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Factors Influencing Consumer Purchase Intentions: A Study of E-Commerce Platforms in South Africa

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A research project submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in fulfilment of the requirements for the degree of Master of Management in the field of Digital Business

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KEYWORDS

Electronic-Commerce (E-Commerce), Mobile-Commerce (M-Commerce), Online Shopping Platforms, Online Retail, Online Shopping Behavior, Consumer Purchase Intentions, South Africa, Utilitarian Value, Hedonic Value

DEDICATION AND ACKNOWLEDGEMENT

This project is dedicated to my son Letiile Mabitsela. You may have been too young to understand why mommy had to spend some time away from you but I hope that one day when you read this report and it makes you proud.

To my husband Tebogo Mabitsela, thank you for your consistency and patience. You have been a great support system any new mom and wife could have ever asked for. You did not question the times apart or having to stand in and look after our son when I needed some time to work on my research. Your patience and encouragement helped me get through every hurdle that I encountered along the way.

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TABLE OF CONTENTS

LIST OF TABLES viii

LIST OF FIGURES xi

LIST OF ACRONYMS xii

CHAPTER 1. INTRODUCTION 14

1.1 PURPOSE OF THE STUDY 14
1.2 CONTEXT OF THE STUDY 14
1.3 RESEARCH PROBLEM 17
1.4 RESEARCH OBJECTIVES 18
1.5 SIGNIFICANCE AND CONTRIBUTIONS OF THE STUDY 18
1.6 SCOPE AND DELIMITATIONS OF THE STUDY 20
1.7 DEFINITION OF TERMS 21
1.8 ASSUMPTIONS 21
1.9 STRUCTURE OF THE RESEARCH REPORT 22

CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK 23

2.1 INTRODUCTION 23
2.2 THE CONCEPT AND TRENDS OF E-COMMERCE (ONLINE SHOPPING) PLATFORMS 23
2.3 E-COMMERCE (ONLINE SHOPPING) IN SUB-SAHARAN AFRICA 25
2.4 E-COMMERCE (ONLINE SHOPPING) PLATFORM IN THE CONTEXT OF SOUTH AFRICA 26
2.4.1 A PROFILE OF SOUTH AFRICA 26
2.4.2 TRENDS IN E-COMMERCE (ONLINE SHOPPING) PLAFORMS IN SOUTH AFRICA 27
2.4.3 THE SOUTH AFRICAN E-COMMERCE RETAIL (ONLINE-SHOPPING) CONSUMER 29
2.5 THEORETICAL UNDERPINNINGS OF THE CONCEPTUAL MODEL 30
2.5.1 THE CONSUMPTION VALUE MODEL 30
2.5.2 CUE UTILIZATION THEORY 31
2.5.3 THEORY OF REASONED ACTION (EXTENSION THEORY) 32
2.6 THE CONCEPT OF ONLINE PURCHASE INTENTIONS 33
2.6.1 REVIEW OF JOURNAL ARTICLES 34
2.7 THE DETERMINANTS (ANTECEDENTS) OF ONLINE PURCHASE INTENTIONS 35
2.8 CONCEPTUAL MODEL DEVELOPMENT 37

2.8.1 Dependent Variable 37
I) Online Purchase Intentions 37
2.8.2 Independent variables and proposed Hypotheses 38
II) Perceived Functional Value 38
III) Perceived Social Value 38
IV) Perceived Emotional Value 39
V) Perceived Epistemic Value 39
VI) Perceived Conditional Value 40
VII) Online Promotion 40
VIII) Brand Familiarity 41
IX) Trust 41
X) Perceived Risk 41
2.9 Conceptual Model of the Study 42
2.9.1 Conceptual Model 42
2.10 Conclusion 45

CHAPTER 3. RESEARCH METHODOLOGY 46

3.1 Research approach 46
3.2 Research design 46
3.3 Population and sample 47
3.3.1 Unit of Analysis 47
3.3.2 Population 47
3.3.3 Sample 47
3.3.4 Sampling method 48
3.4 Data collection 49
3.4.1 Research instrument construction 50
3.4.2 Administration of the research instrument (survey) 52
3.5 Validity and Reliability 53
3.5.1 Content validity and face validity 53
3.5.2 Construct validity 54
3.5.3 Convergent and discriminat validity 54
3.5.4 Reliability 54
3.6 Data Analysis and Interpretation 55
3.6.1 Test for confounding effects (control variables) 56
3.7 Post-hoc analysis 57
3.7.1 Mediation analyses 57
3.8 Limitations and challenges of the study 58
3.9 Ethical considerations 58
3.10 Conclusion 59

CHAPTER 4. DATA ANALYSIS AND PRESENTATION OF RESULTS 60

4.1 Introduction 60
4.2 Data screening 60
4.2.1 Response Rate and Excluded Responses 60
4.3 Demographic profile of respondents 61
4.4 Missing value analysis 63

4.5 OUTLIER ANALYSIS 63
4.6 NORMALITY 63
4.7 PREPARATION FOR FACTOR ANALYSIS 65
4.7.1 FACTORABILITY 65
4.8 TEST FOR COMMON METHOD BIAS 66
4.9 EXPLORATORY FACTOR ANALYSIS (EFA) 66
4.10 RELIABILITY AND VALIDITY 74
4.11 DESCRIPTIVE STATISTICS FOR COMPOSITES 76
4.12 PEARSON'S TEST OF CORRELATION 76
4.13 EVALUATION OF THE MEASUREMENT MODEL: CONFIRMATORY FACTOR ANALYSIS (CFA) 77
4.14 CONVERGENT VALIDITY 80
4.15 DISCRIMINANT VALIDITY 80
4.16 INTERNAL CONSISTENCY RELIABILITY 86
4.17 EVALUATION OF THE STRUCTURAL PATH MODEL 86
4.18 TESTING FOR COLLINEARITY 86
4.19 ESTIMATION OF THE STRUCTURAL PATH COEFFICIENTS 87
4.19.1 TESTING FOR CONFOUNDING EFFECTS 91
4.20 COEFFICIENTS OF DETERMINATION (R^2 VALUE) 92
4.21 EFFECT SIZE (f^2) 92
4.22 PREDICTIVE RELEVANCE (Q^2 VALUE) 94
4.23 EFFECT SIZE (q^2) 95
4.24 POST-HOC ANALYSIS 96
4.25 CONCLUSION 99

CHAPTER 5. DISCUSSION OF FINDINGS 100

5.1 INTRODUCTION 100
5.2 THE RELATIONSHIP BETWEEN PERCEIVED FUNCTIONAL VALUE AND ONLINE PURCHASE INTENTIONS 100
5.3 THE RELATIONSHIP BETWEEN PERCEIVED SOCIAL VALUE AND ONLINE PURCHASE INTENTIONS 101
5.4 THE RELATIONSHIP BETWEEN PERCEIVED EMOTIONAL VALUE AND ONLINE PURCHASE INTENTIONS 101
5.5 THE RELATIONSHIP BETWEEN PERCEIVED EPISTEMIC VALUE AND ONLINE PURCHASE INTENTIONS 102
5.6 THE RELATIONSHIP BETWEEN PERCEIVED CONDITIONAL VALUE AND ONLINE PURCHASE INTENTIONS 102
5.7 THE RELATIONSHIP BETWEEN ONLINE PROMOTION AND ONLINE PURCHASE INTENTIONS 103
5.8 THE RELATIONSHIP BETWEEN BRAND FAMILIARITY AND ONLINE PURCHASE INTENTIONS 103

5.9 THE RELATIONSHIP BETWEEN TRUST AND ONLINE PURCHASE INTENTIONS 104
5.10 THE RELATIONSHIP BETWEEN PERCEIVED RISK AND TRUST 104
5.11 CONCLUSION 105

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS 106

6.1 INTRODUCTION 106
6.2 SUMMARY OF THE STUDY 106
6.3 IMPLICATIONS FOR STAKEHOLDERS 107
6.3.1 PRACTICAL CONTRIBUTION 107
6.3.2 ACADEMIC CONTRIBUTION 108
6.3.3 RECOMMENDATIONS FOR FUTURE RESEARCH 108
6.4 CONCLUSION 109

References 110

APPENDIX (A) Participant Information Sheet 120

APPENDIX (B) Participant Agreement form 122

APPENDIX (C) Instrument 123

APPENDIX (D) Research Permission Letter 130

APPENDIX (E) Ethics Clearance Certificate 131

LIST OF TABLES

Table 1: Top 5 South African online platforms 28

Table 2: Factors affecting online purchase intentions 36

Table 3: Instrument Measures..... 50

Table 4: Response Rate 60

Table 5: Demographic information of the respondents..... 61

Table 6: Descriptive Statistics 64

Table 7: Results of Harman's (1976) Single-Factor Test 66

Table 8: Items excluded after PCFA 67

Table 9: Results Principal Component Analysis (PCA) - Perceived Functional Value..... 68

Table 10: Results of Total Variance Explained by the Dimensions (variables) of Perceived Functional Value 68

Table 11: Results Principal Component Analysis (PCA) - Perceived Social Value 69

Table 12: Results of Total Variance Explained by the Dimensions (variables) of Perceived Social Value 69

Table 13: Results Principal Component Analysis (PCA) - Perceived Emotional Value..... 69

Table 14: Results of Total Variance Explained by the Dimensions (variables) of Perceived Emotional Value 70

Table 15: Results Principal Component Analysis (PCA) - Perceived Epistemic Value..... 70

Table 16: Results of Total Variance Explained by the Dimensions (variables) of Perceived Epistemic Value 70

Table 17: Results Principal Component Analysis (PCA) – Perceived Conditional Value 71

Table 18: Results of Total Variance Explained by the Dimensions (variables) of Perceived Conditional Value 71

Table 19: Results Principal Component Analysis (PCA) – Online Promotion .. 71

Table 20: Results of Total Variance Explained by the Dimensions (variables) of Online Promotion 72

Table 21: Results Principal Component Analysis (PCA) – Brand Familiarity ... 72

Table 22: Results of Total Variance Explained by the Dimensions (variables) of Brand Familiarity 72

Table 23: Results Principal Component Analysis (PCA) – Trust 72

Table 24: Results of Total Variance Explained by the Dimensions (variables) of Trust 73

Table 25: Results Principal Component Analysis (PCA) – Perceived Risk 73

Table 26: Results of Total Variance Explained by the Dimensions (variables) of Perceived Risk 73

Table 27: Instrument (Construct) Validities and Reliabilities 75

Table 28: Descriptive Statistics for Composites 76

Table 29: Results of Pearson's Test of Correlations 76

Table 30: Results of reflective measurement model evaluation 77

Table 31: Results of indicator cross-loadings 81

Table 32: Fornell-Larcker criterion results 82

Table 33: Results of the Heterotrait-Monotrait (HTMT) ratio of correlations..... 83

Table 34: Bootstrap Confidence Intervals 85

Table 35: Test for Collinearity (Criterion: Online Purchase Intetions)..... 87

Table 36: Test for Collinearity (Criterion: Trust) 87

Table 37: Results of Significance Testing of the Structural Path Model Coefficients 90

Table 38: Summary of Results of Hypotheses Testing 91

Table 39: Result of R^2 Value of Dependent (Criteria) Variable..... 92

Table 40: Results of f^2 Effect Sizes for Dependent Variables..... 93

Table 41: Result of Q^2 Values of Dependent Variable 94

Table 42: Results of q^2 Effect Sizes for Dependent (Criteria) Variables..... 96

Table 43 :Significance of Mediation Effect 98

LIST OF FIGURES

Figure 1: South African Retail Landscape and Consumer Segment 17

Figure 2: Categorisation of frameworks 37

Figure 3: Conceptual Model 44

Figure 4: The Basic Model of Mediation 57

Figure 5: Structural Path Model..... 89

LIST OF ACRONYMS

AfCTA - African Continental Free Trade Area

AI – Artificial Intelligence

AVE – Average Variance Extracted

B2C – Business-to-Consumer

CFA - Confirmatory Factor Analysis

C2C – Consumer-to-Consumer

EFA - Exploratory Factor Analysis

HTMT - Heterotrait-Monotrait

ICT – Information and Communication Technology

NIDS – National Income Dynamics Survey

NRI – Network Readiness Index (NRI)

OLS – Ordinary Least Squares

PC – Personal Computer

PCA - Principal Component Analysis

PCFA - Principal Component Factor Analysis

PLS-SEM – Partial Least Squares – Structural Equation Modelling

SOR - Stimulus-Organism-Response

SADC - Southern African Development Community

TAM – Technology Acceptance Model

TPB - Theory of Planned Behaviour

TRA – Theory of Reasoned Action

USD – United States Dollar

CHAPTER 1. INTRODUCTION

1.1 Purpose of the Study

The purpose of this study is to examine the effects of a set of determinants on the purchase intention of consumers using an electronic commerce (online shopping) platform in the South African context.

Since the beginning of the COVID-19 pandemic, there has been high demand for online activities in South Africa and retailers have had to turn to online platforms to start or continue serving their customers. In turn, customers turned to online platforms to find and purchase goods and services. This has fast-tracked digitisation for many retailers and sellers, forcing a digital culture despite the level of preparedness for this new way of living. As such, this has encouraged existing and new online stores to enhance their online appearance and services to promote consumer activity and sales.

1.2 Context of the Study

Africa's e-commerce landscape is viewed to have great developmental potential, attracting investors and entrepreneurs. Li and Bode (2020) expanded on this view and observed that Africa's e-commerce market would reach 50 billion United States Dollars (USD) in 2018. Nigera is found to have reached a 70% Internet penetration rate in 2018, as one of the few African countries to have the most e-commerce sites. By contrast, Kenya was found to have a 79% internet penetration rate, where 85% of its population have access to electronic payment methods (Li and Bode, 2020). It is also worth noting that mobile communication is developing rapidly in Africa, where the African e-commerce market is mainly mobile-based. This has been occasioned by an expansion in mobile network infrastucture and the development of mobile payment methods which have opened up viable shopping opportunities for regions with limited physical outlets.

The context of the study is South Africa, which is a large and dynamic country with unique political and socio-economic issues. The consumer market

landscape in South Africa comprises sophisticated formal retail chain stores e.g., *Woolworths, Pick n Pay, and Checkers*, which serve upper-income consumers, hybrid stores e.g., *Makro*, cash-and carry outlets, e.g. *Boxer and Cambridge*, and thousands of informal spaza shops which operate and serve communities in the townships. Masojada (2021) highlighted that many of the formal retail and hybrid stores in South Africa have a digital footprint providing their customers with an online shopping experience. As such, e-commerce is promising in South Africa. Molla and Licker (2004) emphasised that South Africa's Information and Communication Technology (ICT) infrastructure is advanced and that the country ranks above median at the top of the developing worlds league on the Network Readiness Index (NRI). This is indicative of the potential of e-commerce consumer platforms for South African businesses.

Prominent examples include the "Kalahari.com" website which was launched in 1998 and hosted South African online stores for at least two decades (Goga, Paelo and Nyamwena, 2019). The Naspers Group owns one of the prominent e-commerce retailers in South Africa, *Takealot.com* (comprising the *Mr D Food*, *Superbalist*, and *Spree* service platforms). By 2021, the Takealot Group had an estimated revenue of 606 million USD (Greenfield, 2022), showing substantial growth from 2020 with revenue at 392 million USD. Other popular Business-to-Consumer (B2C) South African e-commerce retail platforms include *AmazonSA*, *Makro*, *Pick n Pay (Pick n Pay ASAP)*, *Checkers* retailers (*Checkers Sixty60*) and Woolworths (*Woolies Dash*) among others (Wood, 2022). This is also supported by statistics obtained from EcommerceDB (2022), where 50 online stores based in South Africa were ranked, with *Takealot.com* leading at a 33.4% revenue growth rate between 2020 and 2021. This is followed by *Superbalist*, *Makro*, and *Amazon*, with 23.3%, 8.8%, and 8.4% growth rates, respectively.

Takealot.com was launched in June 2011 after aquiring *Take2*, an e-commerce business based in the United States of America. It has become one of the fastest growing and most innovative e-commerce retailers on the African continent. *Kalahari.com* was one of the largest and leading e-commerce retailers, selling millions of various products such as books, DVDs, cameras, and electronics. In October 2014, the two e-commerce retailers merged their operations, creating a

platform scale to try and compete against the local brick and mortar retailers and other international online retailers such as Amazon and Alibaba. This merger coincided with the shut-down of *Kalahari.com* (Takealot.com, 2014)

A “spaza shop” (also known as a “tuck shop”) is an informal convenience store which is run in South African townships and rural areas. Spaza shops contribute to the township and rural economy as they provide vital goods, employment, and income (Kgaphola, Tawodzera, and Tengeh, 2019). For decades, spaza shops have served a purpose of supplementing households by selling small everyday grocery and cosmetic products (The Sustainable Livelihoods Foundation, 2012). The concept of convenience shopping of a spaza shop is based on proximity, whereby products are brougt closer to consumers, despite limited stock-at-hand. The convenience of online shopping is much larger where multiple shops and unlimited products are available on an e-commerce platform which saves the consumer from making multiple trips to a physical store.

South African consumers are exposed to many corporate retail stores (including *Woolworths*, *Shoprite*, *Spar*, PicknPay, and *Walmart stores*). Depending on their location (geographical area) and shopping preference, there is a wide selection of choice where the consumer can choose to repetitively shop with a prefered retailer or change to other retailers. This shopping activity can happen both at a physical or online store. Masojada (2021) highlights that due to high levels of income inequality in South Africa, retailers have adapted relevant formats and ranges to meet the needs of a shopper base which extends from low to high income consumers. According to the National Income Dynamics Survey (NIDS), it has been found that online shopping platforms are mostly used by the working, middle, upper-middle, and upper-class consumer segments. The low income working class consumer segment typically accesses physical stores lacking an online shopping presence. **Error! Reference source not found.** shows a profile of available retail consumer stores in South Africa and the corresponding consumer (shopper) segments.

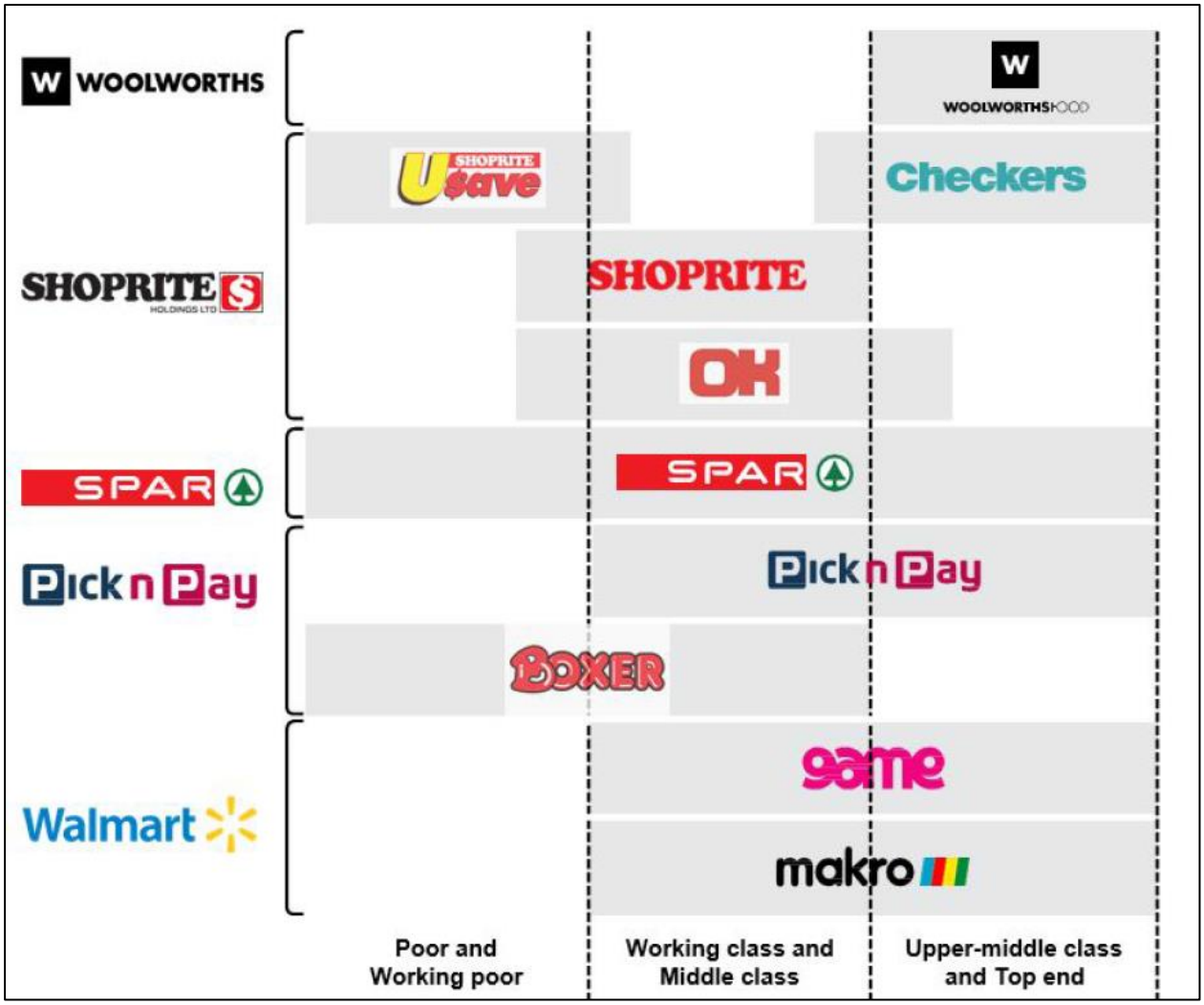


Figure 1: South African Retail Landscape and Consumer Segment (Masojada, 2021)

1.3 Research Problem

There is a lack of knowledge and evidence with which to adequately understand and explain the factors that determine consumer intentions to purchase goods and services on an e-commerce (online shopping) platform in the South African context.

A research gap emerges from the apparent lack of sufficient knowledge in evidence during the time of study on South African e-commerce (online shopping) platforms and factors that influence consumers to form their purchase intentions.

There are possible factors that could influence consumer behaviour using South African e-commerce (online shopping) platforms. Online shopping is considered an alternative for consumers since it is more convinient and comfortable than conventional shopping. This has been attributed to anxiety, crowding in physical spaces, and limited purchasing options.

1.4 Research Objectives

To address the emerging research problem, the following study objectives are specified:

1. Identify a set of relevant factors from the existing literature that are likely to determine e-commerce (online shopping) platform consumer purchase intentions.
2. Develop a conceptual research model underpinned by theory and used to examine (test) the effects of these factors on e-commerce (online shopping) platform consumer purchase intentions.

These objectives were specified to answer the following formulated research questions:

1. What factors determine South African consumers' purchase intentions using e-commerce (online shopping) platforms?
2. What are the effects of these factors on South African consumers' purchase intentions using e-commerce (online shopping) platforms?

1.5 Significance and contributions of the study

E-commerce (online shopping) retail has grown exponentially over the last decade reaching approximately R10 billion in 2017 (Fin24, 2018). From 2018, the South African Post Office noted an increase of over 20% in parcels entering South Africa through their mail ports (South African Post Office, 2018). It is found that 38% of South African e-commerce consumers shop domestically, and a further 50% also shop internationally (PayPal, 2018). Apart from competing e-commerce factors such as product, price, quality, and variety, e-commerce platform providers also compete based. on the quality of

their interfaces and may focus on improving individual consumer (user) experience through features such as seamless navigation and product access. As observed by Pujani (2011), the quality of a system and product information encourages consumer purchase decisions using e-commerce platforms. Through this study, the following contributions were made:

1. Academic Contribution: The present study signifies a theoretical and methodological academic contribution to the e-commerce platform adoption literature by focusing on factors that can influence consumer intentions to purchase goods on online shopping websites. The existing literature was drawn on to develop a theoretically underpinned conceptual model that tests hypothesised effects on individual consumer purchase intentions using a cross-sectional survey design and empirical (multivariate analysis) techniques. Through this study, a contribution will be made to the existing literature in the space of e-commerce (online shopping) platforms. This will be benefial for researchers seeking to investigate factors that influence consumers to form their purchase intentions when interactiing with these platforms.

2. Contextual Contribution: This study signifies a contextual contribution through the investigation of retail online platforms used among individual consumers in South Africa. The adoption patterns of South African online consumers (shoppers) may differ from the rest of the world. In this study, a set of determining factors that influence South African consumer purchase intentions were examined. Findings of the study provide insights into these factors that lead to consumers purchase intentions in this unique African context.

3. Practical Contributions: The online e-commerce platform is not necessarily restricted to well known retailers but can be open to use by many different types of organisations and individual consumers. The present study will not only assist formal online retail stores but also individual enterpreneurs who develop online shopping platforms to better

understand and monitor the key characteristics required to motivate their customers' regular purchase of their products using their online platform. This research will benefit businesses to further understand these factors and direct their efforts towards developing features that better satisfy customer needs.

4. Global Contribution: E-commerce (online shopping) platforms are hosted on the Internet and have no borders, potentially operating at a global scale. Due to the differences in lifestyle and culture in various countries and regions globally, consumers will adopt e-commerce platforms differently, whereby a distinct set of context-sensitive factors may influence their purchase decisions. This study signifies a contribution valuable to international companies seeking to reach consumers who live in South Africa. In addition, South Africa is recognized as part of a broader African context. As such, through the rigorous development of a conceptual model that is replicable to other developing countries with environments similar to that of South Africa, will provide an enhanced understanding of consumer purchase intentions behaviours. Thus, a global contribution will emerge through this study.

1.6 Scope and Delimitations of the Study

- Due to the study's focus being e-commerce (online shopping) platforms, the study will focus on online retailers selling grocery items (including beverages), apparel (including footwear, hats and bags), furniture, books, digital devices, online apps, online gaming, homeware, toys, gym equipment, and hardware. To understand the use of this platform we focus on the consumer (user).

- The study will not focus on traditional and "Above the Line" marketing and advertising.

1.7 Definition of Terms

Electronic Commerce (E-Commerce): defined as “the buying and selling of goods and/or services, as well as enabling financial transactions over the internet” (Cao and Yang 2016, p. 283-289). Industry has broadened the concept to include educational courses, financial services, and sale of digital products such music, online games, and videos (Goga, Paelo and Nyamwena, 2019).

Online Shopping: defined as “the process a customer takes to purchase a service or product over the internet from a merchant. The consumer (who is the shopper) can visit the online store from anywhere and at their leisure to purchase products and services offered” (Jusoh and Ling, 2012, p. 223-230).

Purchase Intentions: defined as “intention to create an online association and engagement with online vendors” (Zwass, 1998).

Hedonic Value: defined as “the value received from multisensory, fantasy and emotive aspects of the shopping experience” (Jones et al., 2006, p. 974-981).

Utilitarian Value: defined as “ the task related value of a shopping experience can be viewed as cognitive, and non-emotional outcome of shopping” (Jones et al., 2006, p. 974-981).

1.8 Assumptions

The following assumptions will be considered for this study:

- Research participants reside in South Africa on a full-time basis.
- Research participants have access to and have used an e-commerce (online shopping) platform.
- Research participants have access to mobile data/Internet connections.

1.9 Structure of the Research Report

Chapter 1 - Introduction: This chapter introduces the context of the study, its purpose, research problem, research objectives and questions, significance of the study, delimitations, assumptions and the definition of terms used in the study.

Chapter 2 - Literature Review: This chapter encompasses a review of the existing literature on e-commerce (online shopping). The review outlines the global view, Sub-Saharan Africa and South African context highlighting e-commerce (online shopping) concepts and trends that have been implemented. The concept and antecedents of online purchase intentions are reviewed. The chapter covers the study's theoretical underpinnings, constructs, and development of a conceptual model.

Chapter 3 - Research Methodology: This chapter covers the research methodology used in the present study, which includes the approach used for data collection, the procedures used to analyse the data, the type of population and sample size. The chapter closes with a discussion of ethical considerations.

Chapter 4 - Data Analysis and Presentation of Results: This chapter comprises a representation of results following analyses conducted using empirical data elicited from a sample of surveyed respondents.

Chapter 5 - Discussion of Results: This chapter entails a discussion of the results obtained following data analyses (testing) of hypothesised conceptual model relationships as discussed in Chapter 4 in relation to the literature review of prior research related to the concept of online purchase intentions presented in Chapter 2.

Chapter 6 - Conclusions and Recommendations: This chapter concludes the present study with a discussion on contributions made to research and practice. In addition, recommendations are presented for academics and practitioners who are developing online shopping platforms in the context of South Africa as well as for international companies seeking to access the South African consumer market.

CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter is divided into three parts. The first part packages e-commerce concepts and trends globally, in Sub-Saharan Africa, and in the South African context. The literature provides origins of e-commerce (online shopping) and how it has evolved and has been adapted in a South African context. This review on e-commerce consumers in the South African context contributes to an understanding of who online shoppers are, their expectations, as well as consumer trends. The second and third part of this chapter focuses on the underpinning theories of this reseaerch and the development of a conceptual model. The selected underpinning theories lead to the identification of constructs which are used in the development of a theoretically underpinned conceptual model that will be used to determine and explain the effects of factors that can influence consumer purchase intentions.

2.2 The Concept and trends of e-commerce (online shopping) platforms

The internet platform offers a spectrum of services and businesses with an online presence benefit as their services collaborate with customers and other associations. The concept of e-commerce (online shopping) was first demonstrated before the world wide web (www) was in use. In 1979, M Aldrick designed and installed a system called Videotext (Jusoh and Ling, 2012). This was an electronic data retrieval system known to transmit textual information via the telephone or cable television and displayed on a television set. Videotext systems were menu-driven and included news, weather forecasts, local information, bus schedules, and entertainment event listings. The system allowed customers, agents, distributors, and suppliers to be connected online, allowing business transactions to be completed electronically in real-time.

By 1990, T. Berners-Lee created the first world wide web server and browser. In 1994 innovations including online banking, NetMarket, and Internet shopping network, were developed. By 1995, Amazon expanded its e-commerce (online shopping) experience followed by eBay and Alibaba launching Toaboa and Tmall in 2003 and 2008, respectively (Jusoh and Ling, 2012). China holds the largest and most popular shopping portals such as Alibaba and JD.com, each selling products worth over 1.2 billion USD (Alibaba) and 98 million USD (JD.com) (Hasan Mahmud, Kabir, Salem, and Fernand, 2016), respectively.

Consumers have become interested in e-commerce (online shopping) as a new service, leading to increased growth in online markets. Numerous online shopping portals have developed online payment service systems allowing users to have an end-to-end shopping experience on one platform. These online shopping portals have a few emergent features (e.g. customer satisfaction, service quality, software performance, security, and product tracking) operating in the back-end which contribute to a seamless shopping experience for the consumer. Futhermore, it is best that the most up-to-date encryption and secure technologies are installed in order to maintain personal customer data. These technologies also help with defending the online portals from hackers, viruses, and malware.

In developing countries such as India, e-commerce was perceived to be in its nascent stages, although in recent years there has been a significant rise in the number of companies taking up e-commerce platforms. Major Indian portal sites have been observed to have shifted towards e-commerce instead of depending on advertising revenue. In 2016, India’s e-commerce market had reached the 38 billion USD mark, to signify a massive jump of over 23 billion USD in revenue clocked by the industry (Bhat, Kansana, and Khan, 2016). The authors believe that mobile-commerce (m-commerce) is a great contributor to e-commerce in India’s markets, contributing up to 70% of total revenue. Shopping online using mobile phones has seeen the m-commerce industry grow rapidly as a stable and secure supplement to the e-commerce industry.

It has been observed that in the past, higher prices were caused by market immaturity. This is supported by a pricing behaviour analysis conducted by Bailey

(1998), where pricing comparison for books, CDs, and software sold online between 1996 and 1997, were found to have higher selling costs. During this period, an American book seller, Barnes and Noble, entered the e-commerce book market with competitive pricing and Amazon.com dropped its prices by almost 10% for a price match (Smith, Bailey and Brynjolfsson, 2001).

As part of the global e-commerce trends, Daigler and Dharmasthira's (2021) research shows that by 2023, B2C e-commerce pricing will be 30% less than recorded in 2019 due to feature commoditisation and a 10% increase in digital revenue for organisations that operate services in the digital marketplace for over a year. This will be achieved through the implementation of transformational technologies that enable customers to purchase goods and services through interactive and self-service experiences. Transformational technologies provide essential information through the use of API and data to assist the consumer to reach their purchase decision. The API supports self-service, as well as interactive buying experience including product catalog navigation, the addition of products to a shopping cart, the full pricing of an order inclusive of discounts and promotions at check-out, and interoperation with customer and product data, and order functionality.

2.3 E-commerce (online shopping) in Sub-Saharan Africa

Chivunga and Tempest (2021) explain that digital innovation trends will continue to play a key role in supporting recovery, sustainable growth, and prosperity. This benefits Africa and contributs to the implementation of the African Continental Free Trade Area (AfCFTA).

COVID-19 accelerated the use of digital applications and tools to drive e-commerce adoption and acceptance by businesses and customers. As a highlight, Africa's giant e-commerce platform "Jumia", had the highest demand for and supply of essential goods at the start of 2020. Elsewhere, the Eko Hotel, a prominent brand in West Africa, now has an online food service (Chivunga and Tempest, 2021). Additionally, in support of the "new ways of work" (occasioned

by the COVID-19 pandemic), governments and businesses had to introduce new business models and digital solutions to survive.

However, there are parts of the African continent with underdeveloped infrastructure and systems thus limiting the growth and adoption of e-commerce. In addressing these challenges, the Southern African Development Community (SADC) is putting in place institutional, legal, and ethical regulatory frameworks to ensure that the adoption of e-commerce takes root in socio-economic structures. It is of paramount importance that the policies put in place are recognized and implemented in the SADC regions to empower Africa's e-commerce growth and lead businesses in the continent to adequately participate in global business value chains.

2.4 E-commerce (online shopping) platform in the context of South Africa

2.4.1 *A Profile of South Africa*

South Africa is a country of contrast and a complex market. It is an economic giant compared to other African economies. The unemployment rate stood at a record high of 35.5% in the fourth quarter of 2021 and decreased to 34.5% in the first quarter of 2022. This was due to a 60,000 decrease in unemployed persons (Trading Economics, 2022). In the same quarter, employment rose by 370,000, bringing it up to 14.9 million. Job gains were seen mostly in the community and social services, manufacturing, and trade sectors.

Gauteng Province contributes over a third of South Africa's economy and dominates every sector except Mining and Agriculture. Mining industry is predominated in Limpopo, Mpumalanga, North-West, and Western Cape provinces. KwaZulu Natal Province has the country's largest Farming and Manufacturing sectors. Government Services make the biggest contribution to the economies of the Free State (followed by Finance) and the Eastern Cape (followed by Trade, Catering, and Accommodation). Finance is the largest industry in the Western Cape, followed by Trade, Catering, and Accommodation

(a sector that roughly corresponds to Shopping, Leisure, and Tourism) (South Africa Gateway, 2021).

In July 2021, KwaZulu-Natal and Gauteng provinces experienced riots and looting of business. The unrest occurred during a tough economic period and the two provinces accounted for almost half (48.9%) of all job losses (South Africa Gateway, 2021), loss of properties, business stock, medical and pharmaceutical supplies, food distribution centers, financial services, and telecommunications facilities (Vhumbunu, 2021). The Shoprite Group of stores reported that out of its 1189 supermarkets, 200 Shoprite Group stores were looted and vandalized, including Checkers Hyper among its other supermarkets. Massmart reported that 41 stores were damaged and 113 telecommunications installments vandalized (Vhumbunu, 2021).

The South African socio-economy does not only portend “doom and gloom” scenarios, as there are success stories of South African companies performing increasingly well on the African continent. This is due to the overwhelming positive track record which is directly related to the peer-learning and coping strategies adopted to address many challenges that have been faced in recent years. For instance, Shoprite’s Checkers is today the largest food retailer in Africa, whereas in the telecommunications sector, the MTN group has expanded aggressively into Africa, thereby growing its digital footprint on the continent (Grobbelaar, 2003).

2.4.2 *Trends in E-commerce (online shopping) Plaforms in South Africa*

Online shopping has made life easier as it has eliminated the struggle associated with visiting multiple stores in person. E-commerce allows users and customers to visit different online retailers at once from the comfort of their homes or wherever they are located geographically. Some of the South African online shops have enhanced reputations, offering quality products at competitive prices and with timeous deliveries.

Apparel and footwear, gadget devices, household appliances, and health products, are the most popular categories among South African online shoppers (Deloitte Digital, 2021). These are highly popular categories and trend comparatively to global online shopping preferences. The top category in South Africa is fresh food features. This trend could be the result of lockdown measures introduced in response to COVID-19 which gave grocery retailers a strong boost.

When reviewing the cheapest e-commerce (online retailer), it is a challenge to identify one due to promotions, discounts, and bargains running at different times. To stay relevant and remain the most preferred platforms, the online retailers must position themselves in offering “cashback” to the customer, which is viewed as a unique selling point.

The table below lists the top 5 South African online platforms with their unique selling point (PMD, 2020):

Table 1: Top 5 South African online platforms

E-commerce (online retailer) platform	**Descriptor**	**Unique selling point**
Takealot.com	SA’s leading online marketplace platform which sells goods to over 1.8 million people	Free delivery over R450. Orders can be collected nation-wide.
Makro	Offers a business-to-business online store. Physical stores available nationawide, well known for promotional bulk sales	14-day return policy. Orders can be collected in-store, at collection lockers and can be delivered as well.

Superbalist.com	Centered on women's and men's clothing, accessories and shoes. Children's fashion, sports apparel, beauty products, and home décor products. R250 off first purchase.	Same free delivery for orders of R450 or more, and a pick-up/collection option.
Mrp.com	Sells clothing, accessories, beauty products. 30-day return policy.	Deliveries for purchases over R350 are free.
Woolworths	Sells beauty products, clothing, food, and homeware.	First-time online shoppers' get free delivery. 60-day return policy.

Source: Top 5 South African online platforms with their unique selling point (PMD, 2020).

2.4.3 *The South African E-Commerce Retail (Online-Shopping) Consumer*

According to (Pargo, 2021) consumers over the age of 60 are found to comprise 25% of South Africa's online shoppers. As such, online shopping accommodates a spectrum of consumer types, those with limited technology experience as well as the "tech-savvy" millennial generation. Due to the nature of online shopping, consumers are required to have funds available in their electronic account for payment, it is found that consumers aged 35 and above can afford to shop online due to their higher income earnings (Pargo, 2021). It is a popular belief that a typical household would have women leading in online shopping trends and contolling expenditure. However some women prefer the traditional in-store experience.

The high rise in popular products being available online such as online tickets (for travel and events), e-books, and reservations, has created instant gratification among consumers as they do not need to wait for delivery or travel to purchase these items (Deloitte Digital, 2021). Convenience and price have driven high online shopping motivations. This has allowed consumers to maximize their productivity and being able to carry out other tasks and affords them to be at a different location while their purchases are being delivered (Pargo, 2021).

The benefit of online shopping is that it is available to consumers 24 hours a day and 7 days a week throughout the year. Moreover, the most popular times when consumers shop online have been found to be during lunch breaks. This can be assumed as a window period where consumers stay-in and shop online instead of walking or driving to shops and trying to make it back on time to continue with their day. (Pargo, 2021) found that 25% of online shopping in South Africa takes place between 9 am (morning) and 12 pm (noon), and a further 28% of online purchases occur in the evening after work hours between 6 and 9 pm (evening). Furthermore, South African consumers expect reliable delivery times that fit into their daily schedules and are willing to pay for specific dates and times

2.5 Theoretical Underpinnings of the Conceptual Model

2.5.1 *The Consumption Value Model*

The act of using up a resource is the basis of consumption. Value on the other hand is seen as *merit,* where the regard for something is held as important or useful, *principle*, relating to standards of behavior or individuals' judgement of what is important, *monetary*, estimation of worth, and *esteem*, appreciation for or a high opinion of something or someone. The consumption value model focuses on factors that predict consumer value. It analyses the 'where' and 'what' consumers find as value that can therefore influence their decisions to purchase a product or service. Sheth, Newman and Gross (1991) posited that value is typically perceived as a primary tool with which to understand human behaviour and conduct business transactions.

Ramayah and colleagues (2018) cite Schechter's (1984) definition of value as an aspect that makes up shopping experience. Zeithaml (1988) described the overall product utility assessment as the perception of what is received and offered, although this my vary between consumers. Product features, quality performance, and results, are what consmers rely-on to form their purchase intentions. As part of the consumer behavior, marketing, and economics literature, the value components used to try to understand consumers' choices and behaviours comprise emotional value, value for money, and quality. Turel, Serenko and Bontis (2010) describe hedonic products as symbolic or non-tangible in nature, and the consumption process requires emotional involvement and mental effort, which relates to the online shopping experience where products are presented virtually with the provision of product descriptors and dimensional views (e.g. 3D display).

The consumption value model integrates components of various consumer behavior models and assumes that consumer choice is a function of multiple consumption values. Product experience and interaction derives consumer value which helps consumers make an informed decision. Turel et al., (2010) refers to two motives as reason for consumers to aquire products, and services functional needs and non-functional wants. These are associated with social, emotional, and epistemic values which help consumers make intrinsically and extrinsically motivated informed decisions.

2.5.2 *Cue Utilization Theory*

The Cue Utilization Theory identifies cues that promote consumption behavior. Xiao, Guo, Yu and Liu (2019) describe it as products being conveyed through a series of cues in order for the customer to make judgement of their qualities. Cox (1967) made an attempt to develop the model incorporating two factors that influenced cue usage, namely Predictive Value (PV) which measures consumers perceptions that the validity of a cue indicator has one or more subjective attributes (consumers associate with product quality), and Confidence Value (CV) reflecting the confidence degree a consumer may have in distinguishing between cues and correctly evaluating these differences. Cue utilization considers a high

predictive and confidence value as important roles when evaluating value (Xiao et al., 2019).

Olson (1972) extended the model, adding a third variable that identified intrinsic and extrinsic cues. Intrinsic cues are the physical characteristics of the product (product size, shape, colour, etc.) and cannot be changed or controlled. On the other hand, extrinsic cues (brand and price of product) are not part and parcel of physical attributes.

When evaluating a product, consumers rely on intrinsic cues, trusting the appearance of a product. It is found that changes made to the products physical appearance (product quality) are less likely to be observed than price changes, even though product standards are judged on quality (Wheatley, Chiu, and Goldman, 1981). The relationship between product quality and its impact is the inverse, causing consumers to rely on a product's physical appearance for their judgement on quality.

Olson (1972) suggested that when the consumer is confronted with many cues they might investigate a limited number. Moreover, if the order of the cues becomes important, then it would highly become possible that the preferred cue will be the one utilized. As an example, if the consumer prefers to make a product evaluation using its intrinsic cues, then the extrinsic cues with a high predicted and confidence value may not be considered for decision making. This is contrary to Wells et al., (2011) where it is said that consumers rely on extrinsic cues to assess product quality.

2.5.3 *Theory of Reasoned Action (Extension Theory)*

The Theory of Reasoned Action (TRA) is used for social psychology in various research fields including psychology, management, and marketing, to explain human behavior. It sought to understand and predict human behavior (Fishbein and Ajzen, 1975). The theory suggests that the individual's attitude can form intentions which then influence their actions and predict behavior. Fishbein and Ajzen (1975) describe behavioural intention as "the likelihood of engagement in particular behaviour", meaning that the intention to behave influences individuals'

actual behavior. This is further explained by Zhao, Fang and Jiang (2020) who observed that behavioral intentions are antecedents of behavior and inform the probability of action of a particular behavior that will bring about a specific outcome.

The TRA views “intention” as a form of “attitude” which is influenced by social pressures (subjective norms) and leads to an intended behavior. Tsai, Chen and Chien (2012) explain that TRA maintains attitude and subjective norms as having independent effects on intention leading to three possible outcomes, that is, intentions are a function of (1) only attitude, (2) only subjective norm, and (3) attitude and subjective norm. When interaction between attitude and subjective norm is hypothesized, it is suggested that attitude is expressed intentionally only when social support is co-present (Tsai, Chen and Chien, 2012).

In consumer behavior, TRA states that purchase intention is affected by consumers assesment of benefits and risks associated with the purchase action, which will then determine if they will conduct purchase behavior or not (Zhao, Fang and Jiang, 2020). This can be aligned to Tsai et al’s (2012) analogy that external environmental factors influence behavior indirectly through attitudes and subjective norms.

2.6 The Concept Of Online Purchase Intentions

There have been several studies on factors affecting online purchase intentions. Literature is reviewed in this section through an analysis of journal articles where different theoretical models have been drawn on to examine factors that influence online purchase intentions across various disciplines.

Dodds et.al, (1991) defined purchase intentions as the possiblity of a consumer’s attempt to purchase a product. Purchase Intentions is often taken as an important variable for predicting behavior. Therefore, the measurement of purchase intentions can act as a behavior prediction variable.

2.6.1 *Review of Journal Articles*

Wu and Lee (2012) used medical and cosmetic products for their study and found that there is a high positive impact between consumers blog involvement and purchase intentions. This is on the basis of consumers that have high blog involvement who will tend to use the product-related information found in discussion forums. This indicates that the effect of trustworthiness does not affect consumer purchase intentions.

Attitude is interlinked with behavioral intention whereby the existing literature shows that there were significant impacts between attitude and intention. Using the Theory of Reasoned Action model, Al-Nasser et.al (2014) found that attitude is complex and multi-dimesional, consisting of cognitive, affective, and conative elements. Through exploratory factor analyses (two factor solutions), attitude towards online shopping has been found to exhibit very good reliability indicating a significant and postive impact towards purchase intentions.

Artificial Intelligence (AI) has provided dynamic developments in the world of big data. There is a new generation of popularised marketing applications. Marketing has moved from one-way directional to an interactive approach with customers, products, and services (Yin and Qiu, 2021). In their study, Yin and Qiu (2021) investigated the relationship between AI technology and online purchase intentions by analysing the mediating role of perceived hedonic value and perceived utilitarian value. They found that the online shopping experience through AI marketing technology is advantageous and improves consumers perceived value. This means that the more accurate the AI technology is, the more helpful it is towards customers, thereby enhancing their utilitarian value and perceived hedonic value. The study further found that although perceived utility value and hedonic value can influence consumer purchase intentions, online shopping platforms and AI marketing technology cannot directly influence consumer purchase intentions as perceived utility value and hedonic value are effective mediators.

2.7 The Determinants (Antecedents) of Online Purchase Intentions

While technology has introduced various ways of communicating and extended options for consumers to access and make purchases, it is essential for research to help managers understand the influence of communication channels in a digital world. It is important to also undertand the antecedents or determinant factors of customer purchase intentions. It is noted by Bebber et al., (2017) that since the rapid growth of marketing channels, e-commerce has been gaining the attention of researchers and market professionals. Therefore, it has become paramount to understand why customers are willing or not willing to make online purchases.

Bebber et.al, (2017) identified informal quality, distrust, and perceived risk as determinants or antecedents of online purchase intentions. They refered to information quality as customer judgement and evaluation on information availability, characterising it by the degree of precesion and relevance. This included the degree to which the information is understable, as well as its presentation (format) and usefulness. The authors understood distrust as the negative expectation that the customer has about the conduct of the other party (seller) concerning a transaction or business relationship being reliable due to fear, skepticism, and caution. This is in comparison to the trust factor described by Mesharan et,al. (2013) as the willingness to accept the possibility of incurring a loss during the shopping process. Mesharan et,al. (2013) identifies trust as a factor that has a strong direct effect on online purchase intentions, observing that a lack of trust leads to a negative effect on the willingness to purchase online. Perceived risk is quoted from Bauer (1960) who defined it as “the feeling of uncertainty the customer has when he cannot predict the consequence of a purchase decision”. The application of this definition in a study conducted by Bebber et,al (2017), was contextualised as when a customer recognises the possibility of loss or other negative outcomes when buying and/ or using a product or service.

Bebber et,al (2017) found distrust to be an inhibiting factor for customer purchases and recommended interaction improvement such as instant chats to

decrease customer doubts and help facilitate interaction. Companies that have these facilities already need to have them available full-time. It was further found that perceived risk had a negative impact on purchase intentions, and is a result of customers relating their familiarity experiences (involving risk). The relationship between information quality and purchase intentions has a positive impact as supported by previous literature. The authors encourage that to ensure repurchase intention, managers should keep their online platforms informative with services that meet customer needs, and with the feeling of reliability and safety.

Other studies included (but are not limited to) the following variables as factors that affect online purchase intentions:

Table 2: Factors affecting online purchase intentions

Variable	**Description**	**Literature Source**
Privacy	The willingness of customer to share information via the internet	(Belanger, Hiller, & Smith, 2002); (Tariq and Eddaoudi, 2009)
Web Features	Ease of navigation and professionalism of the website or user interface quality Categories of privacy, security and pleasure on a website	(Belanger, Hiller, and Smith, 2002)
Past Online Experiance	Customer behaviour is dependent on experience quality which can be obtained only through prior purchase experience	(Laroche, Yang, McDougall, & Bergeron, 2005)

Note: Literature review on online purchase intentions.

A study by Akar and Nasir (2015) further highlights independent variables found in 85 literature articles that have impact on online purchase intentions. The variables are classified into categories illustrated in **Error! Reference source not found.** (namely consumer characteristics, website characteristics, characteristics of web-as-a-sales-channel, merchant characteristics, social media, and product characteristics) adapted from Chang et al., (2005):

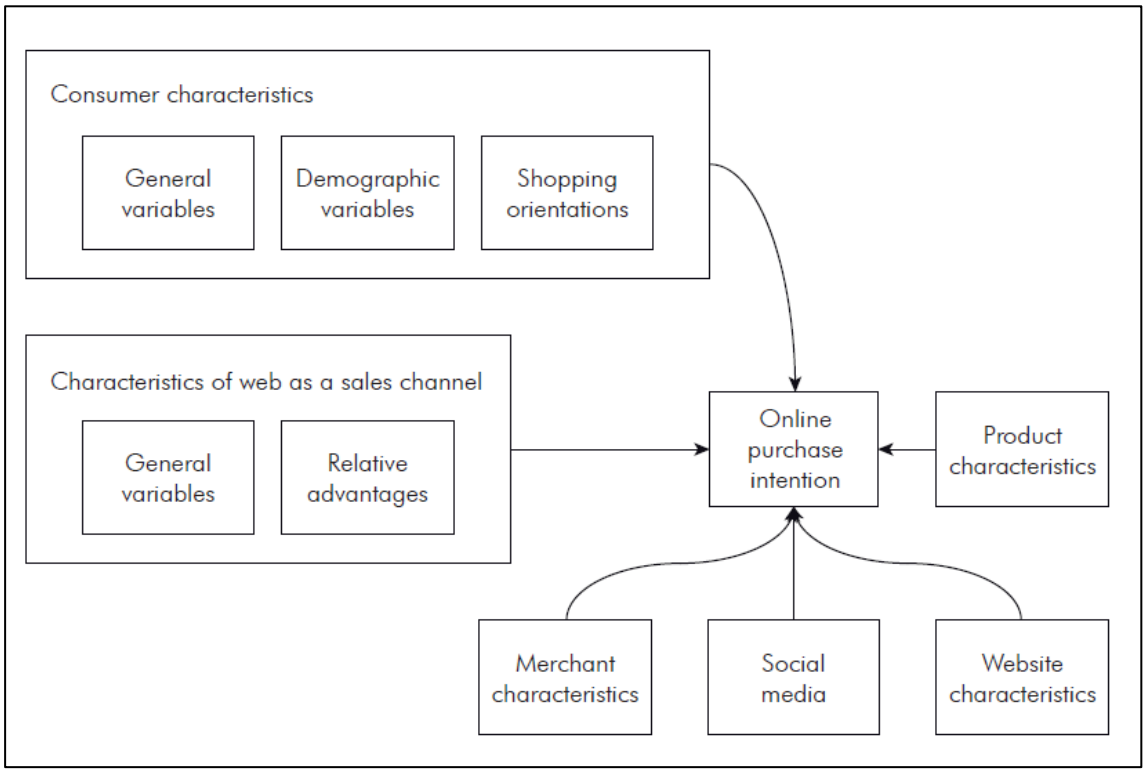


Figure 2: Categorisation of frameworks (Chang et.al, 2005)

2.8 Conceptual Model Development

2.8.1 *Dependent Variable*

i) Online Purchase Intentions

Purchase intentions is defined as a consumer's intentions to create an online association and engagement with online vendors (Zwass, 1998). In this study, purchase intentions refers to the customers willingness and readiness to make an online transaction. Online transaction is referred to as an activity consisting of

three sequential steps, namely ‘information retrieval’, ‘information transfer’, and ‘product purchase’ (Pavlou, 2003). Purchasing online has become a necessary and popular activity that is carried through effectively. The rise of online activity has shown more people finding ease of access to a variety of information and online purchase options. Online retailers are providing efficient ways and improving customer online shopping, which can then motivate purchase intentions. In the present study, variables that are viewed as influencing consumer purchase intentions on an e-commerce (online) platform in South Africa are perceived functional value, perceived social value, perceived emotional value, perceived epistemic value, perceived conditional value (Ramayah, Rahman, and Ling, 2018), online promotion, brand familiarity (Xiao, Guo, Yu, and Liu, 2019), perceived risk, and trust (Zhao, Fang, and Jiang, 2020).

2.8.2 *Independent variables and proposed Hypotheses*

ii) Perceived Functional Value

The level of efficiency and convenience to access offerings on an online platform is considered as functional utility. Online shopping has better value when compared to conventional shopping as it is capable of producing desired results timeously (Pavlou, 2003). The functional value is more likely to increase consumer purchase intentions when shopping on an e-commerce (online) platform. Hence the study’s first hypothesis:

Hypothesis 1 (H1): Perceived functional value of the e-commerce (online) platform is positively related to online purchase intentions.

iii) Perceived Social Value

Sheth and colleagues (1991) describe social value as a perceived utility attained from various social groups in multiple platforms (online and/or offline). The Internet plays a crucial role in how a product or service image is socially positioned among consumers, as this can influence the consumer’s purchase choices. There is a range of online communication channels and social platforms

which consumers use to socially share their experiences and information. Therefore, the second hypothesis is put forth:

Hypothesis 2 (H2): The perceived social value of e-commerce (online) platforms is positively related to online purchase intentions.

iv) Perceived Emotional Value

Perceived emotional value describes the intangible experience consumers experience when engaging with a product or service. This goes beyond economic or monetary value. Sheth, Newman and Gross (1991) describe it as perceived utility that is experinced at different capacity-triggering emotions and feelings in a constructive manner. Emotional value represents customer willingness to accept a state of a product, service and experience (once financial lens is excluded), which can influence purchase decisions. In retail, positively invoked emotions create enjoyment and entertainment (Ducoffe, 1996). This then leads to hedonistic value creation (Hoffman and Novak, 1996). The intentions to purchase online is associated with a range of emotions, hence the third hypothesis is proposed:

Hypothesis 3 (H3): The perceived emotional value of e-commerce (online) platforms is positively related to online purchase intentions.

v) Perceived Epistemic Value

With the wide range of products available online, consumers have buying power to choose preferred product brands they would like to purchase. Epistemic utility results from stimulation for which it is somewhat unclear where it comes from (Long and Schiffman, 2000). Thus, with wide access to various products, consumers can voluntarily choose another product as they may be bored with the previous purchase, or simply to satisfy their curiosity for other offerings. For this reason, customer loyalty is hard to maintain. Ramayah et al., (2018) explained that with online shopping, epistemic value can influence both purchase intentions and switching behaviors. Online retailers should then regularly create new and

updated shopping catalogues to cater for customer curiosity. Therefore, the fourth hypothesis is put forth:

Hypothesis 4 (H4): Perceived epistemic value of e-commerce (online) platforms is positively related to online purchase intentions.

vi) Perceived Conditional Value

Conditional value stems from a specific situation or context of a purchasing decision (Long and Schiffman, 2000). It refers to situational contingences offering alternatives to a temporary situation. This may have influence over the consumers decision making process. Situations (temporary stock-out situations) may impose customers to choose an alternative choice, thus impacting decisions affecting their purchase intentions. Retailers then create favourable situations that will increase consumer intentions to purchase. Therefore, the fifth hypothesis is put forward:

Hypothesis 5 (H5): Perceived conditional value of e-commerce (online) platforms is positively related to online purchase intentions.

vii) Online Promotion

Price promotion can create economic incentives and attract customers to purchase products or services (Raghubir and Corfman, 1999). Price promotions are always sought after by customers as they tend to offer cheaper deals for good products (value for money). This increases customer purchase intentions. Xiao and colleagues (2019) express from an online shopping context, that when faced with retailers offering the same product at different costs, consumers tend to express their purchase intentions with the retailer selling the product at a lower cost. Therefore, the sixth hypothesis:

Hypothesis 6 (H6): Online promotion cues on an e-commerce (online) platform is positively related to online purchase intentions.

viii) Brand Familiarity

Brand familiarity reflects the extent to which a consumer has experience with the brand (direct or indirect experience). This relates to brand positioning in the mind of a consumer. Xiao and colleagues (2019) state that consumers form attitudes towards brands, and familiar brands have advantages over unfamiliar ones as less effort is made when processing information about the brand given that it is usually a trusted and preferred offering. Research from the extant literature indicates that popularly known brands have strong heuristic cues that influence purchase intentions (Maheswaran, Mackie, and Chaiken, 1992). Therefore, the seventh hypothesis is proposed:

Hypothsis 7 (H7): Brand familiarity cues on an e-commerce (online) platforms is positively related to online purchase intentions.

ix) Trust

Zhao et al., (2020) quotes trust as defined in the Merriam-Webster dictionary as a “belief that someone or something is reliable, good, honest, and effective”. This definition by all means shows how humans value and see the importance of trust when engaging with others or with ‘something’ (an online shopping platform). Trust allows consumers to proceed with transactions even when there are uncertainties. Without trust consumers may not want to engage with online shopping. In building trust with an online platform, consumers evaluate the seller’s or retailer’s ability to share information detailing product and service descriptions, and keep their promises and goodwill to ensure customer service (Pavlou, 2003).Therefore, the eighth hypothesis is proposed:

Hypothesis 8 (H8): Trust in an e-commerce (online) platform is positively related to online purchase intentions.

x) Perceived Risk

When a trusting attitude is formed towards a technology, there is also a perception of risk that goes with it. Therefore perceived risk influences the extent

to which a technology is trusted. This aligns with Lu et al's (2010) statement that for trust, perceived risk is identified as one important antecedent. Perceived risk is defined as "the felt uncertainty regarding possible negative consequences of using a product or service" (Pavlou, 2003). Perceived risk acts as an inhibitor to purchase behavior, as it is the expected loss associated with online shopping. This is due to the lack of visibility and transparency that causes fear against online shopping. If perceived risk (be it product or financial risk) is too high, consumers may stop online shopping as they rely on information provided (text and images), whereas in physical stores, consumers are able to touch and feel products before committing to purchase (Zhao, Fang, & Jiang, 2020). The act of sharing personal information over the Internet is also perceived as a risk which can lead to cybersecurity issues (Araujo and Araujo, 2003). Therefore, the ninth hypothesis follows:

Hypothesis 9 (H9): Perceived Risk in an e-commerce (online) platform is negatively related to customer Trust.

2.9 Conceptual Model of the Study

The proposed conceptual model is constructed using seven key variables and two extended variables underpinned by two main theories and one supporting theory, respectively.

2.9.1 *Conceptual Model*

The study's conceptual model is underpinned by the Consumption Value Model (Sheth et al., 1991), Cue Utilization Theory (Olson, 1972), and the Theory of Reasoned Action (TRA) (Fishbein and Azjen, 1975).

The first main theory (Consumption Value Model) integrates components of various consumer behavior models and assumes that consumer choice is a function of multiple consumption values. The second main theory (Cue Utilization Theory) identifies cues that promote consumption behavior, focusing on the intrinsic (product characteristics) and extrinsic (product attributes) cues. The supporting theory (Theory of Reasoned Action) sought to understand and predict

human behavior, suggesting that the individual's attitude can form intentions which then influence their actions and predict behavior.

This conceptual model developed to examine the relationships between a set of determining factors and consumer online purchase intentions when using e-commerce (online shopping) platforms, is presented in . As shown, the determining factors Perceived Functional Value, Perceived Social Value, Perceived Emotional Valuue, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, Perceived Risk, and Trust are related as determinants to e-commerrce shopping platform consumers' Online Purchase Intentions.

The nine constructs (factors) depicted in the conceptual model () and identified following a review of the existing literature on online purchase intentions contribute towards providing an answer to Research Question 1. These constructs (factors) and their effects on online purchase intentions will in turn be examined among South African consumers to answer Research Question 2.

The variables age, gender, education, income, internet experience, and online shopping experience, will be included and controlled for when empirically testing the study's conceptual model. This will be to determine whether these variables have any potential confounding effects on consumer purchase intentions. This is consistent with past studies (e.g. Xiao et al., 2019), where the potential effects of demographic variables such as age, gender, education, and income, were controlled for and tested for their potential confounding effects on online purchase intentions as the dependent variable.

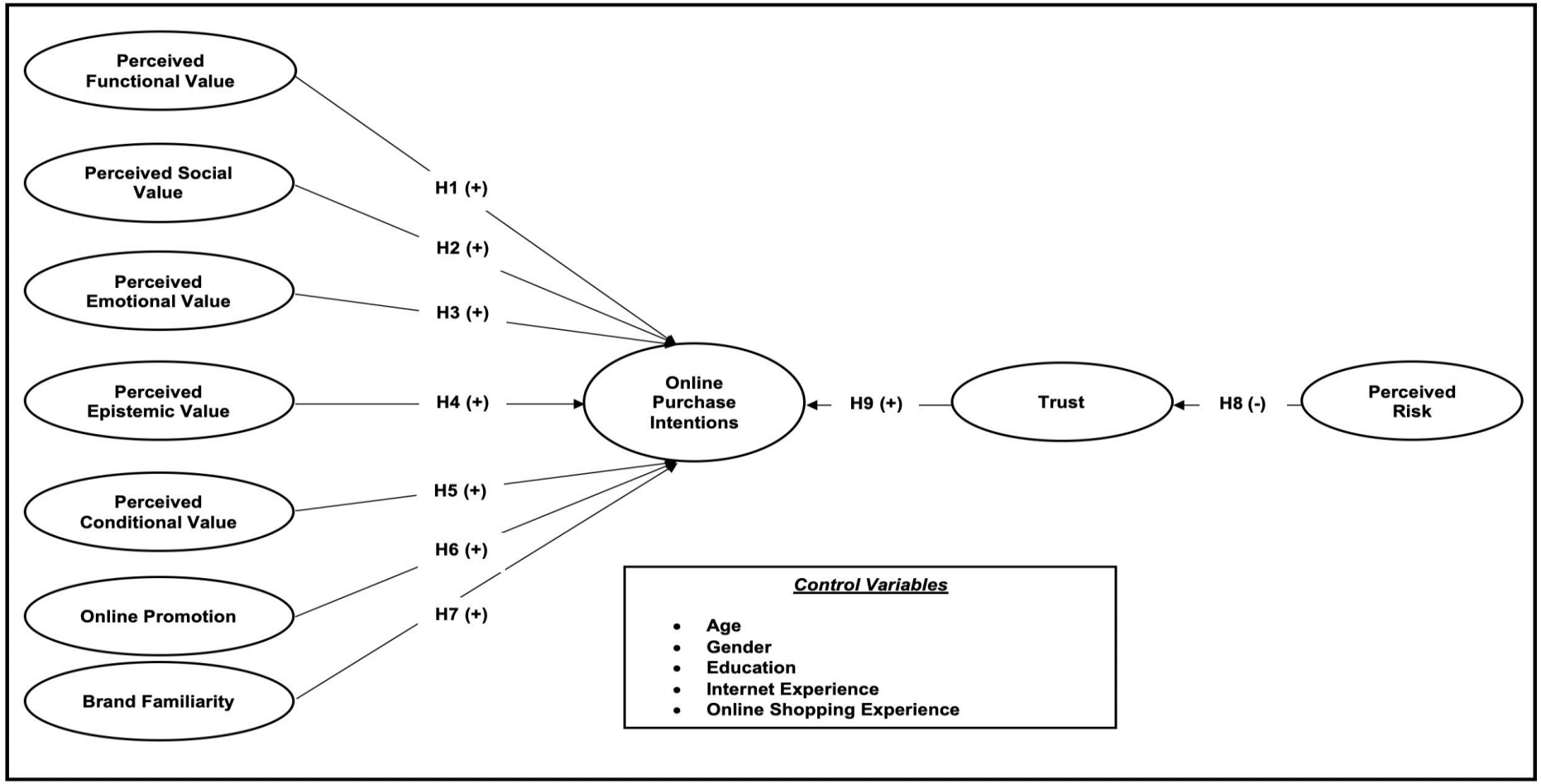


Figure 3: Conceptual Model

2.10 Conclusion

A literature overview of e-commerce concepts and trends Globally, in Sub-Saharan Africa, and in the South African context, were provided. Journal articles on the determinants (antecedents) and concept of online purchase intentions were extensively reviewed. The literature provides origins of e-commerce (online shopping). The construction of the conceptual model comprised seven key variables selected from two main underpinning theories (Cue Utilisation and Consumption Value Model) and two variables from one supporting underpinning theory (Theory of Reasoned Actioned). The conceptual model's hypotheses were developed to examine the relationship between a set of independent variables and online purchase intentions as the dependent variable.

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Research approach

The study employed a quantitative approach. This approach was deemed appropriate as the study was focused on large groups of people from which a representative sample generalised to the relevant target population could be obtained (Holton and Burnett, 2009). The approach involved studying relationships between independent variables and a dependent variable, collecting quantifiable data, and testing an empirical model. The quantitative approach allows for objective observation whereby data is used to measure reality (Williams, 2007). This assumes that reality is objective and independent of the researcher. “The intent of quantitative research is to establish, confirm, or validate research relationships and develop generalisations that contribute to theory” (Leedy and Omrod, 2001). Data were collected and analysed to examine a set of hypothesised independent variables in terms of their relative effects on Online Purchase Intentions as the dependent variable of the study. This supports the use of a quantitative deductive approach that is explanatory in nature (Mayer, 2015).

3.2 Research design

The study adopts a descriptive design which is consistent with the employed quantitative approach. Descriptive research attempts to define situations as they currently exist (Williams, 2007). It is appropriate for this study as it allows the researcher to collect comprehensive data on the population that will be studied, so that relevant recommendations can be adequately provided. Omair (2015) concurs with Holton and Burnett (2009) expressing that a descriptive study generalises findings from a sample to a larger (target) population via a cross-sectional survey (with no comparison group). The advantage of a cross-sectional survey is that outcome prevelance and risk factors can be detemined.

Furthermore, the survey is to be conducted at a particular “point-in-time” and never to be repeated.

3.3 Population and sample

3.3.1 *Unit of Analysis*

The unit of analysis is a classification of the specific unit to be sampled (Blanche, Durrheim and Painter, 2008). The target sample for this study comprised of consumers (users) of e-commerce (online shopping) platforms in the South African context (Bhattacherjee, 2012). This unit of analysis is a data point. Thus, data surveyed from data points must use a survey instrument (structured questionnaire).

3.3.2 *Population*

For the purposes of the present study, the researcher targeted a population of active consumers (users) of e-commerce (online shopping) platforms screened based on their access to the Internet as a transaction medium whether on their traditional Personal Computers (PCs) or mobile devices. In light of the need to further analyse the South African e-commerce (online shopping) context, this consideration was informed by the assumption that shoppers (consumers) who regularly purchase goods on online store platforms or through websites and applications have Internet connectivity. In other words, all shoppers who have access to and interact with e-commerce (online shopping) platforms to purchase goods will be considered for sample selection.

3.3.3 *Sample*

The sampling stage of this study involved two phases. The first entailed identification of e-commerce (online shopping) users from which a sample could be selected. The second involved describing the sampling approach used to collect data. A cross-section of e-commerce (online shopping) platform users who use either traditional computer-based or mobile-device-enabled tools as

shoppers on the Internet were pooled as the sample for this study. This cross-section determined their online presence and status as being part of a community of active online shoppers who purchase products and service offerings on shopping platforms either on websites or through mobile smartphone applications. To ensure this, participants were pre-screened to ensure that relevant criteria were satisfied. For instance, respondent online shoppers (consumers) were screened by requesting them to indicate their levels of experience using the Internet and online shopping platforms. In addition, these targeted shoppers (consumers) were aged 18 years and above. These participants are considered likely regular Internet subscribers and frequent users of various e-commerce (online shopping) platforms.

3.3.4 *Sampling method*

A sampling decision informing the context and objectives of the study was concluded. The context involved communities of shoppers who use e-commerce (online shopping) platforms in the South African context. These shoppers included those who use both traditional PCs or mobile devices to purchase goods on Internet stores (websites) or through smartphone applications. The primary requirement for engagement with online shopping platforms was access to Internet connectivity. A pooled sample of South African shoppers (consumers) who use e-commerce (online shopping) platforms accessed through traditional PC's or mobile devices. These consumers purchase goods on Internet websites or via smartphone applications.

As such, background information on population characteristics can be used to arrive at a decision (Henry, 1990; Neuman, 2003). The accessible population of respondents were found on professional networks such as LinkedIn and WhatsApp. The researcher further obtained research participants through a referral process, whereby respondents shared an electronic link to an online questionnaire with their respective networks (snowballing). The method of snowballing was effective considering that a reach covering the online population (consumers) who use e-commerce (online shopping) would be a challenge. Although snowball sampling carries an inherent risk of selection bias, there is a

likelihood of respondent referrals being similar in characteristics and knowledge (Saunders, Lewis and Thornhill, 2003). However, given that online shopping is a personal and unique experience, this sampling method was justified.

Of those respondents reached out to, only those who were screened and confirmed to have an internet connection as users of e-commerce (online shopping) platforms to purchase goods through Internet stores or using smartphone applications, were sampled. Furthermore, a cross-sectional online survey was used to elicit data from the pooled sample of online shoppers (consumers) via the shared electronic link to the questionnaire which was developed using the Qualtrics survey platform. This electronic link was disseminated through PC (included in e-mail) and mobile based platforms (e.g. LinkedIn and WhatsApp). For statistical inferences to be possible in this study and to enhance the statistical power of the proposed conceptual model, a minimum sample ratio of 20 observations for each independent variable is preferred (Hair, Anderson, Babin and Black, 2010). As the number of independent variables in the conceptual model developed for the present study equals 10, it was determined that this threshold would yield a minimum sample size of at least 200 respondents (n = 200). Thus, a total number of 203 responses was received following the study's data collection phase.

3.4 Data collection

Data collection involves the development of measurement instruments and identification of data sources (Krishnaswamy, Sivakumar, and Mathirajan, 2006). Primary data for the present study were collected using a structued survey questionnaire as the measurement instrument of choice. The questionnaire comprised close-ended questions for which 5-point Likert scales ranging from "1= strongly disagree" to "5 = strongly agree" were predominantly used as the response selection criteria. This was preferred for the study as it allows for data collection from a large sample across groups of respondents. For additional details, refer to the Research Instrument presented in Appendix C. Each questionnaire was completed in approximately 15 minutes.

3.4.1 *Research instrument construction*

This study measured ten constructs, namely “Perceived Functional Value”, “Perceived Social Value”, “Perceived Emotional Value”, “Perceived Epistemic Value”, “Perceived Conditional Value”, “Online Promotion”, “Brand Familiarity”, “Perceived Risk”, “Trust”, and “Online Purchase Intentions”. To ensure instrument consistency, these variables were measured using 5-point Likert scales ranging from “1= strongly disagree” to “5 = strongly agree”, and with multiple item measures. This enabled target respondents to respond with their levels of agreement or disagreement with a given statement used to measure a particular construct dimension (Carter, 2009). Likert scales are respondent-friendly and allow for responses to be coded. Further, these scales have been observed to be reliable for the measurement of human behaviour indicators (Oliver and Linda, 1981). Each instrument variable consisted of between three to six items, adopted for the study’s context from measurement scales validated in prior literature.

Table 3: Instrument Measures

Instrument Measures			
Variable	Scale Item	Statement	Literature Source
Perceived Functional Value	PFV 1	[E-Commerce (Online Shopping) Platforms] services are reliable.	(Lee, Lee, Kim and Kim, 2022)
	PFV 2	[E-Commerce (Online Shopping) Platforms] services have good functions (features).	
	PFV 3	[E-Commerce (Online Shopping) Platforms] provide a timely service.	
	PFV 4	[E-Commerce (Online Shopping) Platforms] services fulfil my needs well.	
	PFV 5	[E-Commerce (Online Shopping) Platforms] services are well provided.	
	PFV 6	[E-Commerce (Online Shopping) Platforms] services have a good standard.	
Perceived Social Value	PSV 1	[E-Commerce (Online Shopping) Platforms] services help me feel acceptable.	(Lee, Lee, Kim and Kim, 2022)
	PSV 2	[E-Commerce (Online Shopping) Platforms] services make a good impression on other people.	
	PSV 3	[E-Commerce (Online Shopping) Platforms] make me familiar with other people.	
	PSV 4	[E-Commerce (Online Shopping) Platforms] services improve the way I am perceived.	
	PSV 5	Using [E-Commerce (Online Shopping) Platforms] service gives me a sense of belonging to other users.	
Perceived Emotional Value	PEMV 1	Using [E-Commerce (Online Shopping) Platforms] services is interesting.	(Lee, Lee, Kim and Kim, 2022)
	PEMV 2	Using [E-Commerce (Online Shopping) Platforms] services is enjoyable.	

	PEMV 3	[E-Commerce (Online Shopping) Platforms] services make me want to use it.	
	PEMV 4	I feel relaxed when I use [E-Commerce (Online Shopping) Platforms].	
	PEMV 5	I feel good when I use [E-Commerce (Online Shopping) Platforms].	
	PEMV 6	[E-Commerce (Online Shopping) Platforms] services give me pleasure.	
Perceived Epistemic Value	PEPV 1	[E-Commerce (Online Shopping) Platforms] services make me curious to explore novel and different products.	(Newman and Gross, 1991) (Ramayah, Rahman and Ling, 2018)
	PEPV 2	[E-Commerce (Online Shopping) Platforms] services make me want to try and purchase different product offerings.	
	PEPV 3	[E-Commerce (Online Shopping) Platforms] services make me want to learn about and experience novel products.	
Perceived Conditional Value	PCV 1	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the preferred product offering is out-of-stock.	(Newman and Gross, 1991) (Ramayah, Rahman and Ling, 2018)
	PCV 2	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the retail price of the preferred product is increased.	
	PCV 3	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the retail price of the preferred product is no longer offered at a discount.	
Online Promotion	OP 1	There are many forms of promotion on [E-Commerce (Online Shopping) Platforms].	(Xiao, Guo, Yu and Liu, 2019)
	OP 2	The promotion of merchandise on [E-Commerce (Online Shopping) Platforms] is very strong.	
	OP 3	The promotion of local products on [E-Commerce (Online Shopping) Platforms] is frequent.	
	OP 4	[E-Commerce (Online Shopping) Platforms] provide enough merchandising information.	
Brand Familiarity	BF 1	I often see ads for product brands recommended by [E-Commerce (Online Shopping) Platforms].	(Xiao, Guo, Yu and Liu, 2019)
	BF 2	I often see the display and recommendation of commodity brands on [E-Commerce (Online Shopping) Platforms].	
	BF 3	I often hear other people discuss the brand of products recommended by [E-Commerce (Online Shopping) Platforms].	
	BF 4	I often buy product brands recommended by [E-Commerce (Online Shopping) Platforms].	
Perceived Risk	PR 1	Compared to traditional shopping channels, purchasing from [E-Commerce (Online Shopping) Platforms] involves more product risk, e.g., product not working or defective product.	(Kim, Ferrin and Roa, 2008) (Zhao, Fang and Jiang, 2020)
	PR 2	Compared to traditional shopping channels, purchasing from the [E-Commerce (Online Shopping) Platforms] involves more financial risk, e.g., fraud or difficulty in returning the product.	
	PR 3	Overall, shopping on [E-Commerce (Online Shopping) Platforms] involves more risk.	
Trust	TR 1	[E-Commerce (Online Shopping) Platforms] are unreliable.	(Jones and Leonard, 2008) (Zhao, Fang and Jiang, 2020)
	TR 2	[E-Commerce (Online Shopping) Platforms] cannot be trusted due to too many uncertainties.	
	TR 3	In general, I cannot rely on [E-Commerce (Online Shopping) Platforms] sellers to keep the promises they made.	

	TR 4	Anyone trusting [E-Commerce (Online Shopping) Platforms] is asking for trouble.	
Online Purchase Intentions	OPI 1	I am likely to purchase products on [E-Commerce (Online Shopping) Platforms].	(Kim, Ferrin and Roa, 2008) (Zhao, Fang and Jiang, 2020)
	OPI 2	I am likely to recommend [E-Commerce (Online Shopping) Platforms] to my friends.	
	OPI 3	I am likely to make another purchase from [E-Commerce (Online Shopping) Platforms] if I need the products I will buy.	

The final paper-based version of the questionnaire (research instrument) is shown in Appendix C.

The use of a structured questionnaire was advantageous as it yielded an effective and efficient response rate. Moreover, there were no cost requirements and a level of convenience was provided. Anonymity was maintained throughout the data collection phase as all responses had no attributes that would identify respondent identities. Furthermore, the use of close-ended questions in a questionnaire allows for precise information to be gathered and is more sustainable when measuring attitudes and perceptions.

3.4.2 *Administration of the research instrument (survey)*

A cover letter was prepared following guidelines and standards from the University's ethics committee. The cover letter was included during the data gathering exercise, explaining the purpose of the study and requesting for repondents to participate in the survey by completing the questionnaire. Data was collected online through means of an online questionnaire using the Qualtrics survey platform. A participatory consent disclaimer was placed as part of the online survey. The participation of respondents in completing the online was taken as their consent to participate in the survey. Partcipants were allowed to quit the survey at any time without being affected. Instructions and the length of time it will take to complete the survey were also stuipulated prior to commencement of the exercise.

3.5 Validity and Reliability

The purpose of validation is to provide researchers with a high degree of confidence that the selected positivist methods are useful in scientific research (Straub, Boudreau and Gefen, 2004).

3.5.1 *Content validity and face validity*

In a quantitative study, content validity refers to the measuremet of a concept or concepts and whether they measure what they are supposed to (Bryman and Cramer, 2011). Face validity measures what should be captured in the study. A pilot study was carried out as it is deemed the first point of protocol for a research process (Hair, Anderson, Babin and Black, 2010). A small sample tested the research instrument and helped to identify gaps that need to be addressed before the main data collection phase for the study.

Content validity helps determine if the research instrument captures the respective query of each construct (Hair, Anderson, Babin and Black, 2010). Further, in confirming the content validity of the research instrument scale, the instrument was pre-tested by a Doctoral student, two Masters students, and a Lecturer. These individuals had prior experience conducting empirical study's on Information Technology (IT) adoption.

To ensure the face validity of the instrument, a pilot study was conducted among 10 respondents from a selected group of members from the target population (this sample was excluded from the data analysis). Pilot respondents comprised a representation of retail industry professionals (from The Foschini Group and Clicks), as well as academics and individuals who use e-commerce platforms on a frequent basis. In ensuring a high degree of validity, a pre-validated instrument was utilised.

The pre-testers and pilot respondents were requested to evaluate the study's questionnaire and provide their feedback on the construction of the questions, use of words (unambiguous and non-tautological), the ease of flow and structure of each section, and any additional comments that could enhance the quality of

the survey instrument. Their feedback was received with minor adjustments recommended and included. The study's questionnaire was administered to survey respondents during the month of December in 2022.

3.5.2 *Construct validity*

Principal Component Factor Analysis (PCFA) is a technique used to optimally derive variables as a reduced number of subsets by merging them (Straub, Boudreau and Gefen, 2004). An Exploratory Factor Analysis (EFA) was conducted using PCFA. The Confirmatory Factor Analysis (CFA) was subsequently used to assess the construct validity (convergence and discriminant). Further, the Average Variance Extracted (AVE) was also assessed, with a value of 0.5 or higher indicating convergence validity. Lastly, the Heterotrait-Monotrait Ratio of Correlations (HTMT) was used to ascertain discriminant validity (Henseler, Ringle and Sarstedt, 2015).

3.5.3 *Convergent and discriminat validity*

Convergent validity tests determine whether a relationship exists between constructs that have relationships, whereas discriminant validy tests indicate whether these constructs are unrelated (Straub, Boudreau and Gefen, 2004). Convergent and discriminant validity test criteria were used to calculate the Average Variance Extracted (AVE) for each study construct. Chin (1998) noted that convergent validity is attained when the AVE for each construct is above a value of 0.50. Discriminant validity was tested by calculating the square root of each construct's AVE ($\sqrt{AVE}$) and checking whether this value is higher than their respective correlations with other constructs (as illustrated in Table 30, Chapter 4).

3.5.4 *Reliability*

The research instrument should be able to measure sample type consistently each time it is used (Creswell, 2009). Cronbach's Alpha reliability coefficient values ranging from 0 to 1 were used to measure internal consistency. This

measure applies to the consistency among the variables in a summated scale, with a cut-off value threshold of 0.70 as recommended by Hair et al., (2010). In principle, the closer to 1 this value is, the stronger the reliability.

3.6 Data Analysis and Interpretation

Data analysis was conducted using the IBM Statistical Package for the Social Sciences (SPSS) (Version 28) and SmartPLS (Version 4) software packages. SmartPLS was used to conduct a Confirmatory Factor Analysis (CFA) using the Partial Least Squares – Structural Equation Modelling (PLS-SEM) approach. PLS-SEM is appreciated in studies where the researcher's aim is to predict and explain target constructs. It is therefore used in this study as the objective is to explain the hypothesised relationship between variables in a conceptual model (Hair, Matthews and Sarstedt, 2017). The analysis process included data screening, a respondent profile and descriptive statistics, and correlation and regression analyses. A measurement model was tested using PLS-SEM which allowed for analysis of validity and reliability of model constructs and their underlying dimensions. Furthermore, a structural path model was used to analyse the hypothesised relationships of the study's conceptual model (Chapter 2, Figure 3).

In prior studies e.g. Jones and Leonard (2008), measures of the multi-item construct Trust have been reverse coded. This is considered particularly when the items for a construct measure negative perceptions yet its hypothesised relationship with the study's dependent variable is positive. Another case where reverse coding has been applied is where negatively worded items within the construct are reversed to align all correlations and loadings in the same factor. It can also be effected to ensure that all construct scale items are oriented in the same direction, typically positive (Hair et al., 2010). In the case of constucts (i.e. Perceived Risk and Trust) conceptualised in the present study where a negative relationship was hypothesised or construct item measures were worded in the negative, the aforementioned conditions were well taken into account by the researcher in ensuring that sign reversals during subsequent analyses did not adversely affect the findngs reported in the study (presented in Chapter 4). The

process of screening captured data included the deletion of rows (which represented respondents response) that had null values, this process is known as the replacement of missing values and the removal of outliers. Respondent and non-respondent analyses were conducted using Microsoft Excel to check for response bias (Creswell, 2009). Numerical codes were assigned and classified into variable groups. This was first implemented in Micosoft Excel and subsequently imported into SPSS for further analyses. Respondent demographic data were analysed and tabulated in addition to descriptive findings (presented in Chapter 4).

Correlation analysis was conducted to ascertain the direction and strength between the variables. The Pearson Correlation coeffient was used to measure their linear associations. The correlation coefficient's degree of association is denoted by *r*. This value denotes the strength of a relationship between two variables. A positive correlation is measured when one variable increases as the other increases. Where one decreases and the other increases, the correlation is negative (Sedgwick, 2012).

A structural path model was used using PLS-SEM, which is a form of Ordinary Least Squares (OLS) regression, to analyse the hypothesised relationships of the study's conceptual model (Figure 3 of Chapter 2). The relation between the dependent variable and independent variables determined through regression analysis. The experimental data of the dependent variable variance is mathematically depicted through regression analysis (Hair, Anderson, Babin,and Black, 2010). The variance is denoted with an R^2 value and contribution significance of each independent variable to the total variance is shown as a Beta value coefficient (Hair, Anderson, Babin, and Black, 2010) (as discussed and shown in chapter 4). In this case path coefficients are equivalent to Beta values which are obtained using standard multiple regression analyses.

3.6.1 *Test for confounding effects (control variables)*

The demographic variables age, gender, education, Internet experience, and online shopping experience were included as controls in estimating the structural path model.

In line with previous studies (e.g. Xiao et al., 2019), the potential effects of demographic variables have been tested as control variables for confounding effects on online consumer purchase intentions.

The selected demographic controls were found to have no confounding effects.

3.7 Post-hoc analysis

To enhance the empirical findings of the study, the researcher took the extra step of applying an additional PLS-SEM test of the mediating role of trust in the relationship between perceived risk and online purchase intentions. This was implemented using mediation analyses with bootstrapping procedures.

3.7.1 *Mediation analyses*

Mediation involves testing the paths between two variables, namely a predictor (X) and criterion (Y), while observing a third intervening variable (M). This is a special variable that indirectly affects the direct effects between these two predictor (X) and criterion (Y) variables via its indirect effect (X → Y via M). The basic mediation model used to inform the post-hoc test conducted in the study is shown in Figure 4

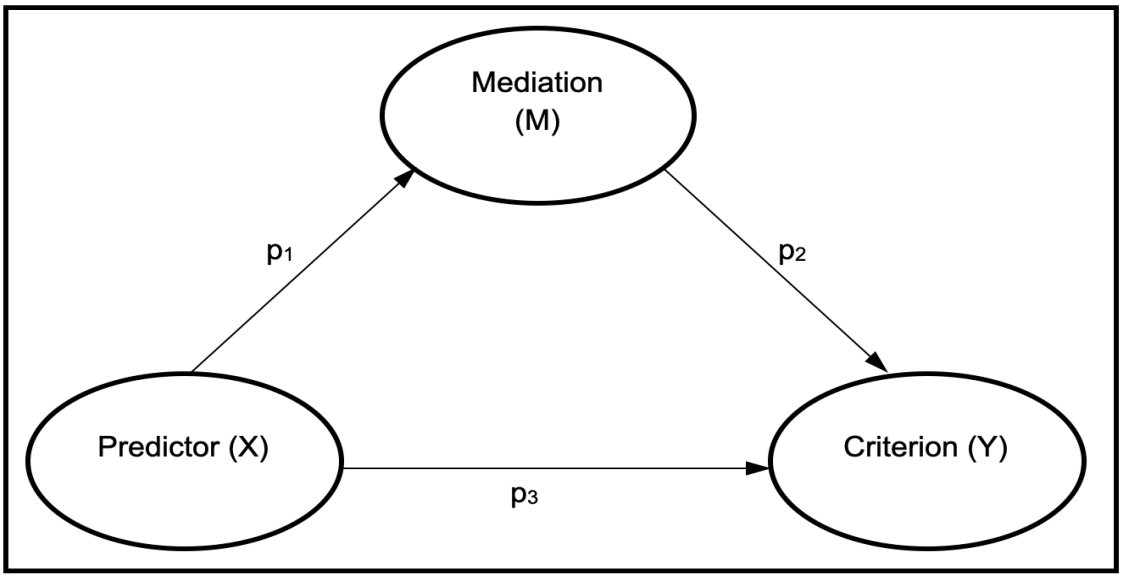


Figure 4: The Basic Model of Mediation

In testing the structural path model for mediation, the researcher sought to answer the three key questions:

1. Is the direct effect of X on Y (p_3) significant when M is excluded?
2. Is the indirect effect ($p_1 . p_2$) of X on Y via M significant when M is included?
3. How much of the direct effect (p_3) of X on Y does the indirect effect ($p_1 . p_2$) account for (partial or full mediation)?

3.8 Limitations and challenges of the study

The use of a survey instrument subjects a study to response bias as self reporting is enabled. Method bias is introduced when all constructs used are measured using a single data source during the interpretation of survey results (Straub, Boudreau and Gefen, 2004). There were five expected limitations of the present study. First, in terms of the study sample size, the online respondents did not represent the entire online shopping population in the context of South Africa. Second, given a limited time frame, not all respondents were available during the period of data collection (over the December festive period). Third, due to self-reporting, respondets may have been subjective and biased to a degree. Fourth, the subjective perceptual behaviors and not objective actual behaviors of respondents were gauged. As such, some respondents may have wished to be viewed in a particular light, which possibly influenced them to reflect desired characteristics other than their actual behavioural traits relating to online shopping. Fifth, in light of the cross-sectional nature of the research conducted in the present study, respondents ‘responses represented consumer behavior at a particular point in time. This could have inhibited causal inference from observation of their evolving purchase behaviours over longer time periods.

3.9 Ethical considerations

Ethical clearance was applied for at the WBS Ethics Committee in July 2022 and clearance was obtained in September 2022 (Protocol number WBS/ DB2412285/305). Permission to conduct the study by accessing Wits students was applied for from the University Registrar’s Office and was approved for in

December 2022. The research was carried out in a manner that ensured that participants' anonymity as well as confidentiality of their data were protected. Nothing beyond basic demographic information was requested. Participants were informed that they may opt out of the survey at any point-in-time making participation voluntary. No third parties were allowed access to the collected data, which was stored on a cloud-based platform. No financial interest was gained by the researcher and participants were not to be incentivised either.

3.10 Conclusion

An approach more appropriate for the present study was identified as quantitative. This is the appropriate research approach as the the present study focuses on large groups of people and generalising from the sample being studied. The approach involved studying relationships between dependent and independent variables, collecting quantifiable data, and testing the empirical model. Descriptive design is identified as appropriate for this study as it allows the researcher to collect comprehensive data. The data collection method identified is the survey questionnaire. For the data analysis, the IBM SPSS (version 28) and SmartPLS (version 4) statistical software packages were used for the present study. Interpretation of data analysis is discussed in the next chapter.

CHAPTER 4. DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Introduction

This chapter follows the described methodology in Chapter 3, detailing the analysis results from data collected. In this chapter, the process of data screening including respondent sample demographics is discussed. This is followed by tests of validity and reliability including factor analyses. In addition, descriptive statistics tests conducted are also described. Thereafter, tests of construct reliability and validity, are described. In conclusion, independent and dependent variables of the study's conceptual model are correlated and the hypotheses discussed in Chapter 2 tested via partial least squares – structural equation modelling (PLS-SEM) regression-based path analyses. Lastly, results of hypotheses testing are presented.

4.2 Data screening

4.2.1 *Response Rate and Excluded Responses*

A structured questionnaire was distributed to 203 respondents from which 140 acceptable responses were collected, for a response rate of 69%, as shown in Table 4.

Table 4: Response Rate

Distributed Questionnaire	Responses	Response Rate
203	140	69 (%)

Note: Present study's response rate

A total of 63 questionnaires were classified as non-responses for exclusion from the study. Of these, 38 were classified as "complete refusal" non-responses, where no question was answered. Further, 25 were deemed "break-off" non-

responses, whereby less than 50% of all questions were answered other than by no answer. All data was collected via online Qualtrics survey questionnaire, imported into Excel and then exported to IBM SPSS (Version 28). The data were prepared following three stages. Firstly, data were searched for missing values. Secondly, data were examined for outliers. Lastly, the data were examined for normality, an underlying statistical assumption for multivariate data analysis.

4.3 Demographic profile of respondents

A demographic profile was obtained from the dataset to identify emergent patterns among respondents in the study. The respondent profile (n = 140) of the study is shown in

Table 5.

Table 5: Demographic information of the respondents

Respondents Demographic Profile (n=140)		
Demographic Variable	**Frequency**	**Percentage (%)**
Age		
Below 20 years	16	11.4%
21-30 years	47	33.6%
31-40 years	58	41.4%
41-50 years	13	9.%
51-60 years	6	4.3%
Missing	0	0%
Gender		
Male	43	30.7%
Female	96	68.6%
Prefer not to say	1	0.7%
Missing	0	0%
Education		
Primary School (Basic)	1	0.7%
High School (Matric)	29	20.7%
Diploma	16	11.4%
Bachelor’s Degree	42	30%
Post Graduate Diploma	22	15.7%
Master’s Degree	27	19.3%
Doctorate Degree	1	0.7%
Other	2	1.4%
Missing	0	0%
Internet Experience		
Under 1 year	1	0.7%
1-3 years	3	2.1%

3-5 years	5	3.6%
Over 5 years	131	93.6%
Missing	0	0%
Online Shopping Experience		
Under 1 year	11	7.9%
1-3 years	26	18.6%
3-5 years	26	18.6%
Over 5 years	77	55%
Missing	0	0%
Online Shopping Frequency		
Daily	13	9.3%
Weekly	22	15.7%
Monthly	25	17.9%
Occasionally	22	15.7
When I need it	55	39%
Rarely/For special offers/Discounts only	3	2.1%
Missing	0	0%
Average Monthly Spending (Groceries Only)		
R 0 - 100	37	26.4%
R 100 - 500	15	10.7%
R 500 - 1000	33	23.6%
R 1000 - 2000	27	19.3%
R 2000 - 5000	22	15.7%
More than R 5000	6	4.3%
Missing	0	0%
Average Monthly Spending on Other Products		
R 0 - 100	8	5.7%
R 100 - 500	22	15.7%
R 500 - 1000	29	20.7%
R 1000 - 2000	40	28.6%
R 2000 - 5000	32	22.9%
More than R 5000	9	6.4%
Missing	0	0%

Eight demographic variables were assessed to profile respondents. Three were the individual measures gender, age and highest level of education. An additional three were related to the Internet and online shopping experience and frequency respectively, whereas the last two were related to average monthly spending on groceries and other products.

Most of the respondents were aged between 31 and 40 years (41.4%) followed by those aged between 21 and 30 years (33.6%), with females representing 68.6% of the sample. The distribution in highest education comprised holders of a Bachelor's degree (30%), followed by those educated up to High School (20.7%), Masters degree holders (19.3%), and those that have earned a Postgraduate degree (15.7%) and Diploma (11.4%), respectively. 93.6% of

respondents reported having Internet experience with 55% having had online shopping experience whereas 39% indicated that they frequented online shopping platform when they need it. The average monthly spending attributes highlighted that 26.4% of respondents spend between R0 and R100 on groceries only, while 28.6% respondents reported spending between R1000 to R2000 on other products.

4.4 Missing value analysis

The missing data replaced with the series mean for all predictor (independent) variables and the target (dependent) variable.

The number of cases with null value per variable and the number of variables with no data per case is identified as missing data (Hair et al., 2010). From this case and variable perspective, no missing data were found.

In order to hold the sample size and confirm that all cases had complete data, missing values were replaced with the series mean for the variables across the entire data set (Hair et al., 2010). The mean substitution method was used.

4.5 Outlier analysis

The univariate method for outlier detection was used to analyse data where values are converted to standard scores, and a threshold for selection of an outlier established (Hair et al., 2010). Accordingly, in small samples (less than or equal to 80), a standard score of 2.5 or greater is used (Hair et al., 2010). In larger sample sizes, the score is increased to 4 (Hair et al., 2010). The study sample comprised 140 responses. Hence a threshold of 4 was used to identify outliers. An inspection of the data set revealed that there were no extreme values identified.

4.6 Normality

The descriptive statistics obtained for the predictor (independent) variables and target (dependent) variable, are summarized in Table 6.

Table 6: Descriptive Statistics

Descriptive Statistics						
Variable	**Measurement Item**	**Number of Missing Values**	**Mean**	**Standard Deviation**	**Skewness**	**Kurtosis**
Perceived Functional Value	SMEAN(PFV1)	0	3.8786	0.79085	-0.577	0.665
	SMEAN(PFV2)	0	3.9143	0.65135	-0.865	2.867
	SMEAN(PFV3)	0	3.9357	0.74148	-0.434	0.137
	SMEAN(PFV4)	0	3.9286	0.76472	-0.368	-0.143
	SMEAN(PFV5)	0	3.9214	0.74009	-0.198	-0.394
	SMEAN(PFV6)	0	3.7214	0.72039	-0.111	-0.215
Perceived Social Value	SMEAN(PSV1)	0	2.8000	1.04020	-0.216	-0.356
	SMEAN(PSV2)	0	2.9714	1.06577	-0.160	-0.491
	SMEAN(PSV3)	0	2.5571	1.03376	0.182	-0.721
	SMEAN(PSV4)	0	2.4714	1.04188	0.348	-0.362
	SMEAN(PSV5)	0	2.4143	1.04562	0.403	-0.309
Perceived Emotional Value	SMEAN(PEmV1)	0	3.9500	0.78954	-1.156	2.928
	SMEAN(PEmV2)	0	3.8643	0.84997	-0.663	0.756
	SMEAN(PEmV3)	0	3.8357	0.87005	-0.671	0.606
	SMEAN(PEmV4)	0	3.7429	0.86807	-0.679	0.549
	SMEAN(PEmV5)	0	3.6500	0.76736	-0.566	1.086
	SMEAN(PEmV6)	0	3.5929	1.02414	-0.540	0.039
Perceived Epistemic Value	SMEAN(PEsV1)	0	3.7786	0.96012	-0.877	0.459
	SMEAN(PEsV2)	0	3.7357	0.99358	-0.831	0.316
	SMEAN(PEsV3)	0	3.5857	1.00349	-0.911	0.481
Perceived Conditional Value	SMEAN(PCV1)	0	3.4786	1.07602	-0.700	-0.370
	SMEAN(PCV2)	0	3.8286	0.92092	-0.941	0.653
	SMEAN(PCV3)	0	3.7286	0.98801	-0.702	0.029
Online Promotion	SMEAN(OP1)	0	3.9786	0.88527	-0.715	0.247
	SMEAN(OP2)	0	3.8143	0.93367	-0.642	0.133
	SMEAN(OP3)	0	3.3143	1.05316	-0.211	-0.589
	SMEAN(OP4)	0	3.5286	0.86034	-0.433	-0.234
Brand Familiarity	SMEAN(BF1)	0	4.0643	0.70160	-0.343	-0.106
	SMEAN(BF2)	0	3.8214	0.91563	-1.063	1.110
	SMEAN(BF3)	0	3.3143	1.10646	-0.360	-0.732
	SMEAN(BF4)	0	3.0643	1.16428	0.068	-1.003
Trust	SMEAN(T1)	0	2.5714	0.96815	0.664	0.056
	SMEAN(T2)	0	2.6071	1.05050	0.505	-0.551
	SMEAN(T3)	0	2.5786	1.08666	0.734	-0.226
	SMEAN(T4)	0	2.2071	0.96333	0.895	0.691
Perceived Risk	SMEAN(PR1)	0	3.4357	1.08761	-0.667	-0.299
	SMEAN(PR2)	0	3.5429	1.07537	-0.482	-0.639
	SMEAN(PR3)	0	3.4714	1.08252	-0.409	-0.660
Online Purchase Intentions	SMEAN(OPI1)	0	4.0429	0.78540	-0.437	-0.341
	SMEAN(OPI2)	0	3.9286	0.87854	-0.893	0.982

The distribution of data (also referred to as Normality) per individual metric variable, and its correspondence to the normal distribution is a fundamental assumption of multivariate analysis (Hair et al., 2010). All the variables were appropriate since their skewness and kurtosis values fell within the ranges of - 2 and + 2 for skewness and - 3 and + 3 for kurtosis, respectively (Hair et al., 2010).

4.7 Preparation for factor analysis

4.7.1 *Factorability*

All independent variables were inter-correlated to evaluate suitability for subsequent factor analysis (Hair et al., 2010). Factor analysis assesses construct dimensions inspecting emergent correlation matrices and displays no substantial number above 0.30 (Hair et al., 2010). Factor analysis excludes inter-correlation scores of less than 0.30 of an item with another within the same construct. Such an inter-correlation would otherwise diminish the factorability of the data.

Perceived Functional Value, in terms of factorability PFV1, PFV2, PFV3, PFV4, PFV5, and PFV6 correlated with values greater than 0.300. Therefore, these dimensions were retained. PSV1, PSV2, PSV3, PSV4, and PSV5 correlated with values greater than 0.300. Thus, these dimensions were retained. The dimensions PEmV1, PEmV2, PEmV3, PEmV4, PEmV5, and PEmV6 correlated with values greater than 0.300. These dimensions were therefore retained. The dimensions PEsV1, PEsV2, and PEsV3 correlated with values greater than 0.300. These dimensions were thus retained. The dimensions PCV1, PCV2, and PCV3 correlated with values greater than 0.300. Hence these three dimensions were retained. The dimensions OP1, OP2 and OP3 correlated with values greater than 0.300, so that these dimensions were also retained. The dimensions BF3 and BF4 correlated with values greater than 0.300. These items were retained for subsequent analyses. The dimensions T1, T2, T3, and T4 correlated with values greater than 0.300. As such, these inter-correlated dimensions were retained. Lastly, the dimensions PR1, PR2, and PR3, correlated with values greater than 0.300. These dimensions were also retained for subsequent analysis.

4.8 Test for common method bias

The commonality of variable variance was tested using Exploratory Factor Analysis (EFA), via a Harman's Single factor test that was applied to the data (Podsakoff and Organ, 1986). Common method bias is detected if a single factor accounts for over 50% of the variance for all variables (Podsakoff and Organ, 1986). Table 7 presents the results of Harman's (1976) Single Factor Test.

Table 7: Results of Harman's (1976) Single-Factor Test

Results of Harman's (1976) Single-Factor Test						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.104	22.204	22.204	9.104	22.204	22.204
2	5.602	13.665	35.868	5.602	13.665	35.868
3	2.991	7.294	43.163	2.991	7.294	43.163
4	2.420	5.903	49.066	2.420	5.903	49.066
5	2.087	5.091	54.157	2.087	5.091	54.157
6	1.743	4.252	58.409	1.743	4.252	58.409
7	1.598	3.897	62.307	1.598	3.897	62.307
8	1.182	2.883	65.190	1.182	2.883	65.190
9	1.053	2.567	67.757	1.053	2.567	67.757
10	1.042	2.541	70.298	1.042	2.541	70.298

A total of 41 variables across the dimensions of Perceived Functional Value, Perceived Social Value, Perceived Emotional Value, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, Trust, Perceived Risk and the dependent variable Online Purchase Intensions, were analysed via Principal Component Analysis (PCA) which was unrotated. Table 7 displays 10 emergent factors shown to have Eigen values greater than 1.000 and that accounted for 70.298% of the combined variance in the variable (Hair et al., 2014). No single factor explained over 50% of the variance. Therefore, no common method bias was detected in the data.

4.9 Exploratory Factor Analysis (EFA)

The main method of factor analysis used was Principal Component Analysis (PCA) where through extraction and Promax orthogonal rotation, variable

dimensions were rearranged and examined to ascertain to which factors they belonged. This analysis was used to determine the unidimensionality of each variable. According to Hair et al's (2010) recommendation, the factors should be interpreted as follows:

1. Items have high loadings on a single factor.
2. Those that load on two or more factors are deleted unless theoretically proven or if data reduction is the sole objective.
3. Items of 0.50 or more communalities are retained for further analysis.
4. The items load onto unlikely factors.

The items excluded from the study for each of the constructs, are displayed in Table 8.

Table 8: Items excluded after PCFA

Construct	No. of Initial Items	No. of Retained Items	Items Excluded	Rationale
Online Promotion	4	3	SMEAN (OP4)	Inclusion reduces factorability of data
Brand Familiarity	4	2	SMEAN (BF1)	Inclusion reduces factorability of data
			SMEAN (BF2)	Inclusion reduces factorability of data

Through extraction the information was summarized within a number of variables into fewer variates (factors) or dimensions with minimal lost data. The second approach rotation, helped in re-allocating the factor variance to obtain a simpler, more meaningful theoretical configuration. The Promax method was selected for rotation in EFA. The extraction method used was PCA with Promax selected for rotation. Hence, PCA factor extraction with Promax rotation was utilised.

To determine the factor loadings' practical significance, factor loadings must be evaluated against three conditions.

First, items should have high loadings above 0.500 for a sample size greater than 120 but not below 150 (Hair et al., 2010). Second, items that have loadings on two or more factors (cross-load) are ruled out except when theoretically justified (Hair et al., 2010). The items should generally exceed 0.500 in item

communalities. Third, Eigen values of 1.000 or more were preserved, whereas any score below this threshold was excluded (Pallant, 2010).

To achieve the optimal solution for all variables, two runs were required. The results of the first run displayed dimensions OP4, BF1, and BF2 cross-loading onto other dimensions. These dimensions were excluded from subsequent analyses. Through the process of elimination, it was found that the following remaining variables best represented and had high communality scores above 0.500:

Table 9: Results Principal Component Analysis (PCA) - Perceived Functional Value

Principal Component Analysis (PCA) Result: Perceived Functional Value (PFV)	
Item	Factor
SMEAN(PFV1)	0.726
SMEAN(PFV2)	0.753
SMEAN(PFV3)	0.759
SMEAN(PFV4)	0.752
SMEAN(PFV5)	0.743
SMEAN(PFV6)	0.746

The optimal solution for the dimensions of Perceived Functional Value

Table 10: Results of Total Variance Explained by the Dimensions (variables) of Perceived Functional Value

Total Variance Explained: Perceived Functional Value (PFV)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.344	55.741	55.741	3.344	55.741	55.741
2	.750	12.507	68.248			
3	.551	9.178	77.425			
4	.524	8.742	86.167			
5	.446	7.433	93.600			
6	.384	6.400	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Functional Value comprised 6 items. Factor 1 had an Eigen value of 3.344 (>1) and explained 55.741% of the variance.

Table 11: Results Principal Component Analysis (PCA) - Perceived Social Value

Principal Component Analysis (PCA) Result: Perceived Social Value (PSV)	
Item	Factor
SMEAN(PSV1)	0.844
SMEAN(PSV2)	0.856
SMEAN(PSV3)	0.835
SMEAN(PSV4)	0.859
SMEAN(PSV5)	0.878

The optimal solution for the dimensions of Perceived Social Value

Table 12: Results of Total Variance Explained by the Dimensions (variables) of Perceived Social Value

Total Variance Explained: Perceived Social Value (PSV)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.652	73.036	73.036	3.652	73.036	73.036
2	.554	11.089	84.125			
3	.299	5.979	90.104			
4	.290	5.793	95.897			
5	.205	4.103	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Social Value comprised 5 items. Factor 1 had an Eigen value of 3.652 (>1) and explained 73.036% of the variance.

Table 13: Results Principal Component Analysis (PCA) - Perceived Emotional Value

Principal Component Analysis (PCA) Result: Perceived Emotional Value (PEmV)	
Item	Factor
SMEAN(PEmV1)	0.726
SMEAN(PEmV2)	0.810
SMEAN(PEmV3)	0.818

SMEAN(PEmV4)	0.707
SMEAN(PEmV5)	0.785
SMEAN(PEmV6)	0.766

The optimal solution for the dimensions of Perceived Emotional Value

Table 14: Results of Total Variance Explained by the Dimensions (variables) of Perceived Emotional Value

Total Variance Explained: Perceived Emotional Value (PEmV)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.556	59.259	59.259	3.556	59.259	59.259
2	.840	14.000	73.260			
3	.537	8.952	82.212			
4	.415	6.913	89.124			
5	.373	6.209	95.334			
6	.280	4.666	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Emotional Value comprised 6 items. Factor 1 had an Eigen value of 3.556 (>1) and explained 59.259% of the variance.

Table 15: Results Principal Component Analysis (PCA) - Perceived Epistemic Value

Principal Component Analysis (PCA) Result: Perceived Epistemic Value (PEsV)	
SMEAN(PEsV1)	0.888
SMEAN(PEsV2)	0.898
SMEAN(PEsV3)	0.929

The optimal solution for the dimensions of Perceived Epistemic Value

Table 16: Results of Total Variance Explained by the Dimensions (variables) of Perceived Epistemic Value

Total Variance Explained: Perceived Epistemic Value (PEsV)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.459	81.967	81.967	2.459	81.967	81.967

2	.332	11.050	93.018			
3	.209	6.982	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Epistemic Value comprised 3 items. Factor 1 had an Eigen value of 2.459 (>1) and explained 81.967% of the variance.

Table 17: Results Principal Component Analysis (PCA) – Perceived Conditional Value

Principal Component Analysis (PCA) Result: Perceived Conditional Value (PCV)	
Item	Factor
SMEAN(PCV1)	0.749
SMEAN(PCV2)	0.855
SMEAN(PCV3)	0.879

The optimal solution for the dimensions of Perceived Conditional Value

Table 18: Results of Total Variance Explained by the Dimensions (variables) of Perceived Conditional Value

Total Variance Explained: Perceived Conditional Value (PCV)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.066	68.859	68.859	2.066	68.859	68.859
2	.607	20.225	89.084			
3	.327	10.916	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Conditional Value comprised 3 items. Factor 1 had an Eigen value of 2.066 (>1) and explained 68.859% of the variance.

Table 19: Results Principal Component Analysis (PCA) – Online Promotion

Principal Component Analysis (PCA) Result: Online Promotion (OP)	
Item	Factor
SMEAN(OP1)	0.816
SMEAN(OP2)	0.876
SMEAN(OP3)	0.758

Table 20: Results of Total Variance Explained by the Dimensions (variables) of Online Promotion

Total Variance Explained: Online Promotion (OP)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.007	66.913	66.913	2.007	66.913	66.913
2	.624	20.798	87.71			
3	.369	12.289	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Online Promotion comprised 3 items. Factor 1 had an Eigen value of 2.007 (>1) and explained 66.913% of the variance.

Table 21: Results Principal Component Analysis (PCA) – Brand Familiarity

Principal Component Analysis (PCA) Result: Brand Familiarity (BF)	
Item	Factor
SMEAN(BF3)	0.881
SMEAN(BF4)	0.881

Table 22: Results of Total Variance Explained by the Dimensions (variables) of Brand Familiarity

Total Variance Explained: Brand Familiarity (BF)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.554	77.692	77.692	1.554	77.692	77.692
2	.446	22.308	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Brand Familiarity comprised 2 items. Factor 1 had an Eigen value of 1.554 (>1) and explained 77.692% of the variance.

Table 23: Results Principal Component Analysis (PCA) – Trust

Principal Component Analysis (PCA) Result: Trust (T)	
Item	Factor
SMEAN(T1)	0.837

SMEAN(T2)	0.868
SMEAN(T3)	0.865
SMEAN(T4)	0.859

Table 24: Results of Total Variance Explained by the Dimensions (variables) of Trust

Total Variance Explained: Trust (T)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.940	73.494	73.494	2.940	73.494	73.494
2	.413	10.325	100.000			
3	.330	8.259				
4	.317	7.922				
Extraction Method: Principal Component Analysis.						

The dimensions of Trust comprised 4 items. Factor 1 had an Eigen value of 2.940 (>1) and explained 73.494% of the variance.

Table 25: Results Principal Component Analysis (PCA) – Perceived Risk

Principal Component Analysis (PCA) Result: Perceived Risk (PR)	
Item	Factor
SMEAN(PR1)	0.766
SMEAN(PR2)	0.924
SMEAN(PR3)	0.881

Table 26: Results of Total Variance Explained by the Dimensions (variables) of Perceived Risk

Total Variance Explained: Perceived Risk (PR)						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.218	73.917	73.917	2.940	73.917	73.917
2	.576	10.325	93.114			
3	.207	6.886	100.000			
Extraction Method: Principal Component Analysis.						

The dimensions of Perceived Risk comprised 3 items. Factor 1 had an Eigen value of 2.218 (>1) and explained 73.917% of the variance.

4.10 Reliability and validity

Each construct showed that the items were highly loaded up to more than 0.5. In addition, there were no cross-loaded items compared to other factors. The Cronbach's Coefficient Alpha Value was applied to further examine the consistency and reliability of the revised scale. The threshold value of 0.700 is considered appropriate for items to be deemed reliable (Nunnally, 1994). The results revealed acceptable reliability scores (>0.700) and the items were retained for further study. All variables exhibited discriminant and convergent validities. AVE was used to compute the discriminant and convergent validity as measured by the following formula:

$$AVE = \frac{\sum[\lambda_I^2]Var(X)}{\sum[\lambda_I^2]Var(X)+\sum[Var(\varepsilon_I)]}$$

where:

$_I$ = The Loading of x_I on X

Var = Variance

ε_I = The Measurement Error of x_i

$\sum$ = Denotes a Sum

(Fornell and Larcker, 1981)

The construct validities and reliabilities of Perceived Functional Value, Perceived Social Value, Perceived Emotional Value, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, Trust, Perceived Risk, and Online Purchase Intentions, are presented in Table 27.

Table 27: Instrument (Construct) Validities and Reliabilities

Instrument (Construct) Validities and Reliabilities				
Variable (Dimension)	**Scale Items**	**No of Items**	**AVE**	**SQRT AVE**
Perceived Functional Value	PFV1	6	0.557	0.746
	PFV2			
	PFV3			
	PFV4			
	PFV5			
	PFV6			
Perceived Social Value	PSV1	5	0.730	0.854
	PSV2			
	PSV3			
	PSV4			
	PSV5			
Perceived Emotional Value	PEmV1	6	0.593	0.770
	PEmV2			
	PEmV3			
	PEmV4			
	PEmV5			
	PEmV6			
Perceived Epistemic Value	PEsV1	3	0.819	0.905
	PEsV2			
	PEsV3			
Perceived Conditional Value	PCV1	3	0.688	0.829
	PCV2			
	PCV3			
Online Promotion	OP1	3	0.669	0.818
	OP2			
	OP3			
Brand Familiarity	BF3	2	0.776	0.881
	BF4			
Trust	T1	4	0.735	0.857
	T2			
	T3			
	T4			
Perceived Risk	PR1	3	0.739	0.860
	PR2			
	PR3			
Online Purchase Intentions	OPI1	3	0.766	0.875
	OPI2			
	OPI3			

The acceptable threshold value of at least 0.500 is acceptable for convergent validity to be established. Therefore, overall reliabilities and convergent and discriminant validity were confirmed (Fornell and Larcker, 1981).

4.11 Descriptive statistics for composites

The descriptive statistics for composite scores are presented in Table 28. The standard deviation scores were close to 1 indicating consistency in terms of responses (Hair et al., 2010). In keeping with the acceptable range for skewness and kurtosis i.e. -2 to +2 and -3 to +3 respectively, all values were acceptable (Hair et al., 2010).

Table 28: Descriptive Statistics for Composites

Descriptive Statistics for Composites						
Variable	**N Statistic**	**Number of Missing Values**	**Mean**	**Standard Deviation**	**Skewness**	**Kurtosis**
PFV	140	0	3.883	0.548	-0.101	0.611
PSV	140	0	2.643	0.893	0.072	-0.360
PEmV	140	0	3.773	0.663	-0.612	1.437
PEsV	140	0	3.700	0.893	-0.838	0.574
PCV	140	0	3.679	0.823	-0.639	0.399
OP	140	0	3.702	0.781	-0.583	0.374
BF	140	0	3.189	1.001	-0.092	-0.541
T	140	0	2.491	0.872	0.605	-0.112
PR	140	0	3.483	0.927	-0.408	-0.526
OPI	140	0	4.062	0.689	-0.352	-0.383

4.12 Pearson's test of correlation

The variables of the study were tested for correlations using a Pearson's test and the results are displayed in Table 29.

Table 29: Results of Pearson's Test of Correlations

Pearson's Test of Correlations										
	PFV	**PSV**	**PEmV**	**PEsV**	**PCV**	**OP**	**BF**	**T**	**PR**	**OPI**
PFV	1	0,108	0.436**	0.233**	0.105	0.301**	0.057	-0.384**	-0.264**	0.554**
PSV	0.108	1	0.405**	0.265**	0.042	0.193*	0.454*	0.261*	0.000	0.043
PEmV	0.436**	0.405**	1	0.605**	0.072	0.416**	0.380**	-0.209*	-0.033	0.446**
PEsV	0.233**	0.265**	0.605**	1	0.181*	0.455**	0.389**	-0.077	-0.044	0.328**
PCV	0.105	0.042	0.072	0.181*	1	0.130	0.243*	0.082	0.073	0.138
OP	0.301**	0.193*	0.416**	0.455**	0.130	1	0.344**	-0.106	-0.109	0.430**
BF	0.057	0.454**	0.380**	0.389**	0.243**	0.344*	1	0.312**	0.042	0.106
T	-0.384**	0.261**	-0.209*	-0.077	0.082	-0.106	0.312**	1	0.360**	0.387**
PR	-0.264**	0.000	-0.033	-0.044	0.073	-0.109	0.042	0.360**	1	-0.119
OPI	0.554**	0.043	0.446**	0.328**	0.138	0.430**	0.106	-0.387**	-0.119	1

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

The correlation matrix highlighted significant inter-correlations between the variables. Some bivariate relationships were inter-correlated but were, however, not found to be insignificant.

The sole aim of the study was to evaluate the relationships of the variables even though bivariate correlations can be used to demonstrate their associations.

As the Pearson's correlation test is insufficient for testing the variable inter-correlations, the present study is suited to the more robust Structural Equation Modelling (SEM) (Hair et al., 2017). Hence, the examination of a structural path model was employed as the chosen method to test the study's hypothesised relationships in Chapter 2.

4.13 Evaluation of the measurement model: Confirmatory Factor Analysis (CFA)

Internal consistency reliability, convergent validity and discriminant validity were evaluated using Confirmatory Factor Analysis (CFA). Results are presented in Table 30.

Table 30: Results of reflective measurement model evaluation

Latent Variable	Latent Variable Item	No. of Items	Internal Consistency Reliability		Convergent Validity	
			Composite Reliability (p_c)	Cronbach's Alpha (α)	Outer Loadings	AVE
Brand Familiarity	BF3	2	0.826	0.713	0.666	0.712
	BF4				0.990	

Online Promotion	OP1	3	0.856	0.751	0.850	0.667
	OP2				0.876	
	OP3				0.716	
Online Purchase Intentions	OPI1	3	0.907	0.847	0.866	0.765
	OPI2				0.872	
	OPI3				0.886	
Perceived Conditional Value	PCV1	3	0.864	0.771	0.789	0.679
	PCV2				0.871	
	PCV3				0.810	
Perceived Emotional Value	PEmV1	6	0.896	0.862	0.727	0.591
	PEmV2				0.812	
	PEmV3				0.828	
	PEmV4				0.690	
	PEmV5				0.761	
	PEmV6				0.786	
Perceived Epistemic Value	PEsV1	3	0.931	0.890	0.909	0.817
	PEsV2				0.892	
	PEsV3				0.911	

Perceived Functional Value	PFV1	6	0.883	0.841	0.728	0.557
	PFV2				0.730	
	PFV3				0.754	
	PFV4				0.762	
	PFV5				0.760	
	PFV6				0.741	
Perceived Risk	PR1	3	0.894	0.820	0.773	0.739
	PR2				0.912	
	PR3				0.886	
Perceived Social Value	PSV1	5	0.906	0.908	0.716	0.662
	PSV2				0.826	
	PSV3				0.821	
	PSV4				0.944	
	PSV5				0.741	
Trust	T1	4	0.917	0.880	0.845	0.734
	T2				0.865	
	T3				0.872	
	T4				0.845	

4.14 Convergent validity

Individual indicator reliability was used to evaluate convergent validity.

High outer loadings on a construct indicate that related indicators hold similar aspects to each other and are represented in the construct (Hair et al., 2017) . The overall rule is that construct indicators with outer loadings equal to 0.708 or higher are maintained, while those under 0.708 but exceeding 0.400 are considered for deletion.

Resuts shown in Table 30 indicate that all factor item loadings exceeded the recommended threshold of 0.708, except for one brand familiarity indicator BF3 scoring an outer loading of 0.666, and one perceived emotional value indicator PEmV4 with a score of 0.690, respectively. However, these two indicators were, retained due to corresponding overall construct Cronbach's Alpha and composite reliability scores which were higher than the recommended threshold of 0.700 (Hair et al., 2017).

Table 30 shows that each latent variable's Average Variance Extracted (AVE) values in the reflective measurement model was greater than the recommended cut-off threshold value of 0.500 (Hair et al., 2017).

Overall, results of the reflective measurement model evaluation indicated satisfactory convergent validity.

4.15 Discriminant validity

Three tests were conducted to evaluate discriminant validity:

Discriminant validity was first evaluated by assessing cross-loadings indicators. That is, an indicator's outer loading on the associated construct should be higher than any of its cross-loadings (correlations) with other model constructs (Chin 1998; Hair et al., 2017).

Table 31: Results of indicator cross-loadings

	BF	OP	OPI	PCV	PEmV	PEsV	PFV	PR	PSV	T
BF3_1	**0.666**	0.253	0.028	0.188	0.274	0.285	-0.012	0.046	0.293	0.254
BF4_1	**0.990**	0.290	0.150	0.222	0.392	0.403	0.115	0.026	0.418	0.290
OP1_1	0.149	**0.850**	0.411	0.172	0.330	0.359	0.224	-0.064	0.080	-0.179
OP2_1	0.242	**0.876**	0.380	0.136	0.371	0.352	0.311	-0.028	0.113	-0.082
OP3_1	0.409	**0.716**	0.276	0.022	0.333	0.409	0.220	-0.158	0.282	-0.015
OPI1_1	0.103	0.349	**0.866**	0.123	0.336	0.189	0.445	-0.107	0.054	-0.306
OPI2_1	0.188	0.412	**0.872**	0.096	0.455	0.370	0.504	-0.139	0.151	-0.356
OPI3_1	0.070	0.397	**0.886**	0.182	0.383	0.320	0.510	-0.048	0.032	-0.357
PCV1_1	0.165	0.069	0.131	**0.789**	0.073	0.155	0.159	-0.002	0.051	-0.031
PCV2_1	0.193	0.152	0.150	**0.871**	0.063	0.165	0.034	0.160	-0.060	0.134
PCV3_1	0.234	0.149	0.074	**0.810**	0.050	0.143	0.060	0.030	0.019	0.111
PEmV1_1	0.296	0.335	0.306	0.046	**0.727**	0.451	0.250	0.072	0.371	-0.103
PEmV2_1	0.317	0.355	0.362	0.044	**0.812**	0.477	0.356	-0.090	0.294	-0.188
PEmV3_1	0.332	0.413	0.402	0.069	**0.828**	0.573	0.379	-0.099	0.243	-0.275
PEmV4_1	0.256	0.183	0.290	0.031	**0.690**	0.340	0.349	-0.075	0.210	-0.044
PEmV5_1	0.310	0.315	0.261	-0.031	**0.761**	0.413	0.327	-0.018	0.371	-0.089
PEmV6_1	0.318	0.307	0.414	0.152	**0.786**	0.497	0.357	0.058	0.170	-0.236
PEsV1_1	0.350	0.424	0.359	0.204	0.493	**0.909**	0.205	-0.036	0.190	-0.085
PEsV2_1	0.412	0.417	0.300	0.154	0.582	**0.892**	0.251	-0.028	0.233	-0.033
PEsV3_1	0.350	0.364	0.246	0.144	0.586	**0.911**	0.191	-0.045	0.211	-0.094
PFV1_1	0.000	0.146	0.431	0.082	0.206	0.034	**0.728**	-0.238	0.072	-0.419
PFV2_1	-0.035	0.151	0.343	0.066	0.258	0.114	**0.730**	-0.150	-0.008	-0.297
PFV3_1	0.109	0.184	0.405	0.043	0.295	0.177	**0.754**	-0.241	0.123	-0.208
PFV4_1	0.045	0.238	0.439	0.133	0.330	0.184	**0.762**	-0.190	0.018	-0.235
PFV5_1	0.173	0.410	0.463	0.110	0.439	0.330	**0.760**	-0.137	0.182	-0.236
PFV6_1	0.138	0.219	0.399	0.017	0.424	0.210	**0.741**	-0.206	0.113	-0.335
PR1_1	-0.016	-0.173	-0.134	0.118	-0.100	-0.130	-0.266	**0.773**	0.022	0.293
PR2_1	0.080	-0.024	-0.099	0.072	0.036	0.011	-0.217	**0.912**	-0.052	0.294
PR3_1	0.018	-0.045	-0.061	0.043	-0.024	0.009	-0.192	**0.886**	-0.097	0.347
PSV1_1	0.442	0.163	0.003	0.096	0.379	0.195	0.107	0.013	**0.716**	0.277
PSV2_1	0.428	0.136	0.053	0.014	0.307	0.180	0.114	-0.013	**0.826**	0.247
PSV3_1	0.336	0.130	0.040	-0.011	0.293	0.233	0.067	-0.040	**0.821**	0.190
PSV4_1	0.377	0.172	0.100	-0.002	0.337	0.228	0.108	-0.048	**0.944**	0.158
PSV5_1	0.410	0.123	-0.019	0.045	0.405	0.286	0.074	0.070	**0.741**	0.226
T1_1	0.161	-0.101	-0.329	0.037	-0.187	-0.091	-0.368	0.345	0.107	**0.845**
T2_1	0.312	-0.133	-0.319	0.089	-0.168	-0.044	-0.330	0.315	0.177	**0.865**
T3_1	0.296	-0.117	-0.369	0.099	-0.171	-0.057	-0.362	0.337	0.209	**0.872**
T4_1	0.272	-0.067	-0.316	0.056	-0.231	-0.076	-0.244	0.241	0.227	**0.845**

BF = Brand Familiarity, OP = Online Promotion, OPI = Online Purchase Intentions, PCV = Perceived Conditional Value, PEmV = Perceived Emotional Value, PEsV = Perceived Epistemic Value, PFV = Perceived Functional Value, PR = Perceived Risk, PSV = Perceived Social Value, T = Trust

The second test was conducted to further establish discriminant validity using the Fornell-Larcker criterion. This criterion is used to compare the square root of the AVE values of each construct, with latent variable correlations. The approach adapted follows Hair et al's (2017) recommendation that the square root of the AVE for each construct be higher than its highest correlation with any other construct.

Table 32 presents results of the Fornell-Larcker criterion valuation with the square root of the reflective constructs' AVE on the diagonal and correlations between the constructs in the off-diagonal positions.

Table 32: Fornell-Larcker criterion results

	BF	OP	OPI	PCV	PEmV	PEsV	PFV	PR	PSV	T
Brand Familiarity	**0.844**									
Online Promotion	0.303	**0.817**								
Online Purchase Intentions	0.139	0.443	**0.875**							
Perceived Conditional Value	0.231	0.146	0.153	**0.824**						

Perceived Emotional Value	0.398	0.419	0.451	0.077	**0.769**					
Perceived Epistemic Value	0.410	0.448	0.342	0.189	0.606	**0.904**				
Perceived Functional Value	0.101	0.308	0.558	0.103	0.440	0.239	**0.746**			
Perceievd Risk	0.031	-0.091	-0.112	0.088	-0.033	-0.039	-0.259	**0.859**		
Perceived Social Value	0.424	0.175	0.092	-0.003	0.347	0.232	0.116	-0.053	**0.813**	
Trust	0.302	-0.124	-0.390	0.083	-0.219	-0.078	-0.385	0.365	0.208	**0.857**

Diagonal values (in **bold**) represents the square root of the AVE of each construct.

BF = Brand Familiarity, OP = Online Promotion, OPI =. Online Purchase Intentions, PCV = Perceived Conditional Value, PEmV = Perceived Emotional Value, PEsV = Perceived Epistemic Value, PFV = Perceived Functional Value, PR = Perceived Risk, PSV = Perceived Social Value, T=Trust

The Heterotrait-Monotrait (HTMT) ratio of correlations was the third test used to further evaluate discriminant validity.

Two approaches were considered to assess the Heterotrait-Monotrait (HTMT), that is, HTMT as a criterion and HTMT as a statistical test. According to Henseler et al., (2015), HTMT values greater than 0.85 (a more conservative measure) or 0.90, indicate a lack of discriminant validity. Conversely, HTMT as a statistical test involves the use of the bootstrapping procedure, which allows for the construction of the confidence intervals for the HTMT. Therefore, a confidence interval containing the value 1.000, indicates a lack of discriminant validity. If, however, the value 1.000 lies beyond the interval's range, then discriminant validity is observed (Henseler et al., 2015). Per Henseler et al's (2015) instruction, these HTMT parameters were used in the present study to observe discriminant validity.

Table 33 shows that all HTMT ratios were lower than the conservative threshold value of 0.85, thereby affirming discriminant validity.

Table 33: Results of the Heterotrait-Monotrait (HTMT) ratio of correlations

	BF	OP	OPI	PCV	PEmV	PEsV	PFV	PR	PSV	T
Brand Familiarity										
Online Promotion	0.455									
Online Purchase Intentions	0.135	0.543								
Perceived Conditional Value	0.329	0.187	0.176							
Perceived Emotional Value	0.480	0.519	0.512	0.098						
Perceived Epistemic Value	0.486	0.554	0.377	0.219	0.688					
Perceived Functional Value	0.124	0.378	0.653	0.150	0.509	0.274				
Perceievd Risk	0.069	0.151	0.137	0.123	0.115	0.083	0.315			
Perceived Social Value	0.561	0.225	0.089	0.084	0.468	0.294	0.140	0.085		
Trust	0.391	0.151	0.448	0.139	0.235	0.100	0.443	0.423	0.290	

BF = Brand Familiarity, OP = Online Promotion, OPI = Online Purchase Intentions, PCV = Perceived Conditional Value, PEmV = Perceived Emotional Value, PEsV = Perceived Epistemic Value, PFV = Perceived Functional Value, PR = Perceived Risk, PSV = Perceived Social Value, T=Trust

The HTMT statistic, is the estimated parameter from these sub-samples, from which standard errors of the estimates are derived. A bootstrap confidence interval is obtained using this data. This confidence interval represents the range within which the true HTMT population value lies, assuming a specific level of confidence, that

is, 95% (Hair et al., 2017). As a general rule, a confidence interval containing the value 1.000 shows a lack of discriminant validity. On the contrary, if the value of 1.000 falls outside the range of the interval, this indicates that the two constructs under observation are distinct empirically (Hair et al., 2017).

Table 34: Bootstrap Confidence Intervals

	Original Sample (O)	Sample Mean (M)	Bias	95% Confidence Interval	
				2.5%	97.5%
Brand Familiarity -> Online Purchase Intentions	0.016	0.024	0.008	-0.176	0.182
Online Promotion -> Online Purchase Intentions	0.225	0.214	-0.010	0.084	0.382
Perceived Conditional Value -> Online Purchase Intentions	0.082	0.088	0.006	-0138	0.198
Perceived Emotional Value -> Online Purchase Intentions	0.122	0.150	0.028	-0.135	0.313
Perceived Epistemic Value -> Online Purchase Intentions	0.049	0.045	-0.004	-0.111	0.231
Perceived Functional Value -> Online Purchase Intentions	0.330	0.327	-0.003	0.186	0.484
Perceived Risk -> Trust	0.365	0.372	0.007	0.185	0.500
Perceived Social Value -> Online Purchase Intentions	-0.001	-0.050	-0.049	-0229	0.222
Trust -> Online Purchase Intentions	-0.216	-0198	0.018	-0.369	-0.086

As shown in Table 34 above, bootstrap confidence intervals did not contain the value 1.000, thus confirming discriminant validity.

4.16 Internal consistency reliability

In evaluating the internal consistency (reliability) of variables (dimensions), the Composit Reliability (p_c) value was used.

Composit Reliability (p_c) ranges from 0.000 to 1.000, with higher values indicating higher reliability levels (Hair et al.,2017), thus being interpreted in a manner similar to Cronbach's Alpha. Composite Reliability (p_c) values between 0.600 and 0.700 are acceptable in exploratory research, however, in more advanced research, values ranging between 0.700 and 0.900 are considered satisfactory (Nunnally, 1994; Hair et al., 2017). Cronbach Alpha scores were obtained through a CFA test using PLS-SEM. Cronbach Alpha has a more conservative reliability measure which results in a relatively low reliability value whereas Composite Reliability (p_c) overestimates the internal consistency reliability which leads to a heightened estimated reliability score (Hair, Matthews, and Sarstedt, 2017).

Table 30 shows the composite reliability scores for each latent variable which were found to be greater than 0.700. Therefore, internal consistent reliability was established.

4.17 Evaluation of the structural path model

The evaluation of the structural path model includes assessing the relationships proposed in the conceptual model of this study to ascertain its predictive power (Hair et al., 2017). After a successful evaluation of the measurement model through which the validity and reliability of the latent variable (construct) measures were established, the structural path model was assessed. To investigate the structural path model, a sequential methodical strategy was used to examine the structural path model.

4.18 Testing for collinearity

The estimation of path coefficients for the dependent (criterion) variable should not be affected by levels of substantial collinearity across independent (predictor)

variables. Hence, collinearity testing is crucial (Hair et al., 2014). Table 35 and Table 36 displays the results of the collinearity test conducted for this study.

Table 35: Test for Collinearity (Criterion: Online Purchase Intetions)

Results of Test for Collinearity		
Criterion: Online Purchase Intentions		
Predictor	**Tolerance**	**VIF**
Brand Familiarity	0.582	1.717
Online Promotion	0.727	1.376
Perceived Conditional Value	0.902	1.109
Perceived Emotional Value	0.461	2.168
Perceived Epistemic Value	0.552	1.810
Perceived Functional Value	0.689	1.451
Perceived Social Value	0.738	1.354
Trust	0.656	1.524

Table 36: Test for Collinearity (Criterion: Trust)

Results of Test for Collinearity		
Criterion: Trust		
Predictor	**Tolerance**	**VIF**
Perceived Risk	1	1.000

The tolerance values were greater than 0.200, and the VIF values less than 5.000, well within the acceptable thresholds (Hair et al., 2014). Collinearity between the predictors in the path model was, therefore, not viewed as a problem in this investigation.

4.19 Estimation of the structural path coefficients

The structural path model assessed the effect of determinants, represented by Perceived Functional Value, Perceived Social Value, Perceived Emotional Value, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, Trust, Perceived Risk, and the dependent variable Online Purchase Intensions. Path coefficients were assessed in order to determine the relative strengths of the paths in the structural path model. A non-parametric bootstrapping technique was used to determine whether the hypothesized correlations in the structural model path coefficients were significant (Davidson

and Hinkley, 1997; Efron and Tibshirani, 1986; Hair et al., 2014). The path coefficients of the structural model were then evaluated for significance using *t* and *p* values (Hair et al., 2014; Hair et al, 2017). Critical *t* values were utilized to interpret statistical significance levels. In this case. The significance levels were deemed as 1.65 for a significance level of 10% (α = 0.10, two-tailed test), 1.96 for a significance level of 5% (α = 0.05, two-tailed test), and 2.57 for a significance level of 1% (α = 0.01, two-tailed test) (Hair et al., 2017). The bootstrapping procedure was used as an eliminator of redundancy to which bootstrap confidence intervals were obtained to specify the range within which the true population parameter lies under the assumption of a given level of confidence by using standard errors (Hair et al., 2017).

Error! Reference source not found. shows the structural path model that was estimated to test the relationship between the criterion Online Purchase Intentions and its predictors (determinants) represented by Perceived Functional Value, Perceived Social Value, Perceived Emotional Value, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, Trust. In addition, the relationship between Perceived Risk and Trust was tested for its significance.

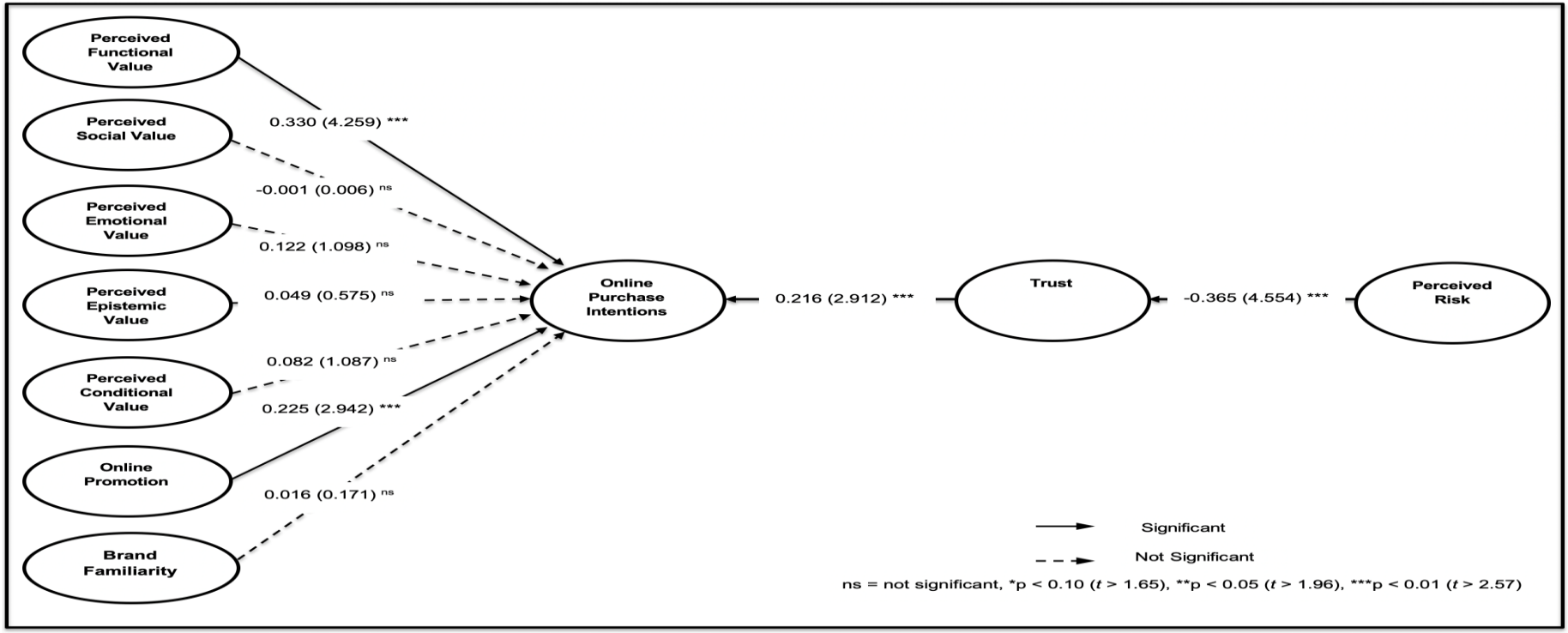


Figure 5: Structural Path Model (n = 140)

Indirect Effects:
Perceived Risk → Trust → Online Purchase Intentions (path coefficient = -0.090, *t* = 2.942, p < 0.01)***
Control Variables
Age → Online Purchase Intentions (path coefficient = -0.330, *t* = 0.650, p < 0.10)
Gender → Online Purchase Intentions (path coefficient = -0.002, *t* = 0.022, p < 0.10)
Education → Online Purchase Intentions (path coefficient = -0.021, *t* = 1.638, p < 0.10)
Internet Experience → Online Purchase Intentions (path coefficient = -0.021, *t* = 0.277, p < 0.10)
Online Shopping Experience → Online Purchase Intentions (path coefficient = 0.059, *t* = 0.565, p < 0.10)
Note: For schematic clarity, the observed non-significant (ns) effects of control variables on the dependent variable Online Purchase Intentions, are not drawn. The indirect effect is significant (p < 0.01) based on the PLS-SEM Bootstrapping Procedure.

Table 37: Results of Significance Testing of the Structural Path Model Coefficients

	Path Coefficient	t value	P value	Significant level	95% Confidence Interval
Perceived Functional Value → Online Purchase Intentions	0.330	4.259	0.000	***	[0.186, 0.484]
Perceived Social Value → Online Purchase Intentions	-0.001	0.006	0.996	ns	[-0.229, 0.222]
Perceived Emotional Value → Online Purchase Intentions	0.122	1.098	0.272	ns	[-0.135, 0.313]
Perceived Epistemic Value → Online Purchase Intentions	0.049	0.575	0.566	ns	[-0.111, 0.231]
Perceived Conditional Value → Online Purchase Intentions	0.082	1.087	0.277	ns	[-0.138, 0.198]
Online Promotion → Online Purchase Intentions	0.225	2.942	0.003	***	[0.084, 0.382]
Brand Familiarity → Online Purchase Intentions	0.016	0.171	0.864	ns	[-0.176, 0.182]
Trust → Online Purchase Intentions	0.216	2.912	0.004	***	[-0.369, -0.086]
Perceived Risk → Trust	-0.365	4.554	0.000	***	[0.185, 0.500]

*ns = non-significant, *** =significant p<0.01 (t > 2.57)*

The results in Table 37 indicate that Perceived Functional Value had the most salient significant and positive relationship with Online Purchase Intensions (path coefficient = 0.330, $t = 4.259$, $p < 0.000$). This was followed by Online Promotion which had a significant relationship with Online Purchase Intentions (path coefficient = 0.225, $t = 2.942$, $p < 0.003$). Trust also had a significant and positive relationship with Online Purchase Intentions (path coefficient = 0.216, $t = 2.912$, $p < 0.005$). However, a significant and negative relationship was found between Perceived Risk and Trust (path coefficient = -0.365, $t = 4.554$, $p < 0.000$).

Perceived Social Value was not shown to significantly affect Online Purchase Intentions (path coefficient = -0.001, $t = 0.006$, ns), in contrast with the hypothesised relationships (Chapter 2). A similar observation was made for Perceived Epistemic Value (path coefficient = 0.049, $t = 0.575$, ns), Perceived Emotional Value (path coefficient = 0.122, $t = 1.098$, ns), Perceived Conditional Value (path coefficient = 0.082, $t = 1.087$, ns), and Brand Familiarity (path coefficient = 0.016, $t = 0.171$, ns) which all showed no significance in contrast with the formulated hypotheses (Chapter 2).

4.19.1 *Testing for Confounding Effects*

The demographic variables age, gender, education, Internet experience, and online shopping experience were included and tested as controls in estimating the structural path model. These demographic controls were tested for their potential confounding effects on the study's dependent variable online purchase intentions.

Age (path coefficient = -0.330, t = 0.650, $p < 0.10$), gender (path coefficient = -0.002, t = 0.022, $p < 0.10$), education (path coefficient = 0.129, t = 1.638, $p < 0.10$), Internet experience (path coefficient = -0.021, t = 0.277, $p < 0.10$), and online shopping experience (path coefficient = 0.059, t = 0.565, $p < 0.10$), were not found to have significant relationships with online purchase intentions. These demographic controls had no observable confounding effects when estimating the structural path model. Therefore, there was no observed interference on relevant research hypotheses of the present study.

Table 38: Summary of Results of Hypotheses Testing

Summary of Results of Hypothesis Testing		
Hypothesis		**Results**
H1	Perceived functional value of the e-commerce (online) platform is positively related to online purchase intentions.	Supported
H2	The perceived social value of e-commerce (online) platforms is positively related to online purchase intentions.	Not Supported
H3	The perceived emotional value of e-commerce (online) platforms is positively related to online purchase intentions.	Not Supported
H4	Perceived epistemic value of e-commerce (online) platforms is positively related to online purchase intentions.	Not Supported
H5	Perceived conditional value of e-commerce (online) platforms is positively related to online purchase intentions.	Not Supported
H6	Online promotion cues on an e-commerce (online) platforms is positively related to online purchase intentions.	Supported
H7	Brand familiarity cues on an e-commerce (online) platforms is positively related to online purchase intentions.	Not Supported
H8	Trust in an e-commerce (online) platform is positively related to online purchase intentions.	Supported
H9	Perceived Risk in an e-commerce (online) platform is negatively related to customer Trust.	Supported

4.20 Coefficients of Determination (R^2 Value)

The Coefficient of Determination (R^2 value) which is used to assess the estimated structural path model's predictive accuracy derives the squared correlation between a dependent variable's anticipated and actual values (Hair et al., 2014; Hair et al., 2017). The R^2 value denotes the total impact of the predictor variables on the outcome variable. The R^2 values range from 0 to 1 with larger values indicating higher levels of prediction accuracy (Hair et al., 2014). For dependent variables, Chin (1998) and Ringle (2004) suggested the R^2 value thresholds of 0.670 (substantial), 0.333 (moderate), and 0.190 (weaker), respectively (Chin, 1998; Ringle, 2004). These R^2 value thresholds, particularly in the social sciences and associated research, are open to interpretation and may not necessarily be conclusive (Hair et al., 2014). For instance, R^2 values of 0.200 or more are regarded as extremely significant in some studies on Consumer Behaviour, whereas those of 0.750 or higher are deemed high in disciplines such as Marketing (Hair at el., 2014).

The Coefficient of Determination (R^2 value) for the criterion (dependent) variable Online Purchase Intentions, is shown in Table 38.

Table 39: Result of R^2 Value of Dependent (Criteria) Variable

***R²* Value of Dependent (Criteria) Variable**	
Dependent (Criterion) Variable	***R²* Value**
Online Purchase Intentions	0.455

According to the findings presented in Table 39, the estimated structural path model has a highly significant level of predictive accuracy for the dependent variable Online Purchase Intentions (R^2 = 0.455).

4.21 Effect Size (f^2)

The calculation of an f^2 effect size was implemented in addition to the evaluation of the overall R^2 value. When a certain predictor (independent) variable is excluded from the structural path model, the R^2 value of the dependent (criterion) variable changes. This change is measured by the f^2 effect size. Consequently,

it is evaluated based on how or whether the eliminated independent variable affected the dependent variable (Hair et al., 2014; Hair et al., 2017).

The following formula is used to compute the f^2 effect:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

The dependent variable's R^2 values when a specific independent (predictor) variable is either included or omitted from the path model are referred to as R^2 included and R^2 excluded, respectively (Hair et al., 2017). The changes in the R^2 values were estimated in order to calculate the f^2 effect magnitude. The path model was estimated twice to produce the f^2 effect.

First, the independent (predictor) variable was incorporated in the path model estimation (yielding R^2_{included}). Second, the independent variable (yielding R^2_{excluded}) was omitted from the path model estimation. Cohen (1988) value thresholds were applied to interpret the f^2 effect size obtained using the formula above (Cohen, 1988). A specific independent predictor is said to have a modest, medium, or large effect on the dependent (criterion) variable, if its f^2 value falls between 0.020 and 0.150, 0.150, and 0.350, or is higher than 0.350, respectively. The predictive structural path model's f^2 effect sizes are shown in Table 40.

Table 40: Results of f^2 Effect Sizes for Dependent Variables

Independent (Predictor) Variable	Dependent (Criterion) Variable	R^2 included	f^2 effect size	Interpretation
Brand Familiarity	Online Purchase Intentions	0.455	0.000	No effect
Online Promotion		0.455	0.067	Small effect
Perceived Conditional Value		0.455	0.011	No effect
Perceived Emotional Value		0.455	0.013	No effect
Perceived Epistemic Value		0.455	0.002	No effect
Perceived Functional Value		0.455	0.138	Small effect

Trust		0.455	0.056	Small effect
Perceived Social Value		0.455	0.000	No effect
Perceived Risk	Trust	1.33	0.153	Medium effect

According to the findings presented in Table 40, Online Promotion, Perceived Functional Value, and Trust had a small effect on Online Purchase Intentions. Additionally, Perceived Risk was found to have a medium effect on Trust (0.153). However, Brand Familiarity, Perceived Conditional Value, Perceived Emotional Value, Perceived Epistemic Value, and Perceived Social Value had a negligible effect on Online Purchase Intentions.

4.22 Predictive Relevance (Q^2 Value)

Through the use of blindfolds and a predetermined omission distance, D, the Q^2 value for the path model was determined (Hair et al., 2017). Blindfolding techniques are applied to dependent (criteria) variables that make up a reflective (mode A) specification of the measurement model (Hair et al., 2017). The model's significant predictive relevance for a particular dependent (criterion) variable is indicated by Q^2 values above 0.000. On the other hand, Q^2 values of 0.000 or lower indicate a lack of predictive relevance (Hair et al., 2017). Structural model path coefficients were derived using the PLS-SEM approach. Data points of indicators that were left out of the measurement model were systematically anticipated using the predicted scores of the reflective dependent (criterion) variable. The omission distance (D), which is used to execute the blindfolding process is what determines the systematic pattern of removing and predicting the data points.

The actual and predicted values were then compared using the blindfolded results to determine the estimated predictive significance of the structure route model. Table 40 displays the results.

Table 41: Result of Q^2 Values of Dependent Variable

Results of Q^2 Value of Dependent (Criteria) Variable	
Dependent (Criterion) Variable	***Q^2* Value**
Online Purchase Intentions	0.321

According to the findings presented in Table 41, the structural path model was found to exhibit significant predictive relevance for the dependent (criterion) variable Online Purchase Intentions (0.321).

4.23 Effect Size (q^2)

The calculation of the q^2 effect size was done in addition to the Q^2 value evaluation. A measure of the predictor's (independent) contribution to the criterion's (dependent) Q^2 value is the q^2 effect size (Hair et al., 2014; Hair et al., 2017). To determine the relevant impact of relationships between Online Purchase Intentions and its predictors (determinants) represented by Perceived Functional Value, Perceived Social Value, Perceived Emotional Value, Perceived Epistemic Value, Perceived Conditional Value, Online Promotion, Brand Familiarity, and Trust, on the estimated structural path model's predictive relevance Q^2, the q^2 effect was manually calculated for the current study. The PLS-SEM algorithm, it should be noted, does not offer q^2 effect size values. As a result, manual computation was required. Predictive relevance values of 0.02, 0.15, and 0.35 respectively, indicate that the independent variable has a minor, medium, or substantial impact on the estimated structural path model's predictive relevance Q^2 for a particular dependent (criterion) variable size (Hair et al., 2014; Hair et al., 2017).

The formula below was used to calculate the q^2 effect size:

$$q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{included}}$$

Values for $Q^2_{included}$ and $Q^2_{excluded}$ were derived using the PLS-SEM findings. To be more precise, $Q^2_{included}$ values were derived from the earlier estimation performed while blindfolded to establish a predictive relevance (Q^2) score of 0.321. The value for the specific dependent (criterion) variable was acquired through a structural path model re-estimation after the predictor variable was

removed size (Hair et al., 2017). Table 42 displays the q^2 effect sizes of the calculated structural path model.

Table 42: Results of q^2 Effect Sizes for Dependent (Criteria) Variables

Results of q^2 Effect Sizes for Dependent (Criteria) Variables					
Independent (Predictor) Variable	**Dependent (Criterion) Variable**	**Q^2 included**	**Q^2 excluded**	**q^2 effect size**	**Interpretation**
Brand Familiarity	Online Purchase Intentions	0.321	0.335	-0.02	No effect
Online Promotion		0.321	0.281	0.06	Small effect
Perceived Conditional Value		0.321	0.330	-0.01	No effect
Perceived Emotional Value		0.321	0.313	0.012	No effect
Perceived Epistemic Value		0.321	0.329	-0.01	No Effect
Perceived Functional Value		0.321	0.195	0.19	Medium Effect
Trust		0.321	0.345	-0.04	No effect
Perceived Social Value		0.321	0.327	-0.01	No effect
Perceived Risk	Trust	0.108	0.366	-0.03	No effect

Results from Table 42 indicate that the association between Perceived Functional Value and Online Purchase Intentions has a significant medium effect (0.19). Additionally, the correlation between Online Purchase Intentions and Online Promotion (0.06) may be categorised as a small effect. On the other hand, Brand Familiarity, Perceived Conditional Value, Perceived Emotional Value, Perceived Epistemic Value, and Perceived Social Value, had a negligible effect on Online Purchase Intentions.

4.24 Post-Hoc Analysis

Following tests of the structural path model, the researcher conducted a post-hoc test (one that exceeds the scope of relationships hypothesised and empirically examined in the study). Although not theorised in advance, the researcher used bootstrapped mediation PLS-SEM analyses to investigate the effects of trust as a potential intervening mechanism (mediator) between perceived risk and online purchase intentions.

Nitzl et al.'s (2016) two-step procedure was applied to test for mediation in the structural path model. First, the indirect effect of perceived risk on online purchase intentions (through trust positioned as a mediator) was tested for its

significance via a bootstrapping procedure. Second, the direct effects of (1) perceived risk on trust and (2) trust on online purchase intentions, were tested for their significance.

The type of indirect effect (mediation) observed was then determined as per the procedure recommended by Nitzl et al. (2016).

Results following estimation of the structural path model effects with trust positioned to mediate between perceived risk as a predictor and online purchase intentions as the outcome, are presented in Table 43.

The results show that trust fully mediates the effects of perceived risk on online purchase intentions. As such, a lower perception of risk among South African consumers that there will be possible negative consequences (product-related or financial) associated with their use of online shopping platforms will only result in enhanced positive intentions to purchase goods and services once they exhibit sufficient levels of trust in the seller's or retailer's reliability or goodwill. Therefore, perceived risk cannot have a positive influence on online purchase intentions in the absence of consumer trust in e-commerce.

Table 43 :Significance of Mediation Effect

Direct Effect (p_3)	**Size**	**95% Confidence Interval of Direct Effect**	**t value**	**Significance level**	**Indirect Effect (p_1 . p_2)**	**Size**	**95% Confidence Interval of Direct Effect**	**t value**	**Significance level**	**Result**
Perceived Risk → Online Purchase Intentions	0.113	[-0.027, 0.269]	1.466	*ns*	Perceived Risk → Trust → Online Purchase Intentions	-0.090	[-0.166, -0.040]	2.942	***	Indirect Only Mediation

*ns = non-significant, *** = significant $p < 0.01$ ($t > 2.57$)*

Indirect Only Mediation (p_1 . p_2 is significant, p_3 is not significant)

4.25 Conclusion

The study's results are discussed in detail in the next chapter. The conclusions addressed in this chapter will be elaborated on the basis of the study's theoretical foundations and literature review.

CHAPTER 5. DISCUSSION OF FINDINGS

5.1 Introduction

This section reflects and discusses the study's hypotheses and the influence of the identified independent factors on the dependent variable Online Purchase Intentions. These factors were hypothesized to influence consumer behaviours towards online purchase of goods and services. Following predictive analyses, findings comprised observed outcomes based on theoretical underpinnings of the study's conceptual model and the context of the current empirical investigation.

5.2 The Relationship between Perceived Functional Value and Online Purchase Intentions

Hypothesis 1 (H1) was supported. It was found that Perceived Functional Value is a positive significant factor as found in the literature (Lee et al., 2022). The literature highlights that consumers use online platforms for its efficiency and convenience to access offerings. Moreover, with enhanced functional capabilities it is highly likely to increase consumer purchase intentions when shopping on an e-commerce (online) platform. In correspondence with similar concepts such as Perceived Usefulness and Perceived Ease of Use ("the degree to which the consumer believes that using a particular technology will be effortless") from the Technology Acceptance Model (TAM) literature, a web interface that is perceived as facilitating transaction processes and is easy to operate is more likely to be accepted by consumers Pavlou (2003). Furthermore, desirability bias may be a concern when consumers desire products from a specific online retailer. However, by explicitly measuring the perceived functional value construct, the study implicitly assessed this phenomenon.

5.3 The Relationship between Perceived Social Value and Online Purchase Intentions

Hypothesis 2 (H2) was not supported. Sheth (1991) quotes Warner and Lunt (1941) describing social value as being a significant factor in human behaviour due to the influence of social class. Rogers (2003) highlights that consumer choice is the result of interpersonal communication and information dissemination. This demonstrates social value as people often share information, and exchange thoughts and perspectives in order to learn from one another. However, contrary to expectations, results from the present study showed Perceived Social Value to have an insignificant and negative effect on Online Purchase Intentions. This could be attributed to the narrative that social value creates an impression of acceptance by others in society (Ramayah, Rahman, and Ling, 2018). This, in some instances, has, however, been superseded by the elevated maturity levels and independent mindedness of consumers shopping online.

5.4 The Relationship between Perceived Emotional Value and Online Purchase Intentions

Hypothesis 3 (H3) was not supported. Literature describes goods and services being frequently associated with emotional responses (Sheth et al., 1991). For example, a consumer may find shopping online enjoyable as it is convenient. Findings from the present study however showed Perceived Emotional Value to be an insignificant predictor of Online Purchase Intentions. This contradicts other studies of this nature where it is described that the convenience of online shopping arouses emotional willingness to accept it, which then influences purchase decisions (Ramayah et al., 2018). Consumer attitudes and behaviour towards online shopping platforms endures a positive change when there is interactivity that closely matches their preferences. Ramayah et al., (2018) found this to be linked with optimal stimulation theory, whereby consumers are likely to favour positive over situations. It could be explained that due to the high rise of inflation in the wake of the COVID-19 global pandemic, South African consumers may have become more conscious of the emotional value of online shopping

platforms. This is coupled with a heightened awareness of the value of their currency when interacting with these technologies.

5.5 The Relationship between Perceived Epistemic Value and Online Purchase Intentions

Hypothesis 4 (H4) was not supported. Consumers have unlimited boundaries online and there is a vast market to tap into and identify new opportunities to shop in different environments, thus posing the challenge for retailers of maintaining consumer loyalty. Sheth et al., (1991) explains that new experiences bring about curiosity and the desire for knowledge. Contrary to the stated literature, evidence from the present study showed that Epistemic Value was insignificant in influencing online purchase intentions. This could be due to the South African online platform market still growing in terms of its competitiveness when compared to other global online platforms. This then gives South African consumers limited product or service options to switch to, therefore restricting consumers' desire to accumulate knowledge.

5.6 The Relationship between Perceived Conditional Value and Online Purchase Intentions

Hypothesis 5 (H5) was not supported. Conditional Value refers to a situational factor that either encourages or discourages consumers to purchase (Ramayah, Rahman and Ling, 2018). This is dependent on the decision maker who faces various contexts. Consumers have a huge online market to tap into identifying new products and services with competitive pricing to compare against. Porters Five Forces tell us that buyers have the power to influence prices and the quantity of products sold such that they can bargain to influence switching costs or find substitute products. Findings from the present study however show that Conditional Value has an insignificant influence on Online Purchase Intentions. Similar to findings concerning the Epistemic Value construct, the South African online market is still developing and provides limited alternative options as choice of contigency. Ramayah, Rahman and Ling (2018) quote findings in a study

conducted by Hur et.al, (2012) where it was observed that Conditional Value does carry an active role of an influencial factor to online purchase intentions. This can be attributed to situational events a decision maker would be faced with in different contexts.

5.7 The Relationship between Online Promotion and Online Purchase Intentions

Hypothesis 6 (H6) was supported. The present study evidenced that Online Promotions have a positive significant effect on Online Purchase Intentions. A study by Xiao, Guo, Yu and Liu (2019) indicated that price promotion can have an influential impact towards consumers purchase decision, leading the consumer to think that the retailer with lower prices has stonger corporate strength. Price promotion can create an economic incentive which attracts consumers to purchase products. According to the present study, in a South African context retailers often use the approach of giving discounted prices on their online platforms than in physical stores. This is done so to market online presence and gain more consumer reach. This strategy seems to be effective and favourable to consumers' purchase intentions.

5.8 The Relationship between Brand Familiarity and Online Purchase Intentions

Hypothesis 7 (H7) was not supported. The South African online market consumers are found to be predominantly young shoppers who follow current trends and are more to likely associate with their prefered brands. This can invoke an emotional attachment towards the brand and influence purchase intentions. However, observations from the present study indicated that Brand Familiarity had an insignificant impact on Online Purchase Intentions. In the context of this study, Brand Familiarity relates to the brand positioning in the mind of a consumer. A well-established brand acts as a powerful heuristic cue that influences purchase intentions. The present study's findings are in line with a study conducted by Xiao, Guo, Yu and Liu (2019) where it was found that the

higher a consumer's familiarity with the brand, the less influential the external cues (such as promotional cues, content marketing, personalized reccomendation cues, and social reviews) are. Therefore, it can be deduced that the cohort that took part in the present study were not necessarily influenced by the brand's positionining in their minds for them to make online purchase decisions.

5.9 The Relationship between Trust and Online Purchase Intentions

Hypothesis 8 (H8) was supported. The relationship between Trust and Online Purchase intentions was found to be positive. It was observed that Trust is a significant factor for Online Purchase Intentions. This aligns with findings by Zhao, Fang and Jiang (2020) indicating that Trust in Consumer-to-Consumer (C2C) websites is largely dependent on how strongly the website has provided security protection. This makes sense as there are huge amounts of security breaches (when cyber security is compromised). Therefore, online shoppers in South Africa have placed a high priority on security protection and trust in e-commerce platforms. Jones and Leonard (2008) found that internal influences such as the perception of website quality have a significant influence on consumer trust towards e-commerce platforms, as a consumer's perception of quality can result in a feeling of trust in the sellers website. Additionally, external influences such as third party recognition affects trust as consumers may prefer to use structured consumer-to-consumer (C2C) websites that are popularly known to ensure recognised standards.

5.10 The Relationship between Perceived Risk and Trust

Hypothesis 9 (H9) was supported. The relationship between Perceived Risk and Trust was hypothesized to be negatively related. Perceived Risk is a significant factor for Trust. This finding aligns with a study conducted by Lu et.al, (2010), where they stated that for trust to be fostered, perceived risk is an important antecedent. Perceived risk is defined as "the felt uncertainty regarding possible negative consequences of using a product or service" (Pavlou, 2003). This is

understood as “the more risk the consumer perceives, the lower the probability they will purchase products or services”. Consumers are likely to transact online if they gain control over their online transactions meaning that their risk perception about their behavioural and environmental uncertainties must be alleviated.

5.11 Conclusion

This chapter reviewed the research findings of the study alongside those of prior studies from the existing literature on Online Purchase Intentions and related antecedents. The hypothesised relationships that served as the basis for the present study's conceptual model were assessed. Findings following hypotheses testing and variations in empirical results across contexts were also discussed. While some of the findings were consistent with empirical observations from the existing literature, new viewpoints also arose in the explanations pertaining to study findings. The key research findings are summarized in Chapter 6, along with reflections on the implications of the findings for future research and management practice which will be discussed.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The preceding chapters discuss the context of online purchase intentions, with the literature review chapter covering an in-depth discussion on online purchase intentions from global, Sub-Saharan African, and South African perspectives. The research model was created and the underpinned theoretical frameworks were outlined in Chapter 2. The research methodology employed in the present study and outlining the research approach and design, as well as data collection methods implemented, were presented in Chapter 3. The study's data were analysed in Chapter 4 and empirical results following hypotheses testing discussed in Chapter 5. The study is summarised in this chapter and the implications of its results for stakeholders are described. The study's limitations and opportunities for future research are specified, and the study is concluded.

6.2 Summary of the Study

The reason underpinning this study was the lack of determinants on the purchase intentions of consumers using an electronic commerce (e-commerce) platform in the South African context. A trend overview of e-commerce (online shopping) platforms was reviewed from Global, Sub-Saharan African, and South African perspectives.

During the literature review exercise conducted in the present study, it was discovered that the most widely used theoretical models for this type of study include the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Stimulus-Organism-Response (SOR), Consumption Value Model, and Cue Utilisation Theory. In the present study, Cue Utilisation Theory, the Consumption Value Model, and the TRA were the underpinning theories of the conceptual framework developed to address its specified objectives.

This present study identified nine (9) independent variables from the selected underpinning theories, which were then hypothesised as being positively related to online purchase intentions, with the exception of perceived risk hypothesised as being negatively related to trust. Control variables were identified to understand respondent demographics and their potential confounding effects on online purchase intentions.

Validity and reliability tests were conducted after data screening. Descriptive statistics were also run. Regression via PLS modelling was used to test the study's hypotheses through predictive path analysis. Three factors in this present study were found to significantly influence Online Purchase Intentions. These were Perceived Functional Value, Online Promotion, and Trust. In addition, Perceived Risk was found to have a significant influence on Trust. Further, following post-hoc analysis, Trust was found to be a significant positive mediating influence in the negative relationship between Perceived risk and Online Purchase Intentions.

6.3 Implications for Stakeholders

The study's implications for practice and academia are discussed in this section.

6.3.1 *Practical Contribution*

Online shopping has been the fastest adoption online activity becoming a significant part of life today, especially since the rise of the global COVID-19 pandemic. The wide range of internet availability has allowed consumers to become more inclined towards online purchasing. Although, as has been highlighted by Ramaya et al., (2018), online purchasing is not as popular in developed countries as in developing countries.

The present study has indicated that the Functional Value dimension underpinned by the Consumption Value Model significantly influences the South African consumer to purchase online. Online Promotion from the Cue Utilisation model positively influence Purchase Intentions. Further, Trust (underpinned by

the Theory of Reasoned Action) positively influences Online Purchase Intentions, which itself is negatively influenced by Perceived Risk.

Business owners and managers could use these findings as a tool to attract potential consumers and maintain the existing relationship with customers in order to achieve repurchase intentions. The present study also contributed towards assisting policy makers (regulatory bodies) understand what motivates customer choices and how they can be protected (ie., consumer protection policies).

6.3.2 *Academic Contribution*

This study fills a gap in the existing literature by examining South African consumer online purchase intentions. The popular theories used when examining human behaviour exposed a gap in e-commerce (online shopping) platforms research and was highlighted as part of Chapter 1 of the present study. The present study is benefial for researchers seeking to investigate factors that influence consumers to form purchase intentions when interacting with these platforms.

A contribution was made through the present study by adopting theories used in Marketing and Human Behaviour as well as Digital Business. The study's conceptual framework showed that social elements (such as social perceptions and social commerce) do not have a direct influence on the South African consumer's online purchase intentions. The present study also shows that Trust has a significant impact on online purchase intentions as it is largely dependent on how strongly the website has provided the consumer with security protection.

6.3.3 *Recommendations for Future Research*

Good customer service, informative websites that meet customer needs, guaranteed protection of personal information (safety) when personal information is shared, and the assurance that the customer (while shopping online) has no doubt about product features, are highly recommended. The present study's underpinning theories may be used to predict consumer consumption behaviors.

Future research should not only be limited to testing the South African market. A comparative study between developing and developed countries can be conducted. Incorporating national cultures and consumer repurchasing intentions could be considered to understand the effect of functional value in online purchase behaviours across varied contexts. Researchers could also consider analysing trust and perceived risk factors as these factors were at an abstract level. Furthermore, a distinction can be made between environmental and behavioral risk components. Last but not least, the notion of perceived risk itself can be expanded into multi-dimensional constructs such as financial, social, and time.

6.4 Conclusion

The body of knowledge in the space of e-commerce (online shopping) platforms potentially has a wealth of opportunities for empirical research with online purchase intentions cutting across many different industries. The present study focuses on the South African context for online purchase intentions and its potential determinants while enhancing the pre-existing knowledge base on online consumer behaviour when interacting with e-commerce platforms as there is little limited research available.

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APPENDIX (A) Participant Information Sheet



Dear Sir/Madam,

My name is Nolo Tsotetsi, and I am a Master's student at the University of the Witwatersrand (WITS), Johannesburg.

I am conducting a study to evaluate a set of factors (predictors) that affect Internet consumers online purchase intentions using electronic-commerce (e-commerce) online shopping platforms.

This study is designed for the testing of a predictive research model of online purchase behaviour in the context of South Africa.

I hereby invite you to take part in this study by completing this questionnaire. There are no right or wrong answers. You have been invited to participate in this study because you use the Internet to purchase goods on e-commerce (online shopping) platforms on your Personal Computer (PC) or mobile device.

Participation in this survey is completely voluntary and involves no risk, penalty or loss of benefits. In the event that there is a misunderstanding, the research will not invoke any payment. You have the right to withdraw from the survey at any time. You will not be required to provide your personal details or reveal your identity while answering the questionnaire.

The survey is both confidential and anonymous, and the data collected will only be used for the study and no other purpose. By filling in this questionnaire, you will be consenting to participate in the study. A summary of the survey findings will be made available upon your request.

The survey questionnaire consists of 41 statements. Please select the number that reflects the extent to which you agree or disagree with each statement. The entire questionnaire should take approximately 15 minutes to complete. Completion of this questionnaire will be taken as your consent to participate.

Should you have any queries or wish to obtain a copy of the results of the survey, please contact me on +27 71 933 9439. You can also reach me through electronic mail (e-mail) correspondence at 2412285@students.wits.ac.za.

For concerns about the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (HREC Non-Medical) by telephone on +27 11 717 1408, or the Ethics Administrative Officer through electronic mail (e-mail) on Shaun.Schoeman@wits.ac.za.

Thank you for considering your participation

Yours Sincerely,

Nolo Tstotetsi
Wits Business School (WBS) Master of Management in Digital Business (MMDB) Candidate,
University of the Witwatersrand (WITS),
Johannesburg, South Africa (SA)

APPENDIX (B) Participant Agreement form

Factors Influencing Consumer Purchase Intentions: A Study of E-Commerce Platforms in South Africa

By Nolo Tsotetsi

I, …….., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	Yes	No
I understand that I can volunteer to take part in the study	Yes	No
I agree that my participation will remain anonymous (my name will not be used by the researcher in their research report/manuscript/book chapter)	Yes	No

…… (signature)

…… (name of participant)

…… (date)

…… (signature)

…… (name of researcher)

…… (date)

APPENDIX (C) Instrument

Dear Participant,

This study is designed to explain the effects of select factors that affect Internet consumers online purchase intentions using electronic-commerce (e-commerce) online shopping platforms.

I hereby invite you to participate in this survey as you use the Internet to purchase goods and/or services on e-commerce (online shopping) platforms.

The survey should take approximately 15 minutes to complete.

Please ensure that you answer all questions in the survey.

The information received from this questionnaire will be used for research purposes only.

Should you have any queries or wish to obtain a copy of the results of the survey in aggregate form, please contact me by e-mail on 2412285@students.wits.ac.za.

SECTION A: ONLINE SHOPPING PLATFORM CONSUMER PROFILE

Please indicate your response by ticking the appropriate boxes below.

1. Age

Below 20 years ☐ 21 - 30 years ☐ 31 - 40 years ☐

41 - 50 years ☐ 51 - 60 years ☐ 60 years and above ☐

Prefer not to say ☐

2. Gender

Male ☐ Female ☐ Prefer not to say ☐

3. Highest Education Obtained

Primary School (Basic) ☐ High School (Matric) ☐ Diploma ☐

Bachelor's Degree ☐ Post Graduate Diploma ☐

Master's Degree ☐. Doctorate Degree ☐

Other (Please specify) _____

4. Internet Experience

Under 1 year ☐ 1 – 3 years ☐ 4 – 5 years ☐

Over 5 years ☐

5. Online Shopping Experience

Under 1 year ☐ 1 – 3 years ☐ 4 – 5 years ☐

Over 5 years ☐

Section B: ONLINE PURCHASE INTENTIONS

This section is focused on your attitudes towards the use of online shopping platforms

1. Perceived Functional Value

The level of efficiency and convenience with which you access offerings on an online platform

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	[E-Commerce (Online Shopping) Platforms] services are reliable.	1	2	3	4	5
2.	[E-Commerce (Online Shopping) Platforms] services have good functions (features).	1	2	3	4	5
3.	[E-Commerce (Online Shopping) Platforms] provide a timely service.	1	2	3	4	5
4.	[E-Commerce (Online Shopping) Platforms] services fulfil my needs well.	1	2	3	4	5
5.	[E-Commerce (Online Shopping) Platforms] services are well provided.	1	2	3	4	5
6.	[E-Commerce (Online Shopping) Platforms] services have a good standard.	1	2	3	4	5

2. Perceived Social Value

Social view that influences your consumer purchase decisions

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	[E-Commerce (Online Shopping) Platforms] services help me feel acceptable.	1	2	3	4	5
2.	[E-Commerce (Online Shopping) Platforms] services make a good impression on other people.	1	2	3	4	5
3.	[E-Commerce (Online Shopping) Platforms] make me familiar with other people.	1	2	3	4	5
4.	[E-Commerce (Online Shopping) Platforms] services improve the way I am perceived.	1	2	3	4	5
5.	Using [E-Commerce (Online Shopping) Platforms] service gives me a sense of belonging to other users.	1	2	3	4	5

3. Perceived Emotional Value

Your emotional consumer experience when engaging with a product or service

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Using [E-Commerce (Online Shopping) Platforms] services is interesting.	1	2	3	4	5
2.	Using [E-Commerce (Online Shopping) Platforms] services is enjoyable.	1	2	3	4	5
3.	[E-Commerce (Online Shopping) Platforms] services make me want to use it.	1	2	3	4	5
4.	I feel relaxed when I use [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
5.	I feel good when I use [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
6.	[E-Commerce (Online Shopping) Platforms] services give me pleasure.	1	2	3	4	5

4. Perceived Epistemic Value

Wide access to various products such that you can voluntarily choose another product and switch from a previous purchase to satisfy your curiosity for other offerings

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	[E-Commerce (Online Shopping) Platforms] services make me curious to explore novel and different products.	1	2	3	4	5
2.	[E-Commerce (Online Shopping) Platforms] services make me want to try and purchase different product offerings.	1	2	3	4	5
3.	[E-Commerce (Online Shopping) Platforms] services make me want to learn about and experience novel products.	1	2	3	4	5

5. Perceived Conditional Value

Your evaluation of whether you are offered alternatives due to a temporary situation

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the preferred product offering is out-of-stock.	1	2	3	4	5
2.	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the retail price of the preferred product is increased.	1	2	3	4	5
3.	When using [E-Commerce (Online Shopping) Platforms] services, I would consider switching to an alternative if the retail price of the preferred product is no longer offered at a discount.	1	2	3	4	5

6. Online Promotion

Your evaluation of whether price promotions offer you cheaper deals for good products (value for money)

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	There are many forms of promotion on [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
2.	The promotion of merchandise on [E-Commerce (Online Shopping) Platforms] is very strong.	1	2	3	4	5
3.	The promotion of local products on [E-Commerce (Online Shopping) Platforms] is frequent.	1	2	3	4	5
4.	[E-Commerce (Online Shopping) Platforms] provide enough merchandising information.	1	2	3	4	5

7. Brand Familiarity

The extent to which you have experience with the brand (directly or indirectly)

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I often see ads for product brands recommended by [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
2.	I often see the display and recommendation of commodity brands on [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
3.	I often hear other people discuss the brand of products recommended by [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
4.	I often buy product brands recommended by [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5

8. Perceived Risk

Your uncertainty concerning possible negative consequences (product-related or financial)

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Compared to traditional shopping channels, purchasing from [E-Commerce (Online Shopping) Platforms] involves more product risk, e.g., product not working or defective product.	1	2	3	4	5
2.	Compared to traditional shopping channels, purchasing from the [E-Commerce (Online Shopping) Platforms] involves more financial risk, e.g., fraud or difficulty in returning the product.	1	2	3	4	5
3.	Overall, shopping on [E-Commerce (Online Shopping) Platforms] involves more risk.	1	2	3	4	5

9. Trust

Your evaluation of the sellers or retailer's reliability and goodwill

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	[E-Commerce (Online Shopping) Platforms] are unreliable.	1	2	3	4	5
2.	[E-Commerce (Online Shopping) Platforms] cannot be trusted due to too many uncertainties.	1	2	3	4	5
3.	In general, I cannot rely on [E-Commerce (Online Shopping) Platforms] sellers to keep the promises they made.	1	2	3	4	5
4.	Anyone trusting [E-Commerce (Online Shopping) Platforms] is asking for trouble.	1	2	3	4	5

10. Online Purchase Intentions

Your willingness and readiness to make an online transaction

For each statement, please select the number that best reflects the extent to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I am likely to purchase products on [E-Commerce (Online Shopping) Platforms].	1	2	3	4	5
2.	I am likely to recommend [E-Commerce (Online Shopping) Platforms] to my friends.	1	2	3	4	5
3.	I am likely to make another purchase from [E-Commerce (Online Shopping) Platforms] if I need the products I will buy.	1	2	3	4	5

Thank you very much for your participation

APPENDIX (D) Research Permission Letter

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

OFFICE OF THE DEPUTY REGISTRAR

08 December 2022

Nolo Tsotetsi
Student Number (2412285)
Master of Business Administration
Wits Business School

TO WHOM IT MAY CONCERN

"Factors influencing consumer purchase intentions: A study of e-commerce platforms in South Africa."

This letter serves to confirm that the above project has received permission to be conducted on University premises, and/or involving staff and/or students of the University as research participants. In undertaking this research, you agree to abide by all University regulations for conducting research on campus and to respect participants' rights to withdraw from participation at any time.

If you are conducting research on certain student cohorts, year groups or courses within specific Schools and within the teaching term, permission must be sought from Heads of School or individual academics.

Ethical clearance has been obtained. (Protocol number: WBS/DB2412285/305)

Research Expiration: (Research submission date)

Potgieter

Nicoleen Potgieter
University Deputy Registrar

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APPENDIX (E) Ethics Clearance Certificate

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/DB2412285/305
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title	Factors influencing consumer purchase intentions: A study of e-commerce platforms in South Africa
Investigator / Researcher	Miss Nolo Tsotetsi
Nature of Project	MM (Digital Business)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed anonymity and confidentiality.
Issue Date of Certificate	2022-09-02
Expiry date	Date of submission of the project / research report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 +27 82 880 4531 anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

03/09/22
Date: