heightening the awareness of consumers. The outputs demonstrate the influence of hedonic and utilitarian motives, and other factors, in shaping financial product decisions. Derived from this awareness, consumers can develop a deeper understanding of how their influences and consumer credit card product offerings can align with their financial goals, including the value that can be obtained through the acquisition and use of credit cards. This awareness can facilitate the identification of suitable offerings in the market.

5.4.5 Ongoing Customer Engagement Programs

Over time, bankers have realised that credit card propositions alone are no longer enough to ensure satisfaction, loyalty and profitability. Thus, the goal has evolved to engaging customers in all possible ways. Although CE can occur organically, as noted by Harmeling et al. (2017), when an organisation deliberately initiates and manages CE customers are more likely to demonstrate greater motivation and empowerment generating increased wallet share, competitive advantage and profitability within the banking industry. Throughout the survey it was identified 18.5% of respondents who stated they were credit card holders only use their credit cards in times of emergency, accentuating the importance of developing ongoing CE programs, following product acquisition to ensure the consumer's continued use and increasing the likelihood of the credit card becoming a preferred payment method.

5.5 Limitations

All research has limitations that must be considered alongside directions for future research (Price & Murnan, 2004). This section discusses the key limitations and delimitations identified. As documented throughout this study, the focal point of consumer motivation towards credit card product acquisition can be difficult to precisely judge as consumer behaviour and preferences vary between individuals and change over time; however, the study aspired to provide greater insight for credit card issuers into the common traits and preferences of new entrants to the market in Australia, which was achieved, with implications for research and practice unearthed.

First, it is noted that, in addition to individual preferences driving consumer behaviours, advances in technologies in the payments industry and other global changes influencing consumer sentiment towards spending bring forth changes in behaviours and attributes that limit the conclusions that can be drawn. Since the conception of the study new consumer credit product propositions, including the investiture in BNPL and other instalment products has resulted in a further decline in the uptake of Australian consumer credit cards by new entrants to the market. As this research specifically focused on credit cards, an important stream of future research may include the exploration of the influence of these factors on these new consumer credit product propositions, as well as other financial products and services, as discussed in Section 5.6. In addition, the unforeseen effects of the COVID-19 pandemic on consumer spend include an effect on the uptake of consumer credit products, which was not considered in the research design or data collection for this study.

Second, complexities relating to the nature of the Australian credit card market, including regulations and legislation, are considered a limitation of the current study. The Australian financial services industry is heavily regulated to protect consumers and ensure ethical and professional standards are upheld. While these complexities were taken into consideration throughout the research undertaken—ensuring that the findings have practical implications for domestic credit card issuers and consumers alike—varying international regulatory requirements may limit the application of the findings in consumer credit markets elsewhere.

Third, the study did not examine the income, assets and liabilities of individual participants because of the sensitivity of the subject matter. These factors are deemed

influential in an individual's ability to acquire and service a credit card product in the Australian consumer credit market; thus, without the examination of these elements, the study and its implications are generalised in nature. Ethical considerations relating to the population of interest's financial stability resulted in the exclusion of those enrolled in regional universities; as a result, the findings of the study may be biased by identifying consumer motivations only among those from affluent family backgrounds.

Finally, the research methodology adopted, being cross-sectional and purely quantitative in nature, may be considered a limitation because of the complex nature of consumer behaviour in the payments landscape. Price and Murnan (2004) suggest the repetition of a study with participants in different settings is beneficial for substantiating the study findings, and adoption of a mixed method research design enriches the depth of knowledge from respondents' perceptions.

These limitations are considered in the directions for future research below.

5.6 Directions for Future Research

This research has drawn on a wide range of theories to examine the influence of hedonic and utilitarian motivations on product uptake and utilisation for new entrants to the credit card market, and identifies how practitioners and consumers alike can benefit from this insight. Although consumer motivation has received much attention in the literature, this thesis shows that credit card selection and use behaviour is more complex and varied than originally thought. Thus, the following points may be considered for future research.

The study examined new entrants to the market enrolled in tertiary education in Australia; thus, the suggestions for practice are specific to this cohort of consumers. This may motivate the undertaking of further studies including:

- examination of new entrants to the market in full-time employment to determine if access to disposable income affects the influences of hedonic and utilitarian motivations or other factors examined
- consideration of existing credit card holders to identify how credit card providers can utilise consumer motivations to encourage product switching behaviour or change consumer spend trends in current portfolios

- cross-cultural research in emerging Eastern and Western cultures to identify differences in cultural orientation towards consumer credit products
- further consideration of credit card utilisation intentions with comparison of the influence of hedonic and utilitarian motives on those categorised as revolvers *v.* transactors
- introduction or substitution of other factors identified to influence the consumer decision-making process and buying behaviours including personal, societal, and psychological factors.

Additional constructs were captured within the questionnaire which were not utilised within the conceptual model examined, including Potrich et al. (2016) financial attitudes and behaviours, and psychometric variables evaluating brand equity as prescribed by Yoo and Donthu (2001). Brand equity can be beneficial in determining the attitudinal disposition of consumers and predilection as a determinant for ongoing use/engagement and may be further explored. In addition, it is noted that the study did not examine the mediating role of variables had on PSV and credit card intentions. Therefore, the examination of the mediating effects of materialism, normative influence, compulsive buying tendencies, financial literacy, brand attitude, and/or CE may be considered as a pathway for future research. Further, the findings and implications of this study could be augmented through the application of a mixed methodology approach or adoption of a longitudinal study to enrich the depth of the knowledge.

Finally, this research illustrates how researchers can examine and understand influential factors in the decision-making process for credit cards. An important course of future research may be to examine how these factors influence the decision-making process for other financial products and services. The examination of these influences on other products would enrich understanding for consumers and providers; shaping the customer financial product lifecycle, developing long-term and profitable relationships, and ensuring suitability of products offered, acquired, and utilised throughout each stage of life.

5.7 Concluding Remarks

This final chapter of the thesis has summarised the research findings in relation to the research objectives and discussed the significance of this research to both theory and

practice. Limitations and future research directions have been detailed, unlocking the potential to enrich understanding of the influence of consumer motivations across the financial product lifecycle.

This thesis contributes to the academic literature on consumer behaviour and how motivation influences product acquisition and utilisation in the Australian financial services industry. Based on an online survey of 795 students, findings from the research demonstrate a significant influence of both PSV (hedonic and utilitarian) and normative influence on credit card acquisition. Also revealed was the insignificance of other factors considered to shape consumers' buying behaviours, including compulsive buying tendencies and desire to fulfil materialistic urges, in this market. Therefore, it has been ascertained through this study that credit card acquisition and utilisation behaviours are complex and varied, even among young consumers with limited access to disposable income who are about to enter a transformative part of their lives. These findings will help credit card product issuers to better understand their target markets and implement both valuable and operational marketing strategies, and enable consumers to navigate the plethora of credit card products and align their motives with suitable offerings.

References

- Agarwal, S., Liu, C., & Souleles, N. S. (2007). The reaction of consumer spending and debt to tax rebates: Evidence from consumer credit data. *Federal Reserve Bank of Chicago* (No. 2007-10). 1–33.
- Agrawal, K. (2012). A conceptual framework of behavioral biases in finance. *IUP Journal of Behavioral Finance*, March 2012, 7-18.
- Aguirre-Urreta, M. I., & Hu, J. (2019). Detecting common method bias: Performance of the Harman's Single-Factor test. *The DATA BASE for Advances in Information Systems*, 50(2). 45-70.
- Ahmed, S., & Ting, D. H. (2018). The shopping list in goal-directed shopping: scale development and validation. *The Service Industries Journal*, 39(5-6), 319-342.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Design Processes*, 50(20). 179-211.
- Allgood, S., & Walstad, W. B. (2011). *The effects of perceived and actual financial knowledge on credit card behavior*. Network Financial Institute. Indiana State University
- Amagir, A., Goot, W., Maassen van der Brink, H., & Wilschut, A. (2018). A review of financial-literacy education programs for children and adolescents. *Citizenship, Social and Economics Education*, 17(1). 56-80.
- Arisal, İ., & Cömert, Y. (2016). The effect of hedonic and utilitarian motives on consumer behavior: A comparison study between Turkish and Spanish university students. *European Journal of Business & Social Sciences*, 5(3), 99–112.
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77–95.
- Australian Bankers Association Inc. (2015). *Australia's competitive credit card market*. <https://www.ausbanking.org.au/consumers/fact-sheets/>
- Australian Bureau of Statistics. (2019). *3101.0—Australian Demographic Statistics, Sep 2019*. <https://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3101.0>
- Babin, B. J., Darden, W. R., & Griffen, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644–656.
- Babin, B. J., & Darden, W. R. (1995). Consumer self-regulation in a retail environment. *Journal of Retailing*, 71(1), 47-70.
- Babin, B. J., & Krey, N. (2020). Meta-analytic evidence on personal shopping value. *Recherche et Applications en Marketing (English Edition)*, 35(3), 124–132.
- Băbut, R., & Dabija, D.-C. (2012). *Can attitude to advertisement influence brand attitude and purchase intention? Empirical findings from the Romanian banking system* [Paper presentation]. International Conference on Marketing—From

Information to Decision, Cluj-Napoca, Romania.

<https://www.ceeol.com/search/article-detail?id=170139>

- Bagozzi, R. P., & Dholakia, U. (1999). Goal setting and goal striving in consumer behaviour. *Journal of Marketing*, 63(4_suppl1), 19-32.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8–34.
- Baistaman, J., Awang, Z., Afthanorhan, A., & Rahim, M. Z. A. (2020). Developing and validating the measurement model for financial literacy construct using confirmatory factor analysis. *Humanities & Social Sciences Reviews*, 8(2), 413–422.
- Bakırtaş, H., & Divanoğlu, S. U. (2013). The effect of hedonic shopping motivation on consumer satisfaction and customer loyalty. *International Journal of Asian Social Science*, 3(7), 1522–1534.
- Balakrishnan, B. K., Dahnil, M. I., & Yi, W. J. (2014). The impact of social media marketing medium toward purchase intention and brand loyalty among generation Y. *Procedia—Social & Behavioral Sciences*, 148, 177–185.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159–170.
- Batra, R., Homer, P. M., & Kahle, L. R. (2001). Values, susceptibility to normative influence, and attribute importance weights: A nomological analysis. *Journal of Consumer Psychology*, 11(2), 115–128.
- Baumann, C., Burton, S., & Elliott, G. (2007). Predicting consumer behavior in retail banking. *Journal of Business & Management*, 13(1), 79–96.
- Bayton, J. A. (1958). Motivation, cognition, learning: Basic factors in consumer behavior. *Journal of Marketing*, 22(3), 282–289
- Berntal, M. J., Crockett, D., & Rose, R. L. (2005). Credit cards as lifestyle facilitators. *Journal of Consumer Research*, 32(1), 130–145.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (2nd ed.). McGraw-Hill Education.
- Borasi, P., Khan, S., & Kumar, V. (2021). *Credit card payments market by card type, application, and provider: Global opportunity analysis and industry forecast, 2021-2028*. <http://www.alliedmarketresearch.com/credit-card-payments-market-A11836>.
- Bowden, J. L.-H. (2009). The process of customer engagement: A conceptual framework. *Journal of Marketing Theory & Practice*, 17(1), 63–74.
- Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 88, 445.

- Brown, T. A., & Moore, M. T. (2012). Confirmatory factor analysis. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 361–379). Guilford Publications Inc.
- Bucher-Koenen, T., Lusardi, A., & Alessie, R. J., (2016). How financially literate are women? An overview and new insights. GFLEC Working Paper No. 2016-1, 1-37.
- Burnkrant, R. E., & Cousineau, A. (1975). Informational and normative social influence in buyer behavior. *Journal of Consumer Research*, 2(3), 206–215.
- Burroughs, J. E., Chaplin, L. N., Pandelalere, M., Norton, M. I., Ordabayeva, N., Gunz, A., & Dinauer, L. (2013). Using motivation theory to develop a transformative consumer research agenda for reducing materialism in society. *Journal of Public Policy & Marketing*, 32(1), 18–31.
- Buttle, F. (1992). Shopping motives constructionist perspective. *The Service Industries Journal*, 12(3), 349–367.
- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). Routledge.
- Caddy, J., Delaney, L., & Fisher, C. (2020a). *Consumer payment behaviour in Australia: Evidence from the 2019 Consumer Payments Survey. September.* <https://www.rba.gov.au/publications/rdp/2020/2020-06>.
- Caddy, J., Delaney, L., Fisher, C., & Noone, C. (2020b). Consumer payment behaviour in Australia. *RBA Bulletin, March*, 26.
- Cakarnis, J., & D'Alessandro, S. (2015). Does knowing overcome wanting? The impact of consumer knowledge and materialism upon credit card selection with young consumers. *Young Consumers*, 16(1), 50–70.
- Callegaro, M., Baker, R. P., Bethlehem, J., Göritz, A. S., Krosnick, J. A., & Lavrakas, P. J. (2014). *Online panel research: A data quality perspective*. John Wiley & Sons.
- Cameron, B., Team, A. R., & Gentleman, R. (2018). Mobile apps versus web browsers: A comparison of self-administered survey platforms. *CHANCE*, 31(4), 29–36.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychology Bulletin*, 56, 81–105.
- Carlson, K. D., & Herdman, A. O. (2012). Understanding the impact of convergent validity on research results. *Organizational Research Methods*, 15(1), 17–32.
- Chang, H. H., & Liu, Y. M. (2009). The impact of brand equity on brand preference and purchase intentions in the services industries. *The Service Industries Journal*, 29(12), 1687–1706.
- Chien, Y.-W., & Devaney, S. A. (2001). The effects of credit attitude and socioeconomic factors on credit card and instalment debt. *The Journal of Consumer Affairs*, 35 (1), 162–179.

- Chrysochou, P. (2017). Consumer behavior research methods. In G. Emilien, R. Weitkunat, & F. Lüdicke (Eds.), *Consumer perception of product risks and benefits*. Springer International Publishing.
- Comerton-Forde, C., Ip, E., Ribar, D. C., Ross, J., Salamanca, N., & Tsiaplias, S. T. (2018). Using survey and banking data to measure financial wellbeing (Commonwealth Bank of Australia and Melbourne Institute Financial Wellbeing Scales Technical Report No.1). Melbourne Institute Applied Economic and Social Research.
- Commonwealth of Australia. (2015). *Interest rates and informed choice in the Australian credit card market*. Economic References Committee—Canberra Australia.
http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Credit_Card_Interest/Report
- Commonwealth of Australia. (2016). *Credit cards: Improving consumer outcomes and enhancing competition* (May 2016). Commonwealth of Australia.
- Consumer Financial Protection Bureau. (2015). *The consumer credit card market*.
<https://www.consumerfinance.gov/ask-cfpb/category-credit-cards/>
- Cooke, G. (2021). Australian credit card and debit card statistics. Retrieved from
<https://www.finder.com.au/credit-cards/credit-card-statistics>
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–130.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Sage.
- Crowley, A. E., Spanenberg, E. R., & Hughes, K. R. (1991). Measuring the hedonic and utilitarian dimensions of attitudes toward product categories. *Marketing Letters*, 3(3), 239–249.
- Cummins, M. M., Haskell, J. H., & Jenkins, S. J. (2005). *Financial attitudes and spending habits of university freshmen* [Paper Presentation]. Allied Academies International Conference. Academy for Economics and Economic Education, 8(1), 3-6.
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, 1-11.
- De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2009). Relationship quality and the theory of planned behavior models of behavioral intentions and purchase behaviors. *Journal of Business Research*, 62, 82–92.
- De Leeuw, E. (2008). Self-administered questionnaires and standardized interviews. In P. Alasuutari, L. Bickman & J. Brannen (Eds.), *The SAGE Handbook of social research methods* (pp. 313–327). Sage.
- De Silva, L., & Patabendige, S. (2021). Factors impact on consumer credit card usage behaviour: Evidence from Sri Lanka. *Sri Lanka Journal of Marketing*, 7(2), 146-168.

- de Vaus, D. (2014). *Social research today: Surveys in social research* (6th ed.). Routledge/Taylor & Francis Group.
- Department of Education and Training. (2018). *First half year student summary tables*. <https://docs.education.gov.au/node/51961>
- Department of Education and Training. (2020). *2019 Student summary tables*. <https://www.dese.gov.au/higher-education-statistics/resources/2019-student-summary-tables>
- Department of Justice–Consumer Affairs Victoria. (2008). *The impact of credit card advertising on consumer decision-making and behaviour*. Melbourne, Victoria.
- Deshpande, R., & Krishnan, S. (1980). Consumer impulse purchase and credit card usage: An empirical examination using the log linear model. *Advances in Consumer Research*, 7, 792–795.
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: duality, dimensionality and measurement. *Journal of Marketing Management*, 32(5-6), 399-426.
- Dholakia, U. M. (2001). A motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, 35(11/12), 1340–1362.
- Dinkova, M., Kalwij, A., & Alessie, R. (2021). Know more, spend more? The impact of financial literacy on household consumption. *De Economist*, 169(4), 1–30.
- Dogra, P., & Sharma, R. R. (2019). Modelling the effects of financial services advertising on financial product purchase: An empirical validation. *Vision*, 23(4), 418–431.
- Doney, P. M. (2004). Shopping with friends and teens’ susceptibility to peer influence. *Journal of Retailing*, 80, 101–116.
- Doyle, M.-A., Fisher, C., Tellez, E., & Yadav, A. (2017). How Australians pay: New survey evidence. *RBA Bulletin, March Quarter*, 59–65.
- Duncan, A. (2001). *Student credit cards: A guide*. <https://www.canstar.com.au/credit-cards/student-credit-cards>
- Dwyer, P. (2020). Product governance. *Governance Directions*, 72(5), 240–244.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Eren, S. S., Eroğlu, F., & Hacıoğlu, G. (2012). Compulsive buying tendencies through materialistic and hedonic values among college students in Turkey. *Procedia Social & Behavioral Sciences*, 58, 1370–1377.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical & Applied Statistics*, 5(1), 1–4.

- Faircloth, J. B., Capella, L. M., & Alford, B. L. (2001). The effect of brand attitude and brand image on brand equity. *Journal of Marketing Theory & Practice*, 9(3), 61–75.
- Farokhi, F., & Mahmoudi-Hamidabad, A. (2012). Rethinking convenience sampling: Defining quality criteria. *Theory & Practice in Language Studies*, 2(4), 784–792.
- Farrell, L., Fry, T. R., & Risse, L. (2016). The significance of financial self-efficacy in explaining women’s personal finance behaviour. *Journal of Economic Psychology*, 54, 85–99.
- Feinberg, R. F. (1986). Credit cards as spending facilitating stimuli: A conditioning interpretation. *Journal of Consumer Research*, 13(3), 348–356.
- Financial Conduct Authority. (2014) *Credit card market study: Terms of reference* (Vol. 14/6.1, November, pp. 1–32).
- Fiorio, L., Welander, T., Mau, R., & Stcitz, J. (2014). New frontiers in credit card segmentation: Tapping unmet customer needs. *McKinsey on Payments, May*, 11–18.
- Firli, A. (2017). *Factors that influence financial literacy: A conceptual framework* [Paper presentation]. IOP Conference Series: Materials Science and Engineering. <https://iopscience.iop.org/article/10.1088/1757-899X/180/1/012254/pdf>
- Fitzmaurice, J., & Comegys, C. (2006). Materialism and social consumption. *Journal of Marketing Theory & Practice*, 14(4), 287–299.
- Fornell, C., & Larcker, D. F. (1981). *Structural equation models with unobservable variables and measurement error: Algebra and statistics*. Sage.
- Fricker, R. D., Jr., & Schonlau, M. (2012). Advantages and disadvantages of internet research surveys: Evidence from the literature. *Field Methods*, 14, 347–367.
- Fruchter, B. (1954). *Introduction to factor analysis*. Van Nostrand.
- Fulford, S., & Schuh, S. (2020). *Credit cards, credit utilization, and consumption* [Research paper]. West Virginia University. https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1038&context=con_working-papers
- Fuller, C. M., Simmering, M. J., Atinc, G., & Atinc, Y., & Babin, B. K. (2015). Common method variance detection in business research. *Journal of Business Research*, 69(8), 3192–3198.
- Gabriel, D. (2013). *Inductive and deductive approaches to research*. <https://deborahgabriel.com/2013/03/17/inductive-and-deductive-approaches-to-research>
- Gambetti, R. C., Graffigna, G., & Biraghi, S. (2012). The grounded theory approach to consumer-brand engagement. *International Journal of Marketing Research*, 54(5), 659-687.

- Garg, G., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics*, 45(1), 173-186.
- Geisen, E., & Murphy, J. (2020). A compendium of web and mobile survey pretesting methods. In P. C. Beatty, D. Collins, L. Kaye, J. Padilla, G. B. Willis & A. Wilmot (Eds.), *Advances in questionnaire design, development, evaluation and testing* (pp. 287–314). Wiley.
- Gliem, J. A., & Gliem, R. R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales* [Paper presentation]. 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education.
<https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20&%20Gliem.pdf?s>.
- Global Economy. (2021). *Percent people with credit cards – Country rankings*.
https://www.theglobaleconomy.com/rankings/people_with_credit_cards
- Gnambs, T., & Kaspar, K. (2015). Disclosure of sensitive behaviors across self-administered survey modes: A meta-analysis. *Behavior Research Methods*, 47(4), 1237–1259.
- Goldsmith, R. E., Flynn, L. R., & Clark, R. A. (2011). Materialism and brand engagement as shopping motivations. *Journal of Retailing & Consumer Services*, 18, 278–284.
- Greenacre, L., & Akbar, S. (2019). The impact of payment method on shopping behaviour among low income consumers. *Journal of Retailing & Consumer Services*, 47, 87–93.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 105–117). Sage.
- Guba, E. G., & Lincoln, Y. S. (1998). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 195–220). Sage.
- Guido, G. (2006). Shopping motives, big five factors, and the hedonic/utilitarian shopping value: An integration and factorial study. *Innovative Marketing*, 2(2), 57–67.
- Haghshenas, L., Abedi, A., Ghorbani, E., Kamali, A., & Mohammadnaser, H. (2013). Review consumer behavior and factors affecting on purchasing decisions. *Singaporean Journal of Business Economics & Management Studies*, 1(10), 17–24.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate data analysis* (7th ed.) Pearson Prentice Hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory & Practice*, 19(2), 139–152.

- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(4), 106-121.
- Hancock, A. M., Jorgensen, B. L., & Swanson, M. S. (2013). College students and credit card use: The role of parents, work experience, financial knowledge, and credit card attitudes. *Journal of Family & Economic Issues*, 34, 369–381.
- Harmeling, C. M., Moffett, J. W., Arnold, M. J., & Carlson, B. D. (2017). Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science*, 45(3), 312-335.
- Harris, P., Riley, F. D. O., & Hand, C. (2018) Understanding multichannel shopper journey configuration: An application of goal theory. *Journal of Retailing and Consumer Services*, 44, 108-117.
- Harvanko, A., Lust, K., Odlaug, B. L., Schreiber, L. R. N., Derbyshire, K., Christenson, G., & Grant, J. E. (2013). Prevalence and characteristics of compulsive buying in college students. *Psychiatry Research*, 210(3), 1079-1085.
- Hassan, Z. E., & Ellis, M. (2016). *Product suitability obligation and intervention powers to be fast-tracked: Government responds to calls for Royal Commission into the banks*. <https://www.regulationtomorrow.com/au/product-suitability-obligation-and-intervention-powers-to-be-fast-tracked-government-responds-to-calls-for-royal-commission-into-the-banks/>
- Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences in spending habits and credit card use of college students. *The Journal of Consumer Affairs*, 34(1), 113-133.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Henson, R. K., Capraro, R. M., & Capraro, M. M. (2001). *Reporting practice and use of exploratory factor analysis in educational research journals* [Paper presentation]. Annual meeting of the Mid-South Educational Research Association, Little Rock, AR, November 14-16, 2001.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 89(7), 7.
- Hirschman, E. C. (1979). Differences in consumer purchase behavior by credit card payment system. *Journal of Consumer Research*, 6(1), 58–66.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(Summer 1982), 92-101.

- Ho, H., Tien, K.-M. T., Wu, A., & Singh, S. (2021). A sequence analysis approach to segmenting credit card customers. *Journal of Retailing & Consumer Services*, 59, 102391.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modelling technique. *Journal of Quantitative Methods*, 3(1), 76.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings and fun. *Journal of Consumer Research*, 9(2), 132–140.
- Holmes, T. E. (2021). *Student credit, debit and mobile payment statistics*.
<https://www.creditcards.com/statistics/student-credit-debit-prepaid-statistics>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). *Evaluating model fit: A synthesis of the structural equation modelling literature* [Paper presentation]. Seventh European Conference on Research Methodology for Business and Management Studies, London, United Kingdom, June 19-20, 2008.
- Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behavior*. Wiley.
- Howarth, J., D'Alessandro, S., Johnson, L., & White, L. (2021). Massive open online courses and consumer goals. *International Journal of Consumer Studies*, 46(3), 994-1015.
- Hudson, L., & Ozanne, J., mm (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14, 508–521.
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296-316.
- Illion. (2020). *Credit card nation: But are we losing interest?*.
https://www.illion.com.au/wp-content/uploads/2020/05/Credit_card_Nation.pdf
- Isomidinova, G., Singh, J. S. K., & Singh, K. (2017). Determinants of financial literacy: A quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business & Management*, 2(1), 61–75.
- Israel, G. D. (1992). *Determining sample size (Fact sheet PEOD-6)*. Gainesville, FL: University of Florida.
- Jarvis, C. B., Mackenzie, S. B., Podsakoff, P. M. (2003). A critical review of construct indicators and measurement mode misspecification in marketing and consumer research. *Journal of Consumer Research*, 30(Sept), 199-218.
- Jisana, T. (2014). Consumer behaviour models: An overview. *Sai Om Journal of Commerce & Management*, 1(5), 34–43.
- Jones, M. (2010). Customer engagement and loyalty in financial services. *Corporate Finance Review*, 15(3), 25.
- Jones, M. A., Reynolds, K. E., & Arnold, M. J. (2006). Hedonic and utilitarian shopping value: Investigating differential effects on retail outcomes. *Journal of Business Research*, 59, 974–981.

- Jones, R., Nielsen, J., & Trayler, R. (2002). The bank selection process and market definition in Australia. *Journal of Financial Regulation & Compliance*, 10(1), 22-30.
- Jordan, P. J., & Troth, A. C. (2019). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management*, 45(1), 3–14.
- Kalla, S. M., & Arora, A. P. (2011). Impulse buying: A literature review. *Global Business Review*, 12(1), 145–157.
- Kara, A., Kaynak, E., & Kucukemiroglu, O. (1996). An empirical investigation of US credit card users: Card choice and usage behavior. *International Business Review*, 5(2), 209–230.
- Khan, M. N., Rothwell, D. W., Cherney, K., & Sussman, T. (2017). Understanding the financial knowledge gap: A new dimension of inequality in later life. *Journal of Gerontological Social Work*, 60(6-7), 487-503.
- Khare, A. (2013). Credit card use and compulsive buying behavior. *Journal of Global Marketing*, 26(1), 28–40.
- Khare, A., Khare, A., & Singh, S. (2012). Factors affecting credit card use in India. *Asia Pacific Journal of Marketing & Logistics*, 24(2), 236–256.
- Kidwell, B., & Turrisi, R. (2000). A cognitive analysis of credit card acquisition and college student financial development. *Journal of College Student Development*, 41(6), 589–598.
- Kini, A. N., & Basri, S. (2022). A framework for customer engagement behaviour in the financial services industry: A critical review of evidence. *Indian Journal of Finance*, 16(6), 27-43
- Kock, N. (2016). Hypothesis testing with confidence intervals and P values in PLS-SEM. *International Journal of e-Collaboration (IJeC)*, 12(3), 1–6.
- Kosiba, J. P. B., Boateng, H., Amartey, A. F. O., Boakye, R. O., & Hinson, R. (2018). Examining customer engagement and brand loyalty in retail banking: The trustworthiness influence. *International Journal of Retail & Distribution Management*, 46(8). 764-779.
- Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The Qualitative Report*, 10(4), 758–770.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational & Psychological Measurement*, 30(3), 607–610.
- Kruglanski, A. W., Shah, J., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. S. (2002). A theory of goal-systems. *Advances in Experimental Social Psychology*, 34, 331-376.
- Kuhn, T. (1963). The structure of scientific revolutions. *American Journal of Physics*, 31(7), 554–555.

- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tilmanns, S. (2010). Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of Service Research, 13*(3), 297-310.
- Kumar, V., Rajan, B., Gupta, S., & Pozza, I. D. (2019). Customer engagement in service. *Journal of the Academy of Marketing Science, 47*, 138-160.
- Lee, L., & Ariely, D. (2006). Shopping goals, goal concreteness, and conditional promotions. *Journal of Consumer Research, 33*, 60-70.
- Lewis, B. R., & Soureli, M. (2006). The antecedents of consumer loyalty in retail banking. *Journal of Consumer Behaviour: An International Research Review, 5*(1), 15–31.
- Lim, W. M., Ng, W. K., Chin, J. H., & Boo, A. W.-X. (2014). Understanding young consumer perceptions on credit card usage: Implications for responsible consumption. *Contemporary Management Research, 10*(4), 287–302.
- Liu, L., & Zhang, H. (2021). Financial literacy, self-efficacy and risky credit behavior among college students: Evidence from online consumer credit. *Journal of Behavioral and Experimental Finance, 32*, 1-9.
- Lofman, B. (1991). Elements of experiential consumption: An exploratory analysis. *Advances in Consumer Research, 18*, 729–735.
- Lord, K. R., Lee, M.-S., & Choong, P. (2001). Differences in normative and informational social influence. *Advances in Consumer Research, 28*, 280–285.
- Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling & Planning, 22*(2), 54.
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. CeRP Working Paper No. 107, 1-27.
- Maccarrone-Eaglen, A., & Schofield, P. (2020). Compulsive buying among young adults: A behavioural segmentation. *Young Consumers, 21*(1), 57-76.
- MacKenzie, S. B., & Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural remedies. *Journal of Retailing, 88*(4), 542–555.
- MacLean, S., & Gray, K. (1998). Structural equation modelling in market research. *Journal of the Australian Market Research Society, 6*(1), 17–32.
- Makgosa, R., & Mohube, K. (2007). Peer influence on young adults products purchase decisions. *African Journal of Business Management, 1*(3), 64–71.
- Malelak, M. I., & Anastasia, N. (2020). Shopping motives, financial literacy, and credit card utilization among college students. *Advances in Economics, Business & Management Research, 135*, 209–213.
- Malhotra, N., Hall, J., Shaw, M., & Oppenheim, P. (2006). *Marketing research: An applied orientation*. Pearson Education Australia.
- Malhotra, N. K., Birks, D. F., & Wills, P. (2012). *Marketing research: An applied approach* (4th ed.). Pearson Education.

- Malter, M. S., Holbrook, M. B., Kahn, B. E., Parker, J. R., & Lehmann, D. R. (2020). The past, present, and future of consumer research. *Marketing Letters*, 31(2), 137–149.
- Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, 16, 105–116.
- Mansfield, P. M., Pinto, M. B., & Parente, D. H. (2003). Self control and credit card use among college students. *Psychological Reports*, 92, 1067–1078.
- Mathur, A., & Moschis, G. P. (1994). Use of credit cards by older Americans. *Journal of Services Marketing*, 8(1), 27–36.
- Mattila, A. S. (1999). The role of culture and purchase motivation in service encounter evaluations. *Journal of Services Marketing*, 13(4/5), 376–389.
- Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. *American Economic Journal: Applied Economics*, 2(1), 193–210.
- Monferrer, D., Moliner, M. A., & Estrada, M. (2019). Increasing customer loyalty through customer engagement in the retail banking industry. *Spanish Journal of Marketing-ESIC*, 23(3), 461-484.
- Morrison, D. J. (1979). Purchase intentions and purchase behavior. *Journal of Marketing*, 43(2), 65–74.
- Mottola, G. R. (2013). In our best interest: Women, financial literacy, and credit card behavior. *Numeracy*, 6(2), 1–15.
- Muller, A., Reinecker, H., Jacobi, C., Reisch, L., & De Zwaan, M. (2005). Pathological buying – a literature review. *Psychiatrische Praxis*, 32(1), 3-12.
- Nemoto, T., & Beglar, D. (2013). Developing Likert-scale questionnaires. In N. Sondra & A. Krause (Eds.), *JALT Conference proceedings*. Tokyo: JALT.
- Norvilitis, J. M. (2002). Credit card debt on college campuses: Causes, consequences and solutions. *College Student Journal*, 36(3), 356–364.
- Norvilitis, J. M., Szablicki, P. B., & Wilson, S. D. (2003). Factors influencing levels of credit card debt in college students. *Journal of Applied Social Psychology*, 33(5), 935–947.
- Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V. Young, P., & Kamas, M. M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students. *Journal of Applied Social Psychology*, 36(6), 1395-1413.
- Organisation for Economic Co-operation and Development. (2018). *OECD/INFE toolkit for measuring financial literacy and financial inclusion*.
- Oleson, M. (2004). Exploring the relationship between money attitudes and Maslow's hierarchy of needs. *International Journal of Consumer Studies*, 28(1), 83–92.
- Ong, Z., Lau, J., & Zainudin, N. (2021). Money attitude, materialism and compulsive buying among Malaysian young adults. *Management Science Letters*, 11(1), 281–290.

- Orth, U. R., & Kahle, L. R. (2008). Intrapersonal variation in consumer susceptibility to normative influence: Toward a better understanding of brand choice decisions. *The Journal of Social Psychology, 148*(4), 423–448.
- Overby, J. W., & Lee, E.-J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *Journal of Business Research, 59*, 1160–1166.
- Page, C., & Luding, Y. (2003). Bank managers' direct marketing dilemmas—Customers' attitudes and purchase intentions. *International Journal of Bank Marketing, 21*(3), 147–163.
- Palan, K. M., Morrow, P. C., Trapp, A., & Blackburn, V. (2011). Compulsive buying behavior in college students: The mediating role of credit card misuse. *Journal of Marketing Theory & Practice, 19*(1), 81–96.
- Phau, I., & Woo, C. (2008). Understanding compulsive buying tendencies among young Australians: The roles of money attitude and credit card use. *Marketing Intelligence & Planning, 26*(5), 441–458.
- Picot-Coupey, K., Krey, N., Hure, E., & Ackermann, C.-L. (2021). Still work and/or fun? Corroboration of the hedonic and utilitarian shopping value scale. *Journal of Business Research, 126*, 578–590.
- Pinto, M. B., Mansfield, P. M., & Parente, D. H. (2004). Relationship of credit attitude and debt to self-esteem and locus of control in college age students. *Psychological Reports, 94*, 1405–1418.
- Pinto, M. B., Parente, D. H., & Palmer, T. S. (2000). Materialism and credit card use by college students. *Psychological Reports, 86*(2), 643–652.
- Pirog, S. F., & Roberts, J. A. (2007). Personality & credit card misuse among college students: The mediating role of impulsiveness. *Journal of Marketing Theory & Practice, 15*(1), 65–77.
- Plummer, J. T. (1971). Lifestyle patterns and commercial bank credit card usage. *Journal of Marketing, 35*(2), 35–41.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods, 19*(2), 159–203.
- Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review, 39*(3), 356–376.
- Powell, M., & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology, 18*, 605–628.

- Pradhan, D., Israel, D., & Jena, A. K. (2018). Materialism and compulsive buying behaviour: The role of consumer credit card use and impulse buying. *Asia Pacific Journal of Marketing & Logistics*, 30(5), 1239-1258.
- Prelec, D., & Simester, D. (2001). Always leave home without it: A further investigation of the credit-card effect on willingness to pay. *Marketing Letters*, 12(1), 5–12.
- Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them. *American Journal of Health Education*, 35(2), 66.
- Pulina, M. (2011). Consumer behaviour in the credit card market: A banking case study *International Journal of Consumer Studies*, 35, 86–94.
- Qazzafi, S. (2020). Factor affecting consumer buying behavior: A conceptual study. *International Journal for Scientific Research & Development*, 8(2), 1205–1208.
- Ramlan, H., Shalini, P., & Ramesh, P. (2020). The relationship between the consumer spending behaviour with credit card incentives. *Global Business and Management Research: An International Journal*, 12(4), 425-430.
- Ramya, N., & Mohamed Ali, S. A. (2016). Factors affecting consumer buying behavior. *International Journal of Applied Research*, 2(10), 76–80.
- Rasool, A., Shah, F. A., & Tanveer, M. (2021). Relational dynamics between customer engagement, brand experience and customer loyalty: An empirical investigation. *Journal of Internet Commerce*, 20(3), 273-292.
- Reserve Bank of Australia. (2015). *Submission to the senate inquiry into matters relating to credit card interest rates*. (Submission 20). Reserve Bank of Australia. <http://www.rba.gov.au/publications/submissions/financial-sector/pdf/inquiry-matters-relating-to-credit-card-interest-rates-2015-08.pdf>.
- Reserve Bank of Australia. (2020). *Payments System Board annual report*. <https://www.rba.gov.au/publications/annual-reports/psb/2020/pdf/2020-psb-annual-report.pdf>
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303–316. doi:10.1086/209304
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: Concepts, findings and guidelines. *Journal of Marketing Research*, 45 (June), 261–279.
- Ritter, J. R. (2009). Behavioral finance. *Pacific-Basin Finance Journal*, 11, 429–437.
- Robb, C. A. (2011). Financial knowledge and credit card behavior of college students. *Journal of Family and Economic Issues*, 32(4). 690-698.
- Robb, C. A., & Sharpe, D. L. (2009). Effect of personal financial knowledge on college students' credit card behavior. *Journal of Financial Counseling & Planning*, 20(1), 25–43.

- Roberts, J. A., & Jones, E. (2001). Money attitudes, credit card use, and compulsive buying among American college students. *Journal of Consumer Affairs*, 35(2), 213–240.
- Romdonny, J., & Rosmadi, M. L. N. (2019). Factors affecting customer loyalty in products. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 2(1), 337–343.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305–313.
- Rosado-Pinto, F., & Loureiro, S. M. C. (2020). The growing complexity of customer engagement: A systematic review. *EuroMed Journal of Business*, 15(2), 167–203.
- Rozikin, A., & Sholekhah, I. (2020). Islamic financial literacy, promotion and brand image towards saving intention in sharia bank. *Iqtishadia*, 13(1), 95–106.
- Rundle-Thiele, S., & Mackay, M. M. (2001). Assessing the performance of brand loyalty measures. *Journal of Services Marketing*, 15(7), 529–546.
- Safakli, O. V. (2007). Motivating factors of credit card usage and ownership: Evidence from Northern Cyprus. *Investment Management & Financial Innovations*, 4(4), 133–143.
- Sakar, A. (2011). Impact of utilitarian and hedonic shopping values on individual's perceived benefits and risks in online shopping. *International Management Review*, 7(1), 58–68
- Sarstedt, M., Hair Jr, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal (AMJ)*, 27(3), 197–211.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7th ed.). Pearson Education.
- Scarpi, D. (2021). A construal-level approach to hedonic and utilitarian shopping orientation. *Marketing Letters*, 32, 261–271.
- Schiffman, L., Bednall, D., O'Cass, A., Paladino, A., Ward, S., & Kanuk, L. (2008). *Consumer behaviour* (4th ed.). Pearson Education Australia.
- Sedgwick, P. (2014a). Cross sectional studies: Advantages and disadvantages. *BMJ*, 348, 2276. doi: 10.1136/bmj.g2276
- Sedgwick, P. (2014b). Non-response bias versus response bias. *BMJ*, 348, 2573. doi: 10.1136/bmj.g2573
- Šeinauskienė, B., Maščinskienė, J., & Jucaitytė, I. (2015). The relationship of happiness, impulse buying and brand loyalty. *Procedia-Social & Behavioral Sciences*, 213, 687–693.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill-building approach* (6th ed.). John Wiley & Sons.

- Shakinovsky, A., & Hassan, B. (2021). *The future of credit cards: Adapting and driving success during challenging times*. <https://dvh1deh6tagwk.cloudfront.net/funder-au/wp-uploads/2021/03/The-future-of-credit-cards-1.pdf>
- Sheeraz, M., Iqbal, N., & Ahmed, N. (2012). Impact of brand credibility and consumer values on consumer purchase intentions in Pakistan. *International Journal of Academic Research in Business & Social Sciences*, 2(8), 1.
- Shepard, M. (2020). *Cash vs credit card spending statistics (2021)*. <https://fundera.com/resources/cash-vs-credit-card-spending-statistics>
- Sheth, J. N. (1985). *History of consumer behavior: A marketing perspective* [Paper presentation] SV—Historical Perspective in Consumer Research: National and International Perspectives eds., Singapore. <https://www.acrwebsite.org/volumes/12106/volumes/sv05/SV-05>
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The role of parents, work and education. *Journal of Youth and Adolescence*, 39(12), 1457-1470.
- Sienkiewicz, S. (2001). *Credit cards and payment efficiency*. Federal Reserve Bank of Philadelphia—Payment Cards Center.
- Simamora, B. (2021). Toward a general theory of consumer motivation: A critical review. *Technium Social Sciences Journal*, 18, 418.
- Singh, S. (2016). Brand engagement and materialism: Attitude towards shopping. *IUP Journal of Brand Management*, 13(3), 7.
- Singh, S., Rylander, D. H., & Mims, T. C. (2018). Understanding credit card payment behavior among college students. *Journal of Financial Services Marketing*, 23(1), 38–49.
- Slocum Jr., J. W., & Mathews, H. L. (1970). Social class and income as indicators of consumer credit behavior. *Journal of Marketing*, 34(2), 69–74.
- Smith, J., & Noble, H. (2014). Bias in research. *Evidence-based Nursing*, 17(4), 100–101.
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53–66.
- Spears, R. (2021). Social influence and group identity. *Annual Review of Psychology*, 72, 367–390.
- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, XLVI(February), 92–104.
- Srikant, M. (2013). Materialism in consumer behavior and marketing: A review. *Management and Marketing Challenges for the Knowledge Society*, 8(2), 329-352.

- Stankevich, A. (2017). Explaining the consumer decision-making process: Critical literature review. *Journal of International Business Research and Marketing*, 2(6), 7-14.
- Stavins, J. (2018). *Credit card debt and consumer payment choice: What can we learn from credit bureau data?* [Working Papers]. Federal Reserve Bank of Boston. <https://hdl.handle.net/10419/202923>
- Stone, R. N., & Grønhaug, K. (1993). Perceived risk: Further considerations for the marketing discipline. *European Journal of Marketing*, 27(3), 39–50.
- Sung, Y., Choi, S. M., Ahn, H., & Song, Y. A. (2015). Dimensions of luxury brand personality: Scale development and validation. *Psychology & Marketing*, 32(1), 121-132.
- Surekha, M., Umesh, U., & Dhinakaran, D. P. (2022). A study on utilization and convenient of credit card. *Journal of Positive School Psychology*, 6(4), 5635-5645.
- Tahir, M. S., Richards, D. W., & Ahmed, A. D. (2020). Financial literacy, attitudes, and financial satisfaction: An assessment of credit card debt-taking behavior of Australians. *Financial Services Review*, 28(4), 273-301.
- Tarka, P., & Harnish, R. J. (2020). Toward the extension of antecedents of compulsive buying: The influence of personal values theory. *Pschyological Reports* 0(0), 1-45.
- Tauber, E. M. (1972). Why do people shop? *Journal of Marketing*, 36(4), 46–49.
- Tayi, G. K., & Ballou, D. P. (1998). Examining data quality. *Communications of the ACM*, 41(2), 54–57.
- Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology*, 14(2), 258–316.
- Trading Economics. (2021). *Australian consumer confidence*. <https://tradingeconomics.com/australia/consumer-confidence>
- Triwidisari, A., Nurkhin, A., & Muhsin, M. (2017). The relationships between Instagram social media usage, hedonic shopping motives and financial literacy on impulse buying. *Dinamika Pendidikan*, 12(2), 170–181.
- Universities Australia. (2017). *At a glance: The 2017 Universities Australia student finances survey*. Canberra.
- Valence, G., d'Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. *Journal of Consumer Policy*, 11, 419–433.
- Vieira, V., Santini, F. O., & Araujo, C. F. (2018). A meta-analytic review of hedonic and utilitarian shopping values. *Journal of Consumer Marketing*, 35(4), 426–437.

- Visa International Service Association. (2016). *How consumers evaluate credit cards at their primary bank*. <https://usa.visa.com/partner-with-us/visa-performance-solutions/how-consumers-evaluate-credit-cards.html>
- Vivek, S. D., Beatty, S. E., Dalela, V., & Morgan, R. M. (2014). A generalized multidimensional scale for measuring customer engagement. *Journal of Marketing Theory & Practice*, 22(4), 401–420.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: An analysis, causes for concern and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119-134.
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310–320.
- Wahyuni, D. (2012). The research maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*, 10(1), 69–80.
- Wang, X., Yu, C., & Wei, Y. (2012). Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of Interactive Marketing*, 26(4), 198–208.
- Warshaw, P. W. (1980). Predicting purchase and other behaviors from general and contextually specific intentions. *Journal of Marketing Research*, 17(1), 26–33.
- Warwick, J., & Mansfield, P. (2000). Credit card consumers: College students' knowledge and attitude. *Journal of Consumer Marketing*, 17(7), 617–626.
- Weijters, B., Cabooter, E., & Schillewaert, N. (2010). The effect of rating scale format on response styles: The number of response categories and response category labels. *International Journal of Research in Marketing*, 27(3), 236–247.
- Westpac Banking Corporation. (2021). *Consumer sentiment—May 2021* [Press release]. <https://www.westpac.com.au/about-westpac/media/reports/australian-economic-reports/>
- Willits, F. K., Theodori, G. L., & Luloff, A. E. (2016). Another look at Likert scales. *Journal of Rural Social Sciences*, 31(3), 126–139.
- Wilson, V. (2014). Research methods: Sampling. *Evidence Based Library & Information Practice*, 9(2), 45–47.
- Wolfenbarger, M., & Gilly, M. (2000). Consumer motivations for online shopping. *AMCIS 2000 proceedings*, 1362-1366.
- Wong, A., & Carducci, B. J. (1991). Sensation seeking and financial risk taking in everyday money matters *Journal of Business & Psychology*, 5(4), 525–530.
- Woods, W. A. (1960). Psychological dimensions of consumer decision. *Journal of Marketing*, 24(3), 15–19.
- Worthington, A. C. (2006). Predicting financial literacy in Australia. *Financial Services Review*, 15(1), 59–76.

- Wright, K. B. (2017). Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-mediated Communication, 10*(3), 1034. doi:10.1111/j.1083-6101.2005.tb00259.x
- Wu, C.-T., & Wang, T.-W. (2020). Impact of experiential motives, perceived image, and service quality on perceived value and behavioral intentions in an outlet setting. *International Journal of Advanced Engineering and Management Research, 5*(05), 1–20.
- Xiao, J. J. (2008). Applying behavior theories to financial behavior. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 69–81). Springer.
- Yen, H. H., & Nhung, N. T. H. (2018). Brand image on intention of banking services using: The case of Vietnam banks. *International Journal of Sustainability Management & Information Technologies, 3*(6), 63.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology, 9*(2), 79–94.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research, 52*, 1–14.
- Yoro, M. (2016). *The pros and cons of online research panels*.
<https://www.d8aspring.com/blog/the-pros-and-cons-of-online-research-panels>
- Youn, S., & Faber, R. J. (2000). Impulse buying: Its relation to personality traits and cues. *Advances in Consumer Research, 27*, 179–185.

Appendices

Appendix A: Informed Consent and Information Sheet



Dear participant,

Why is the research being conducted?

This survey is part of an academic study that seeks to understand motivations behind credit card product acquisition and use within the tertiary student market.

Who is conducting the research?

The research is conducted as part of a Doctor of Business Administration undertaken via Charles Sturt University by:

- **Rebecca Harris**
Charles Sturt University – Research Student
Doctor of Business Administration
Newcastle Permanent Building Society Limited - Product Manager
Phone: (+612) 49274816
Email: rebecca.harris@npbs.com.au
- **Dr. Abhishek Dwivedi**
Charles Sturt University – HDR Supervisor
Email: adwivedi@csu.edu.au
- **Prof. Steven D'Alessandro**
University of Tasmania– HDR Supervisor
Email: stevedalessandro@utas.edu.au

What you are asked to do?

You will be asked questions regarding shopping motivations and credit card behaviours. There are no right or wrong answers. We just want your opinion. You will be asked questions regarding your employment status, current household income and financial well-being. The survey should take around 15 minutes to complete.

You will be asked questions relating to hedonic and utilitarian shopping motivations. Hedonic shopping motives relates to shopping for pleasure, whereas utilitarian shopping motives refers to shopping for a specific purpose (e.g. food or basic clothing).

Risks to you

There are no risks to you.

If financial problems or financial pressure are causing you stress, financial counselling services can help resolve your issues. Call the National Debt Helpline (1800 007 007) for free, confidential and independent services to help get your financial situation under control.

The expected benefits of the research

The research findings will enable a richer understanding of the impact of shopping motivations on credit card acquisition intentions. The findings aim to increase consumer awareness when making consumer credit financial decisions, and provide understanding of consumer intentions and needs. With this understanding individuals will be able to make more informed credit decisions, and have clearer understanding of product offerings best suited to their needs resulting in increased product satisfaction.

The research findings may also provide benefits to financial service providers, enabling stronger alignment of credit card product offerings with the needs and demands of the consumer.

There is no intention for data collected and outcomes of the study to be utilised for by the researcher and/or their employer for commercial purposes.

Your confidentiality

No personal information will be collected that will identify who you are. We do not need to know this information. The results will only refer to the group as a whole and will make no reference to individuals.

If you wish to obtain a copy of the findings, the research report will be accessible in accordance with normal conditions established by the Executive Director, Library Services, Charles Sturt University. Alternatively, you may contact the primary researcher.

Your participation

Your participation is entirely voluntary. If you decide to participate, you do not need to answer any question that you uncomfortable about. You can withdraw at any time simply by closing your browser.

You can choose to edit any of your responses prior to submitting the survey by navigating back through the questions.

Contact

If you have any questions regarding this research, please contact Rebecca Harris at rebecca.harris@npbs.com.au.

Charles Sturt University's Human Research Ethics Committee has approved this project. If you have any complaints or reservations about the ethical conduct of this project, you may contact the Committee on (02) 6933 4213 or ethics@csu.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

Expressing consent

If you agree to complete this web-based survey, you will be deemed to have consented to participation in this research.

By clicking the button below, you acknowledge that you are over 18 years of age and you are willing to participate in this research.

You may choose to terminate your participation in the study at any time and for any reason. Incomplete and/or terminated surveys will not be included within data analysis for this research.

You consent to having the information you provide used anonymously in research reports specific to this project.

- I consent, begin the survey
- I do not consent, I do not wish to participate



Appendix B: Online Survey Questions

The questions contained in the online survey administered by Qualtrics as part of this study are as follows:

Before beginning, please answer a few questions about yourself.

Are you between 18 years and 25 years of age?

- Yes
- No

Skip to: End of survey if = No

Are you currently enrolled within an undergraduate program at an Australian University?

- Yes
- No

Skip to: End of survey if = No

Please select the university you are currently enrolled at:

Skip to: End of survey if = Australian Catholic University OR Carnegie Mellon University Australia OR Central Queensland University OR Charles Sturt University OR Federation University Australia OR James Cook University OR Southern Cross University OR Torrens University OR University of Adelaide OR University of Canberra OR University of New England OR University of Notre Dame Australia OR University of South Australia OR University of Southern Queensland OR University of Sunshine Coast OR University of Tasmania

Please select your field of study:

Are you currently employed by a bank or other financial services provider?

- Yes
- No

Skip to: End of survey if = Yes

The next few questions relate to your financial wellbeing.

If financial problems or financial pressure are causing you stress, financial counselling services can help resolve your issues. Call the National Debt Hotline (1800 007 007) for free, confidential and independent services to help get your financial situation under control.

In the last 12 months, how difficult was it for you to meet your necessary cost of living expenses (housing, electricity, water, health care, food, clothing or transport)?

- Very difficult
- Difficult
- Neither difficult nor easy
- Easy
- Very easy

How well do the following statements describe you or your situation?

	Not at all	Very little	Somewhat	Very well	Completely
I can enjoy life because of the way I am managing my money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could handle a major unexpected expense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am securing my financial future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do the following statement apply to you?

	Never	Rarely	Sometimes	Often	Always
My finances control my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have money left over at the end of the month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Giving a gift for a wedding, birthday or other occasion would put strain on my finances for the month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>When it comes to how you think and feel about your finances, please indicate the extent to which you agree or disagree with the following statements:</p>					
	Disagree strongly	Disagree	Neither agree not disagree	Agee	Agree strongly
I feel on top of my day-to-day finances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with my current levels of spending relative to the funds I have coming in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am on track to have enough money to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

provide for
my financial
needs in the
future

Skip to: End of survey if participants financial wellbeing score is <49

According to research, there are two types of shopping motivations. Shopping for enjoyment versus shopping for purpose. The following questions ask you about how you see yourself as a shopper.

Using the scale below, please nominate how much you agree or disagree with the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
To me, shopping is an adventure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find shopping stimulating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping is a thrill to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping makes me feel like I am in my own universe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For mto part, I go shopping when there are sales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy looking for discounts when I shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I go shopping to take advantage of sales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like shopping for others because when they feel good I feel good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good when I buy things for the special people in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy shopping for my family and friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy shopping around to find the perfect gift for someone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I go shopping to keep up with the trends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I go shopping to keep up with new fashions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I go shopping to see what new products are available	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I go shopping to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

experience
new things

I go
shopping
with my
family and
friends to
socialise

I enjoy
socialising
with others
when I shop

To me,
shopping
with family
or friends is
a social
occasion

Shopping
with others
is a bonding
experience

When I am
down, I go
shopping to
make
myself feel
better

To me,
shopping is
a way to
relieve
stress

I go
shopping
when I want
to treat
myself
something
special

The following questions relate to financial decision making and day-to-day management of finances.

Do you make the day-to-day decisions about your money?

- Yes
- No
- Don't know

Do you do any of the following for yourself or your household? (please select all that apply to either yourself or anyone you live with).

- Make a plan to manage your income and expenses
- Keep a note of your spending
- Keep money for bills separate from day-to-day spending money
- Make a note of upcoming bills to make sure you don't miss them
- Use a banking app or money management toll to keep track of your outgoings
- Arrange automatic payments for regular outgoings
- None of the above apply

On the scale below, please nominate how much you agree or disagree with the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
It is important to control monthly expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to establish financial targets for the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to save money on a monthly basis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way I manage money today will affect my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to have and	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

follow a monthly expense plan

It is important to pay the full value on credit cards

When buying in instalments, it is important to compare different instalment plans

It is important to stay within a budget

It is important to invest regularly to achieve targets in the long term

The next question asks you to nominate how well a statement relating to financial management describes you. When answering these questions, please choose the answer which currently reflects you. There are no right or wrong answers.

Pleas nominate how well the following statements describe you:

Does not describe me

Describes me slightly well

Describes me moderately well

Describes me very well

Describes me extremely well

I always pay my bills on time to avoid extra charges

I worry about the best way to manage money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take notes and control my personal expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I establish financial targets for the long term that influence the management of my expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the way I control my finances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pay my bills without delay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can identify how much I pay when using credit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use credit cards or overdrafts when I do not have money for expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I follow a weekly or monthly plan for expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I save monthly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I save so I can buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

something expensive					
I compare prices when buying something	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I analyse my financial situation before a major purchase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I buy on impulse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is hard to stick to my spending plan when unexpected expenses arise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is challenging to make progress towards my financial goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When unexpected costs arise I usually have to use credit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When faced with a financial challenge I have a hard time figuring out a solution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lack confidence in my ability to manage my finances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I worry about running out of money

○ ○ ○ ○ ○

When selecting financial products/services which of the following statements best describes how you make your choice?

- I consider several options from different financial institutions before deciding
- I consider various options from my current bank only

The next questions relate to influences which may impact a person's purchase intentions.

In the past 6 months, please nominate how much the following statements describe you:

	Does not describe me	Describes me slightly well	Describes me moderately well	Describes me very well	Describes me extremely well
When buying products, I generally purchase those brands that I think others will approve of	○	○	○	○	○
If other people can see me using a product, I often purchase the brand they expect me to buy	○	○	○	○	○
I achieve a sense of belonging by purchasing the same	○	○	○	○	○

product and brands that others purchase					
I often identify with other people by purchasing the same products and brands they purchase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I want to be like someone, I often try to buy the same brands they buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to know what brands and products make good impressions on others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely purchase the latest fashion styles until I am sure my friends approve of them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that others like the products and brand I buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I don't have a lot of experience with a product, I often ask	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

my friends
about it

I often ask
my friends
to help me
choose the
best product

I often get
information
about a
product
from friends
before I buy

To make
sure I buy
the right
product or
brand, I
often look at
what my
friends are
buying and
using

I prefer
going
shopping
with friends

I spend
more money
when I shop
with friends
than when I
shop alone

Please nominate how well the following statements describe you:

Does not
describe
me

Describes
me slightly
well

Describes
me
moderately
well

Describes
me very
well

Describes
me
extremely
well

I usually buy
only things I
need

I try to keep
my life
simple, as far

as
possessions
are
concerned

The things I
own are not
all that
important to
me

I enjoy
spending
money on
things that
are not
practical

Buying
things gives
me a lot of
pleasure

I like a lot of
luxury in my
life

I put less
emphasis on
material
things than
most people I
know

I have all the
things I
really need to
enjoy life

My life
would be
happier if I
could afford
to buy more
things

It sometimes
bothers me
quite a bit
that I cannot
afford to buy
things all the
things I
would like

I admire
people who
own
expensive,
homes, cars
and clothes

Some of the
most
important
achievements
in life
include
material
possessions

The things I
own say a lot
about how
well I am
doing in life

I like to own
things that
impress
people

I do not pay
much
attention to
the material
objects other
people own

I do not
place much
emphasis on
the amount
of material
objects
people own
as a sign of
success

Please nominate how well the following statements describe you:

Does not
describe
me

Describes
me slightly
well

Describes
me
moderately
well

Describes
me very
well

Describes
me
extremely
well

When I have money, I can't help spend part or the whole of it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am often impulsive in my buying behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For me, shopping is a way of facing the stress of my daily life and of relaxing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes feel that something inside pushed me to go shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are times I have a strong urge to buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times, I have felt somewhat guilty after buying a product because it seemed unreasonable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are some things I buy that I do not show to anybody for the fear of being perceived as irrational in my buying behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I often have
an
unexplainable
urge, a
sudden and
spontaneous
desire to buy
something

I have often
brought a
product I do
not need,
while
knowing I
have very
little money
left

In the event
that I had
some
financial
problems, I
know that I
could rely on
somebody to
help out

Credit cards play a pivotal role within the Australian payments industry, allowing individuals to buy now and pay later.

The next questions relate to credit card possession and use.

Do you currently own a credit card?

- Yes
- No

Display this question if 'Do you currently own a credit card?' = Yes

How many credit cards do you have:

Display this question if 'Do you currently own a credit card?' = Yes

What types of credit card(s) do you currently hold? (select all that apply).

- Low rate
- Low fee
- Platinum
- Rewards
- Not sure

Display this question if 'Do you currently own a credit card?' = Yes

What is your credit limit? (\$) _____

If you hold more than one credit card, please enter the combined total of all your credit cards.

If you are unsure, please provide an estimate or leave blank.

Display this question if 'Do you currently own a credit card?' = Yes

At what age did you get your first credit card?

Display this question if 'Do you currently own a credit card?' = Yes

Which of the following statements most closely matches your credit card usage habits?

- I use my credit card almost every day
- I use my credit card a few times a week
- I use my credit card a few times a month
- I use my credit card for international purchases only
- I use my credit card only for emergencies

Display this question if 'Do you currently own a credit card?' = Yes

Thinking about your main credit card, how often do you pay off the balance in full each month?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

Display this question if 'Do you currently own a credit card?' = No

What is the primary reason for not owning a credit card?

- I prefer to use other payment methods (e.g. cash or debit card)

- Application and approval process is too difficult
- I have previously applied but did not qualify
- I don't want debt
- I have no need for a credit card

In your opinion, what are the key benefits of owning a credit card? (select all that apply).

- Buy now / pay later
- More convenient than carrying cash
- Ability to earn rewards
- Ability to pay for large purchases in instalments
- Can assist in emergency situations
- Safe and convenient way to pay for things when travelling
- There are no benefits to owning a credit card
- Other, please specify _____

In your opinion, rank the following credit card features in order of importance. Drag and drop each item into the box, with the most important item placed at the top.

- _____ Low ongoing rate
- _____ Rewards Program
- _____ Balance transfer rate and period
- _____ Interest-free days
- _____ Provided by main financial institution

Please nominate how much you agree or disagree with the following statements about credit cards:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I pay a lot of attention to anything related to credit card products / offerings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit cards offered by	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

my main financial institution provide good value for money					
I rarely look at other brands / financial institutions for credit card products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping using a credit card allows me to make the purchases I want, when I want	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend / would spend more money when using a credit card for purchases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am / would be less concerned about prices when shopping using a credit card	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to make purchases with a credit card in the next month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of the fees and charges that may	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

apply to
credit cards

The following questions relate to your brand attitude and engagement towards all financial services and products. This may include transaction accounts, savings accounts, investment accounts and loans.

When answering these questions, think about your main financial institution being the institution where you hold your main transaction account.

On the scale below, please nominate how much you agree with the following statements about your main financial institution.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My financial institution is a very good financial institution to bank with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is nice to bank with my financial institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My financial institution provides attractive products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My financial institution is very desirable within the Australian market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My financial institution is extremely likeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider myself loyal to my main financial institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My current financial institution would be my first choice when taking out another financial service or product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will not use a product from another financial institution if my current financial institution offers a similar product / service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please nominate how much the following statements describe you:					
	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
I like to know about different financial products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

and
services
offered

Anything
related to
financial
products
and
services
grabs my
attention

I like to
learn more
about
financial
products
and
services

I pay a lot
of attention
to anything
about new
financial
products
and
services

To finish the survey, please give us some more information about yourself.

Please indicate your gender.

- Male
- Female
- Prefer not to say

Please indicate your current employment status.

- Student
- Employed full time
- Employed part time
- Employed casual
- Other
- Prefer not to say

Display this question if 'Current employment status' = full time, part time or casual

Please indicate the number of paid hours worked. _____

If you would prefer not to say, please leave blank.

Please indicate your number of dependents. _____

If you would prefer not to say, please leave blank.

Please indicate your household income.

Appendix C: Debriefing Statement



Debriefing Statement

PROJECT TITLE: The influences of hedonic and utilitarian motivations on user experience and engagement within the tertiary student credit card market

Rebecca Harris (Responsible Researcher)

Tel: 0421 760 850; email: rebecca.harris@npbs.com.au

Dr. Abhishek Dwivedi (HDR Supervisor) email: adwivedi@csu.edu.au

Prof. Steven D'Alessandro (HDR Supervisor) email: stevedalessandro@utas.edu.au

Thank you for taking the time to participate in this project. This research seeks to understand motivations behind Australian tertiary student's credit card product acquisition and use. Your responses will greatly contribute to our analysis.

You have completed questions regarding your shopping motivations and credit card behaviours. This survey included questions relating to hedonic and utilitarian shopping motivations, your employment status, current household income and financial well-being. Answering this survey may have stimulated cognitive reflection, which may lead to better financial decisions in the future. If you would like further guidance and support surrounding financial decisions, visit moneysmart.gov.au.

If you are experiencing financial problems or financial pressures which are causing you stress, financial counselling services can help resolve your issues. Call the National Debt Helpline (1800 007 007) for free, confidential and independent services to help get your financial situation under control.

Charles Sturt University's Human Research Ethics Committee has approved this project. If you have any complaints or reservations about the ethical conduct of this project, you may contact the Committee on (02) 6933 4213 or ethics@csu.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you have any questions regarding this survey or would like a copy of the report, please contact rebecca.harris@npbs.com.au.

Appendix D: Survey Termination Message

The following text was displayed to respondents whose survey was terminated by the system as they did not meet the eligibility criteria in the questionnaire.

SURVEY TERMINATION MESSAGE– TERMINATED DUE TO INELIGIBLE PARTICIPANT (Q1, Q2, Q4 & Q5)

Thank you for showing interest in this study.

Unfortunately, you are not eligible to participate at this time.

If you have any questions regarding the study, please contact rebecca.harris@npbs.com.au

SURVEY TERMINATION MESSAGE – TERMINATED DUE TO FINANCIAL WELLBEING (Q9)

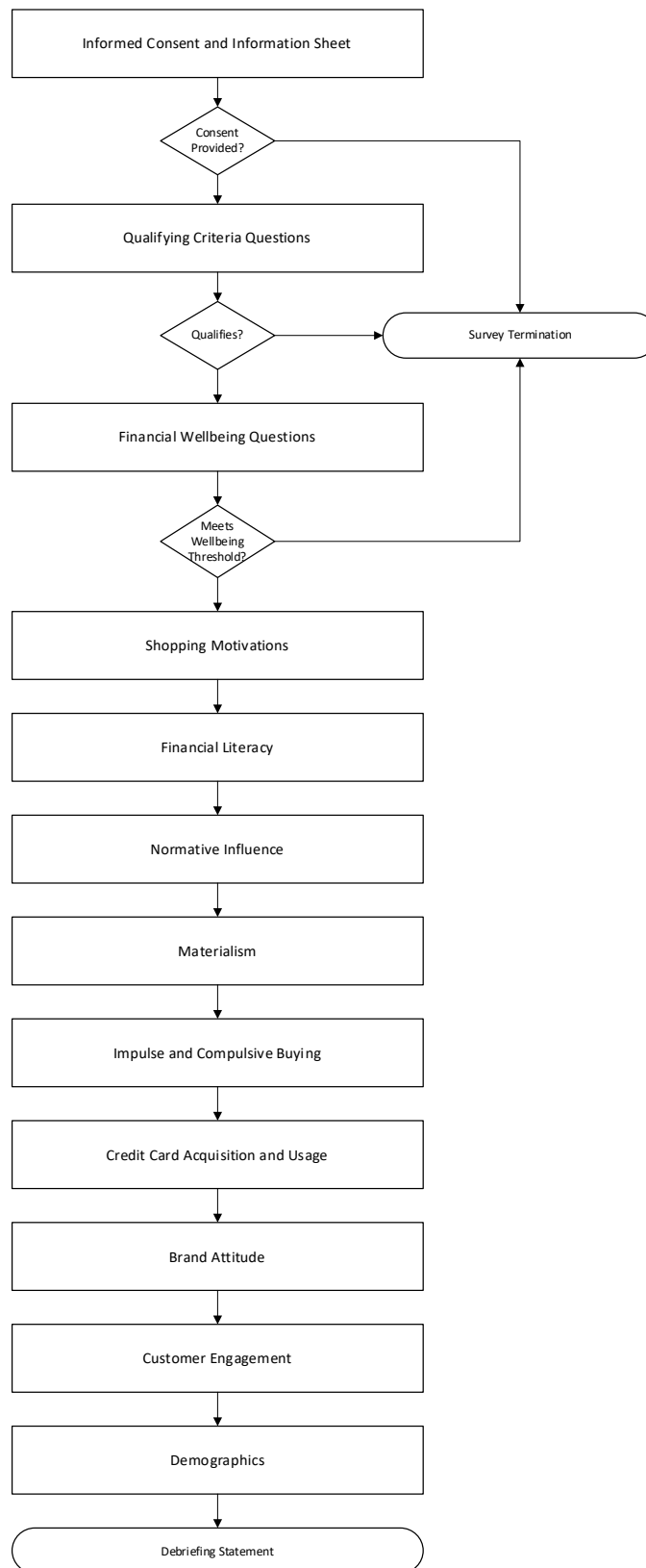
Thank you for showing interest in this study.

Unfortunately, you are not eligible to participate at this time.

If you are experiencing financial problems or financial pressures which are causing you stress, financial counselling services can help resolve your issues. Call the National Debt Helpline (1800 007 007) for free, confidential and independent services to help get your financial situation under control.

If you have any questions regarding the study, please contact rebecca.harris@npbs.com.au

Appendix E: Flowchart of Questionnaire Design



Appendix F: Item-by-item Analysis of Key Variables

Table A1: Descriptive Statistics: Personal Shopping Values

Item	Minimum	Maximum	Mean	Std. Deviation
<i>Adventure shopping items</i>				
To me, shopping is an adventure	1	5	3.62	1.09
I find shopping stimulating	1	5	3.73	1.06
Shopping is a thrill to me	1	5	3.58	1.18
Shopping makes me feel like I am in my own universe	1	5	3.40	1.24
<i>Value shopping items</i>				
For most part, I go shopping when there are sales	1	5	4.09	0.89
I enjoy looking for discounts when I shop	1	5	4.28	0.81
I go shopping to take advantage of sales	1	5	3.99	0.97
<i>Role shopping items</i>				
I like shopping for others because when they feel good, I feel good	1	5	3.73	1.09
I feel good when I buy things for the special people in my life	1	5	4.17	0.89
I enjoy shopping for my friends and family	1	5	4.00	0.92
I enjoy shopping around to find the perfect gift for someone	1	5	3.94	1.02
<i>Idea shopping items</i>				
I go shopping to keep up with the trends	1	5	3.18	1.31
I go shopping to keep up with new fashions	1	5	3.20	1.33
I go shopping to see what new products are available	1	5	3.65	1.16
I go shopping to experience new things	1	5	3.48	1.15

Social shopping items

I go shopping with my family and friends to socialise	1	5	3.80	1.09
I enjoy socialising with others when I shop	1	5	3.66	1.14
To me, shopping with family and friends is a social occasion	1	5	3.69	1.12
Shopping with others is a bonding experience	1	5	3.79	1.10
<i>Gratification shopping items</i>				
When I am down, I go shopping to make myself feel better	1	5	3.23	1.33
To me, shopping is a way to relieve stress	1	5	3.33	1.33
I go shopping when I want to treat myself something special	1	5	3.96	1.05

Table A2: Descriptive Statistics: Normative Influence

Item	Minimum	Maximum	Mean	Std. Deviation
If I don't have a lot of experience with a product, I often ask my friends about it	1	5	3.49	1.15
I often ask my friends to help me choose the best product	1	5	3.20	1.23
I often get information about a product from friends before I buy	1	5	3.27	1.26
To make sure I buy the right product or brand, I often look at what my friends are buying and using	1	5	3.03	1.31
I prefer going shopping with friends	1	5	3.24	1.32
I spend more money when I shop with friends than when I shop alone	1	5	3.10	1.39

Table A3: Descriptive Statistics: Compulsive Buying Tendencies

Item	Minimum	Maximum	Mean	Std. Deviation
When I have money, I cannot help but spend part or the whole of it	1	5	3.29	1.34
I am often impulsive in my buying behaviour	1	5	3.29	1.32
For me, shopping is a way of facing the stress of my daily life and of relaxing	1	5	3.27	1.36
I sometimes feel that something inside pushed me to go shopping	1	5	3.33	1.38
There are times when I have a strong urge to buy	1	5	3.17	1.32
At times, I have felt somewhat guilty after buying a product, because it seemed unreasonable	1	5	3.02	1.31
There are some things I buy that I do not show to anybody for fear of being perceived as irrational in my buying behaviour	1	5	3.34	1.41
I often have an unexplainable urge, a sudden and spontaneous desire, to go and buy something in a store	1	5	3.33	1.42
I have often brought a product that I did not need, while knowing that I have very little money left	1	5	3.42	1.43
In the event that I had some financial problems, I know that I could rely on somebody to help me out	1	5	2.80	1.32

Table A4: Descriptive Statistics: Materialism

Item	Minimum	Maximum	Mean	Std. Deviation
<i>Acquisition centrality</i>				
I usually buy only the things I need	1	5	3.44	1.17
I try to keep my life simple, as far as possessions are concerned	1	5	3.38	1.18
The things I own are not all that important to me	1	5	2.85	1.35
I enjoy spending money on things that are not practical	1	5	2.85	1.36
Buying things gives me a lot of pleasure	1	5	3.37	1.22
I like a lot of luxury in my life	1	5	3.00	1.35
I put less emphasis on material things than most people I know	1	5	3.30	1.20
<i>Acquisition as the pursuit of happiness</i>				
I have all the things I really need to enjoy life	1	5	3.64	1.12
I would be happier if I could afford to buy more things	1	5	3.26	1.31
It sometimes bothers me quite a bit that I cannot afford to buy all the things I would like	1	5	3.17	1.29
<i>Possession defined success</i>				
I admire people who own expensive homes, cars, and clothes	1	5	3.09	1.40
Some of the most important achievements in life include material possessions	1	5	2.80	1.40
The things I own say a lot about how well I am doing in life	1	5	2.90	1.35
I like to own things that impress people	1	5	2.80	1.43
I do not pay much attention to the material objects other people own.	1	5	3.21	1.28

Table A5: Descriptive Statistics: Financial Self-Efficacy

Item	Minimum	Maximum	Mean	Std. Deviation
<i>Financial self-efficacy</i>				
It is hard to stick to my spending plan when unexpected expenses arise	1	5	3.31	1.20
It is challenging to make progress towards my financial goals	1	5	3.09	1.19
When unexpected costs arise, I usually have to use credit	1	5	2.56	1.47
When faced with a financial challenge, I have a hard time figuring out a solution	1	5	2.81	1.32
I lack confidence in my ability to manage my finances	1	5	2.74	1.37
I worry about running out of money	1	5	3.06	1.35

Table A6: Descriptive Statistics: Brand Attitude, Brand Equity and Customer Engagement

Item	Minimum	Maximum	Mean	Std. Deviation
<i>Brand attitude</i>				
My financial institution is a very good financial institution to bank with	1	5	4.00	0.93
It is nice to bank with my financial institution	1	5	4.04	0.87
My financial institution provides attractive products and services	1	5	3.86	0.93
My financial institution is very desirable within the Australian market	1	5	3.98	0.93
My financial institution is extremely likeable	1	5	3.99	0.91
<i>Customer engagement</i>				
I like to know about different financial products and services offered	1	5	3.03	1.29
Anything related to financial products and services grabs my attention	1	5	3.24	1.29
I like to learn about financial products and services	1	5	3.15	1.28
I pay a lot of attention to anything about new financial products and services	1	5	3.28	1.31

Table A7: Descriptive Statistics: Credit Card Product Uptake

Item	Minimum	Maximum	Mean	Std. Deviation
I pay a lot of attention to anything related to credit card products / offerings	1	5	2.82	1.42
Credit cards offered by my main financial institution provide good value for money	1	5	3.27	1.18
I rarely look at other brands / financial institutions for credit card products	1	5	3.43	1.23
Shopping using a credit card allows me to make the purchases I want, when I want	1	5	3.18	1.33
I spend / would spend more money when using a credit card for purchases	1	5	3.19	1.35
I am / would be less concerned about prices when shopping using a credit card	1	5	2.95	1.39
I intend to make purchases with a credit card in the next month	1	5	2.82	1.53
I am aware of the fees and charges that may apply to credit cards	1	5	3.87	1.18

Appendix G: Item-by-item Factor Loadings

Table A8: Item-by-item Factor Loadings

Construct and Items	Factor Loading
<i>Personal shopping values</i> (CR = 0.88; AVE = 0.61)	
<i>Adventure shopping items</i>	0.91
To me, shopping is an adventure	0.79
I find shopping stimulating	0.80
Shopping is a thrill to me	0.86
Shopping makes me feel like I am in my own universe	0.80
<i>Role shopping items</i>	0.65
I like shopping for others because when they feel good, I feel good	0.71
I feel good when I buy things for the special people in my life	0.71
I enjoy shopping for my friends and family	0.80
I enjoy shopping around to find the perfect gift for someone	0.78
<i>Idea shopping items</i>	0.78
I go shopping to keep up with the trends	0.88
I go shopping to keep up with new fashions	0.91
I go shopping to see what new products are available	0.71
<i>Social shopping items</i>	0.68
I go shopping with my family and friends to socialise	0.82
I enjoy socialising with others when I shop	0.78
To me, shopping with family and friends is a social occasion	0.81
Shopping with others is a bonding experience	0.81
<i>Gratification shopping items</i>	0.85
When I am down, I go shopping to make myself feel better	0.87
To me, shopping is a way to relieve stress	0.91
I go shopping when I want to treat myself something special	0.62

Normative influence (CR = 0.88; AVE = 0.66)

If I don't have a lot of experience with a product, I often ask my friends about it	0.76
I often ask my friends to help me choose the best product	0.84
I often get information about a product from friends before I buy	0.85
To make sure I buy the right product or brand, I often look at what my friends are buying and using	0.78

Compulsive buying tendencies (CR = 0.88; AVE = 0.59)

I am often impulsive in my buying behaviour	0.65
I sometimes feel that something inside pushed me to go shopping	0.89
There are times when I have a strong urge to buy	0.84
There are some things I buy that I do not show to anybody for fear of being perceived as irrational in my buying behaviour	0.73
I have often brought a product that I did not need, while knowing that I have very little money left	0.71

Materialism (CR = 0.86; AVE = 0.61)

I like a lot of luxury in my life	0.68
I would be happier if I could afford to buy more things	0.71
Some of the most important achievements in life include material possessions	0.86
The things I own say a lot about how well I am doing in life	0.84

Financial self-efficacy (CR = 0.88; AVE = 0.60)

It is hard to stick to my spending plan when unexpected expenses arise	0.68
When unexpected costs arise, I usually have to use credit	0.76
When faced with a financial challenge, I have a hard time figuring out a solution	0.87
I lack confidence in my ability to manage my finances	0.84
I worry about running out of money	0.72

Brand attitude (CR = 0.87; AVE = 0.57)

My financial institution is a very good financial institution to bank with	0.80
It is nice to bank with my financial institution	0.81
My financial institution provides attractive products and services	0.75
My financial institution is very desirable within the Australian market	0.66
My financial institution is extremely likeable	0.74

Customer engagement (CR = 0.90; AVE = 0.70)

I like to know about different financial products and services offered	0.76
Anything related to financial products and services grabs my attention	0.86
I like to learn about financial products and services	0.86
I pay a lot of attention to anything about new financial products and services	0.87

Credit card product uptake (CR = 0.86; AVE = 0.56)

I pay a lot of attention to anything related to credit card products / offerings	0.78
Credit cards offered by my main financial institution provide good value for money	0.75
Shopping using a credit card allows me to make the purchases I want, when I want	0.79
I spend / would spend more money when using a credit card for purchases	0.62
I intend to make purchases with a credit card in the next month	0.79