

**Antecedents of online shopping behaviour: the moderating
role of gender in Gauteng**

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of the requirements for the Degree of Master of Management in
Strategic Marketing.**

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DECLARATION

I, **Khanyisa R. Sikhalela**, declare that this research report is my own work except as indicated in the reference and acknowledgements. It is submitted in partial fulfilment of the requirements for the Master of Management in Strategic Marketing Degree at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other University.



.....
Khanyisa R. Sikhalela

Signed at:Pretoria.....

On the.....24th.....day of.....February.....2022.....

DEDICATION

I dedicate my Masters in Strategic Marketing research paper to my late grandfather, Mr M.F. Chabane. Thank you for instilling the knowledge and understanding that one can lose everything, but education will forever remain in one's possession.

~ Magezi Freddy Chabane: 1938 – 2020 ~

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Firstly, I would like to thank my uncle Mr Carl Chabane. Thank you for believing and investing in my need to increase my knowledge. Without you, none of this would have been possible. No amount of words can reflect how thankful I am.

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ABSTRACT

Online shopping is a growing phenomenon, and, with the COVID19 pandemic, it has been exacerbated. This study sought to assess the antecedents of online shopping behaviour and the moderating role of gender. Driven by the need to expand the knowledge of digital marketing and consumer behaviour, research on consumer behaviour and gender was imperative. This study was motivated by the lack of studies in the South African context that have investigated the online shopping antecedents and how the relationship between these antecedents and online shopping is influenced by gender. To achieve the aim of the study, this study utilised a self-administered questionnaire to collect data from 200 online shoppers from Gauteng province, South Africa. Correlation and regression analyses were used to evaluate the objectives of the study. Thus, a causal-comparative research design was employed to investigate the effect of perceived benefit, online consumer attitude, perceived risk and trust on online shopping, and how gender influences these relationships. The study revealed that perceived benefit, trust, and online consumer attitude positively affect online shopping. Perceived risk was found to have a negative effect on online shopping. Further results revealed that gender influences the relationships between online shopping behaviour and its antecedents. The study concluded that gender matters regarding online shopping behaviours in Gauteng province. It was recommended that online businesses implement gender-sensitive marketing strategies to attract more online buyers. The results imply that online businesses should pay attention to the four antecedents of online shopping to increase their online sales. Building trust and reducing the perceived risks would enhance online business growth. This suggests that gender-specific or gender-sensitive marketing strategies should be implemented to increase online shopping.

Key words: *Gender, online shopping, online consumer attitude, perceived risk, perceived benefit, trust*

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LIST OF ACRONYMS AND ABBREVIATIONS

OCA	Online Consumer Attitude
OS	Online Shopping
PB	Perceived Benefit
PR	Perceived Risk
TPB	Theory of Planned Behaviour
TR	Trust
TRA	Theory of Reasoned Action

CHAPTER 1. OVERVIEW OF STUDY

1.1 Introduction

A detailed discussion of the background is provided in this chapter. In addition, the problem statement, research objectives, research questions and problems were also discussed. In addition, it also provides research contributions, delimitations of the study as well as definition of terms.

1.2 Background

At some point in the past, buying gadgets online was not a disturbing idea, if not unpopular to many people (Al-Mowalad & Putit, 2013). In previous years, if someone planned to buy anything, they would first check the yellow pages or ask someone for advice from a good local store, and then go to the store to learn about the goods the store offers (Payne, Peltier & Barger, 2017). It was almost impossible for consumers to obtain valuable information and limited product supply. There are unlimited statistics and many e-commerce store scenarios that tend to sell. This situation has undergone a fundamental change (Payne et al., 2017; Charumathi & Rani, 2017, Asiedu & Dube, 2020).

In today's business enterprise world, online shopping is a growing phenomenon, more common in technologically advanced countries, as they continue to provide the convenience of electronic malls via the Internet (Prawira & Sihombing, 2021). Today, more than 2.1 billion people are connected to the Internet, and these numbers are growing at an alarming rate. This has led to an increasing number of online shopping users, as illustrated in Figure 1. Online shopping is a system that uses the Internet to exchange goods and services between consumers and sellers. All capital flow, data flow and logistics operations completed through the Internet are included in online shopping, an important part of e-commerce (Charumathi & Rani, 2017).

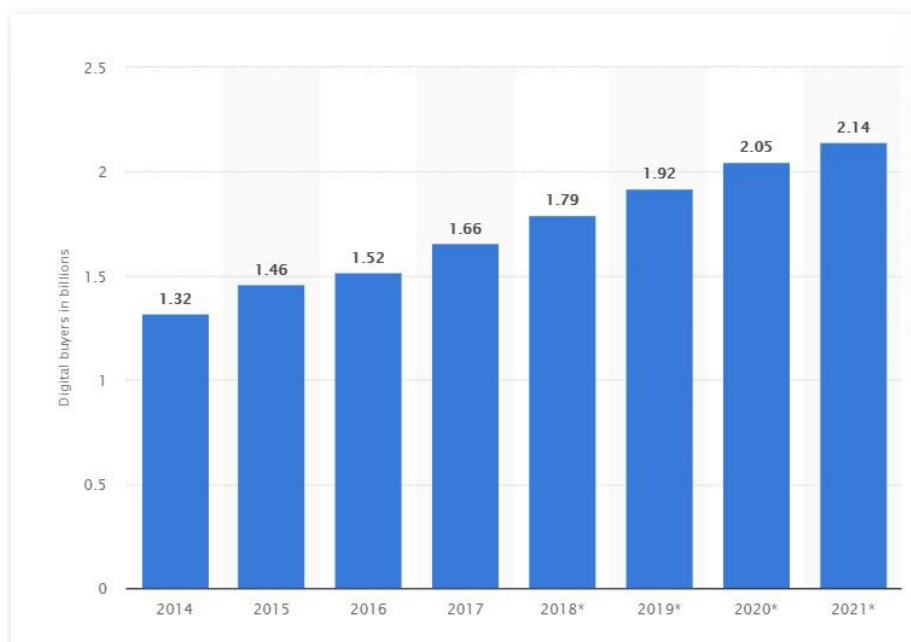


Figure 1.1: Global online shopping users (2014-2021) in billions

Source: Statistical (2019)

The growing and popular online shopping is encouraged for many reasons. There are other factors, such as rising fuel prices, the challenge of arriving at traditional stores on time, and the troubles associated with shopping malls, all of which have led to an increase in online shopping activities (Salim, Alfansi, Dart & Anggarawati, 2009). In addition, compared with traditional shopping, convenience is one of the most significant advantages of online purchasing. People can buy almost anything they should consider without leaving home (Parks, 2008). The online store is open 24 hours a day and can be accessed anywhere with an internet connection nearby and choice. Compared with traditional physical stores, online stores can provide more choices (Sarkar & Das, 2017). Online shops do not need to display their products attractively on the shelves, and they can hold a large amount of inventory. Then there is the price. Since online stores do not have to pay rent for stores in high-end areas of the city and tend to sell many goods, they can promote goods at lower prices than traditional stores (Amin, 2009).

These benefits of online shopping used to be enjoyed by consumers in first world countries, but now they are also enjoyed in developing countries. Online shopping has achieved tremendous growth in developing countries in the past few years. This

growth trend is obvious in South Africa, one of the five countries with the highest online shopping revenue globally (Statistica, 2019).



Figure 1.2: Global comparison revenue

Source: Statistica (2019)

More South Africans use internet connections, which provides them with tools to purchase products online (Donner et al., 2019). This has increased online shopping users nationwide, as illustrated in Figure 3 (Statistica 2019). South Africa's mobile commerce industry is growing-it is estimated that online spending through mobile devices has increased by 65% between 2015 and 2016, reaching an estimated 9.5 billion rand, an increase of 123% (Smith, 2017).

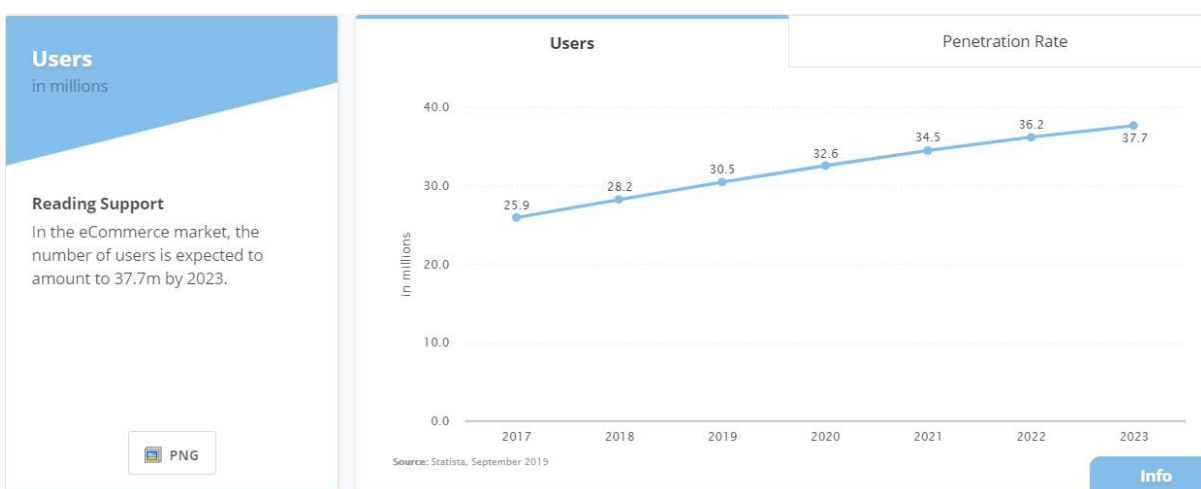


Figure 1.3: South Africa's online shopping users in millions (2017-2023)

Source: Statistica (2019)

A study on "My Broadband" shows that 41.2% of residents in Gauteng are using online shopping (Writter, 2017). Research shows that the age range of online consumers in South Africa is 15-60 years old, but the 25-34 age group is the most frequent user (Statistica 2019).

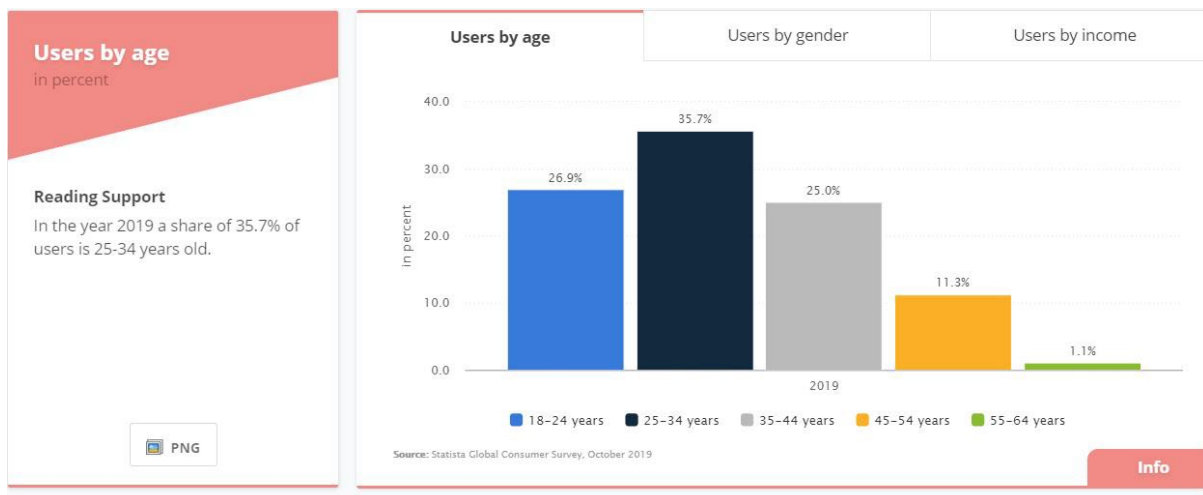


Figure 1.4: South Africa's online shopping users by age

Source: Statistica (2019)

It is also worth noting that there are equal gender divisions. Most ethnicities participating in online shopping are African blacks, while women are more involved in online shopping (Mathaba & Mkhize, 2018); Figure 5, Statistics 2019). According to the South African Bureau of Statistics (2017)'s mid-2016 estimate, South Africa has 51.04% of women and 48.96% of men, which is related to the gender statistics of Gauteng. The cumulative result seems to be consistent with the South African Bureau of Statistics because the percentage of women is higher than that of men. Based on this fact, we assume that our sample represents the population of Gauteng in terms of gender.

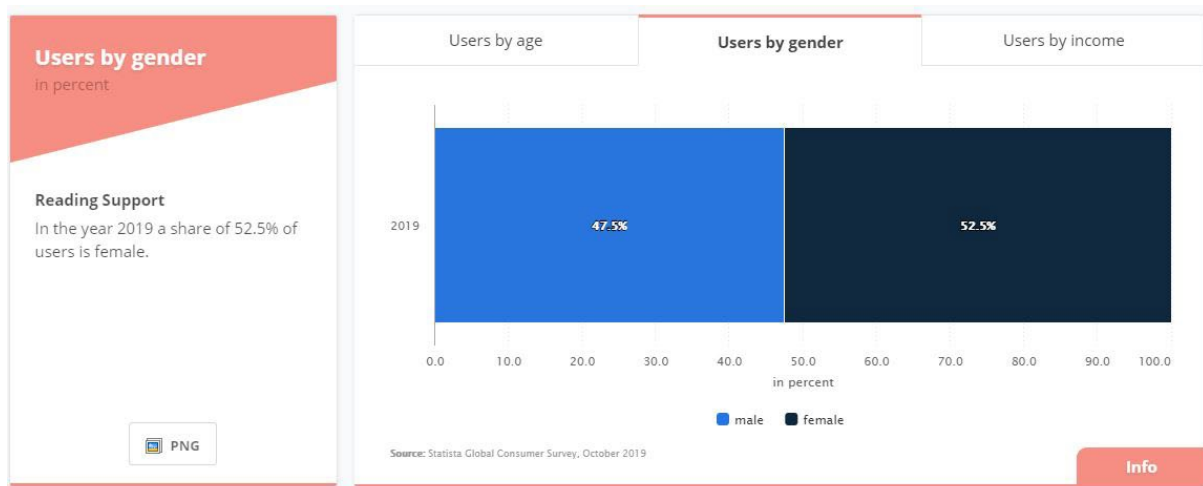


Figure 1.5: South Africa’s online shopping users by gender

Source: Statistica (2019)

In marketing, the customer journey refers to customers' purchasing process through touch points (Wagner, Schramm-Klein, Steinmann & Mau, 2017). According to Bleier, Harmeling & Palmatier (2019), consumers usually do not buy immediately after discovering a product. Typically, customer's assess' goods or services numerous times, then come up with an action, considered a touchpoint. This process goes through touchpoints. The goal of analysing and mapping the customer's journeys would be to learn more about how customers behave (Blejer et al., 2019). As a result, the customer experience can be improved, thereby increasing the conversion rate. It is also possible to analyse the relationship between proprietary touchpoints (Katherine, Spradley & Jantz, 2016).

In traditional shopping, tracking customer interactions leading to purchase is challenging as the source of each consumer's information about the store or product is untraceable (Wagner et al., 2017). Recommendations may come from family, friends, neighbours, newspapers, TV, or even randomly walk in. You can find recommended sources through qualitative surveys, but these surveys are expensive to perform. However, in online shopping, any possible customer contact factors for products or services can be accurately tracked through appropriate tracking tools and even through many channels (Bleier et al., 2019). Many technological solutions can

be used to track and analyse customers purchasing journeys (Katherine et al., 2016; Wagner et al., 2017).

The introduction of social networks and mobile commerce has made online consumer journeys more convenient (Büyüközkan & Çifçi, 2012). Social networks provide an incredible two-way communication platform where online consumers can interact with brands and other online consumers (Hollebeek et al., 2014). The shift from traditional shopping methods has led to the development of different strategies around this new shopping method. As a result, it has become more vital for businesses to focus on more efficient online customer journeys and enhance digital platforms, including websites (Vogt & Alldredge, 2012; Asiedu & Dube, 2021).

1.3 Problem Statement

Research shows that in the traditional shopping experience, gender plays a crucial role in shopping behaviour (Reddy & Srinivas, 2015). A study by Yildirim et al. (2015) has turned to online shopping and its relationship to demographics. Yildirim, Cagatay & Hidayetoğlu (2015) pointed out that the role of online shopping, especially focusing on demographic-related factors, plays a key role in the online shopping process. The former is supported by a recent study by Pandey and Chawla (2018) that highlights how demographics play a key role as a key factor in online shopping behaviour. The role of demographics (age, gender, education, and income) is important because it helps consumers buy online (Akman & Rehan, 2014).

Many studies in different countries have explored the influence of demographics on online shopping behaviour (Reddy & Srinivas, 2015), with the purpose of determining whether an individual's socioeconomic characteristics (gender, income, and age) affect online shopping behaviour. Reddy and Srinivas (2015) found that these factors do not affect individual online shopping behaviour. In contrast, Richa (2012) found that online shopping in India is significantly affected by various demographic factors such as marital status, age, gender, income, and family size. Based on the findings made by other researchers, the results vary depending on the geographic location of the study.

However, several studies have explored factors that influence online shopping behaviour, such as Perceived Benefit (PB), Perceived Risk (PR), Online Attitude (OA) and Trust (TR) (Faqih, 2016; Lim & Yazdanifard, 2014; Riquelme & Román, 2014; Sarkar & Das, 2016; Usman & Kumar, 2021). Although the number of studies on online shopping has increased, few studies in emerging markets only focus on gender, consumer behaviour, and online shopping. Unfortunately, few studies have focused on perceived benefits (PB), perceived risks (PR), online attitudes (OA) and trust (TR), and gender in one study. Thus, the role of gender in influencing antecedents of online shopping behaviour (PB, PR, OA, and TR) has not been extensively investigated. This research aims to help fill this gap in marketing research by focusing on the role of gender in influencing the relationship between online shopping behaviour and its antecedents (PB, PR, OA, and TR).

1.4 Purpose of the study

The purpose of this study was to understand the role of gender on the relationship between online shopping behaviour and its antecedents, namely perceived benefit, perceived risk, online attitude, and trust. The study focused on Gauteng region of South Africa.

1.5 Research Objectives

The primary research objective of this study was to determine the role of gender in influencing the relationship between online shopping behaviour and its antecedents which are perceived benefit, perceived risk, online attitude, and trust. The secondary research objectives were as follows:

- 1) To investigate the effect of Perceived Benefit (PB) on consumer online shopping and the moderating role of gender on the relationship between PB and online shopping behaviour
- 2) To investigate the effect of Perceived Risk (PR) on consumer online shopping and the moderating role of gender on the relationship between PR and online shopping behaviour.

- 3) To investigate the effect of Online Attitude (OA) on consumer online shopping and the moderating role of gender on the relationship between OA and online shopping behaviour.
- 4) To investigate the effect of Trust (TR) on consumer online shopping and the moderating role of gender on the relationship between TR and online shopping behaviour.
- 5) To investigate how males and females differ in consumer online shopping behaviour.

1.6 Research Questions

What is the role of gender in influencing the relationship between online shopping behaviour and its antecedents which are perceived benefit, perceived risk, online attitude, and trust? The secondary research questions were as follows:

- 1) What is the effect of perceived benefit on consumer online shopping and the moderating role of gender on the relationship between PB and online shopping behaviour?
- 2) What is the effect of perceived risk on consumer online shopping and the moderating role of gender on the relationship between PR and online shopping behaviour?
- 3) What is the effect of online attitude on consumer online shopping and the moderating role of gender on the relationship between OA and online shopping behaviour?
- 4) What is the effect of trust on consumer online shopping and the moderating role of gender on the relationship between TR and online shopping behaviour?
- 5) How do males and females differ in consumer online shopping behaviour?

1.7 Contribution of the study

Although there seem to be many scholars interested in understanding the impact of gender and online shopping, there is a scarcity of studies that looked at the role of gender on the relationship between online shopping behaviour and its antecedents: perceived benefit, perceived risk, and online attitude and trust. Given this, this

research has made the following academic contributions: This research contributes to limited research on how gender and four factors affect consumer behaviour when shopping online.

This research helps expand the knowledge of digital marketing and consumer behaviour because most research does not consider how consumer behaviour factors such as PB, PR, OA, and trust affect consumers' online shopping and the role of gender in influencing these relationships. Research needs to understand a person's behaviour and the role of gender, male or female consumers who shop online. The researchers did not know that any previous studies have looked at all these variables as a whole and focused on South Africa, especially in Gauteng. Due to the lack of information, it makes it difficult for marketing managers to understand what factors motivate customers to make online purchases, and it is even more difficult to understand whether gender has a role in influencing online shopping behaviour. Therefore, this research has made the following management contributions: It enables marketing managers to gain insight into the customers they are targeting who live in Gauteng and shop online. This allows them to better understand potential customers and their behaviour and understand the impact of gender on customers' online shopping behaviour. This research will help marketing managers develop advertising and content strategies when promoting their products online and ensure that these strategies are consistent with the gender and behaviour of consumers.

1.8 Delimitations of the study

- Several consumer behaviour factors may influence online shopping behaviour. However, this study was limited to examining four factors of consumer behaviour which were perceived benefit, perceived risk, online attitude, and trust.
- This study was limited to only people in South Africa, specifically in the Gauteng Area.
- Gender was only defined as either male or female. Some research studies define gender as more than males and females.

- This study aimed at understanding more of consumers who shop online, therefore limiting the study to people who have access to shopping online.

1.9 Definition of terms

The following sections present definitions that are seen as important for this study.

1.9.1 Perceived benefits

The positive outcomes that are then associated with a certain behaviour (Arora & Aggarwal, 2018).

1.9.2 Perceived Risk

Perceived risk is the hesitation and uncertainty when considering purchasing items (Masoud, 2013).

1.9.3 Trust

The assurance and ability of something or someone delivering (Chang, Cheung & Tang, 2013).

1.9.4 Online Attitude

Online consumer attitude is a general assessment by individuals, which may sometimes include objects, issues, and advertisement (Le & Nguyen, 2014),

1.9.5 Gender

Gender is stated that it is the responsibilities and roles of women and men produced in families, societies, and cultures (March, Smyth & Mukhopadhyay, 2011).

1.9.6 Online Shopping

Online shopping is the purchasing of goods and services remotely from the website without physically seeing or touching the items (Steinhoff, Arli, Weaven & Kozlenkova, 2019).

1.10 Assumptions

The following assumptions were made in this study.

- All targeted respondents had access to a device and internet connection
- All the respondents were either male or female.
- There was a low response rate.

1.11 Chapter Summary

This chapter discussed the overall context of the study. The background of the study was outlined. The research objectives and questions were presented. In addition, contributions, delimitations, and study assumptions were also discussed. As with the significance of the research study presented, it is clear that this study contributes to the expanding of knowledge of the relationship between online shopping, gender and the four factors, namely; perceived benefit (PB), perceived risk (PR), online attitude (OA) and trust (TR). The following chapter will expand on the literature review of the study.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This chapter focuses on reviewing literature related to online shopping behaviour. The chapter provides a theoretical framework of the study. Behavioural theories are discussed in line with antecedents of online shopping behaviour. Further, the chapter also focuses on hypothesis development and the conceptual model of the study is presented in the final section of the chapter.

2.2 Online Shopping Behaviour

In the past ten years, the use of the Internet has increased substantially, so more consumers are associated with most online products (Alsoud, Balhareth, Ab Yajid & Khatibi, 2021). The online environment provides companies with opportunities to connect with online customers (Akar & Nasir, 2015; Alsoud et al., 2021). This provides the company with an opportunity to sell products online. Steinhoff et al. (2019) pointed out that online shopping is the selling goods and services through websites and all digital platforms available in the digital space. Jusoh and Ling (2012) added that online shopping involves consumers buying products from online stores in the comfort of their homes. According to Lim and Yazdanifanrd (2014), more factors such as culture can influence online consumer behaviour.

Driven by consumers' online consumption behaviour, online services have become one of the most important business-to-consumer transactions (Lim, Osman, Salahuddin & Romle, 2016). In addition, the volume and value of online shopping have increased (Shanthi & Desti, 2015). Akar and Nasir (2015) argue that organisations need to invest in online shopping platforms because there is a trend that more and more consumers are buying online. Organisations need to pay special attention to consumer characteristics, habits, and lifestyles to compete on a larger global scale and obtain a good return on investment.

To survive and maximize profits in this fast-growing industry, online transaction organisations need to fully understand online consumer behaviour, especially the different online shopping attributes (Deka, 2017). These attributes are divided into four

categories: goods, customers, services, and security (Almousa, 2011). Commodities/sales are elements that focus on classification and product information. However, the size of online stores also hinders the success of online sales, and it is also difficult for consumers to find the products they are looking for (Chang & Tseng, 2013).

Consumer online shopping behaviour is of interest to marketers and companies because it reflects how consumers make online purchasing decisions and how these decisions influence business marketing decisions (McLean, Osei-Frimpong & Wilson 2020). In online shopping, consumers also express concerns about the following issues: the safety of online shopping, which has become one of the factors that affect consumers' online purchase methods and methods (Chang, 2016; Alsoud et al., 2021). As a result, it is critical to identify the primary aspects that influence consumers' purchasing decisions. The success of online stores depends on companies that provide services tailored to consumers and meet their requirements (Ha & Stoel, 2012). Therefore, other factors such as consumer online behaviour should be continuously monitored and analysed (Bilgihan & Bujisic, 2015).

2.3 Consumer Behaviour

Consumers can be defined as anyone who participates in the consumption process (Jisana, 2014). Schiffman and Kanuk (2010) believe that consumer behaviour is the process of purchasing goods or services, and this process is to pursue the realization of personal desires. Consumers have gone through many steps in consumer behaviour, including the time to decide what to buy, the money used to buy, and the thinking process behind the purchase (Jisana, 2014). This process gives a deeper understanding of the purchasing decision process (Jisana, 2014). According to Vainikka (2015), the consumption of goods and services occurs in our daily lives. Therefore, consumer behaviour is an important factor in purchasing products and services through the intention of online shopping.

Prawira and Sihombing (2021) note that consumer behaviour is constantly changing with the emergence of new products and services and the changes in consumer preferences. To implement precise marketing and sales tactics, marketers must

understand the consumer's behaviour. Consumer expectations and requirements are evolving, so if brands want to succeed, they need to keep up with the dynamic environment, according to Usman and Kumar (2021). Marketers need to ensure that their marketing and sales strategies are flexible enough to cater to consumer and environmental behaviour changes (Noel, 2009).

2.3.1 Consumer buying behaviour

According to Ramya and Alir (2016), consumer buying behaviour is related to how customers obtain goods and services and their experience of satisfying their wants. Ramya and Ali (2016), as cited in Hlela (2019), propounded that consumer buying behaviour is the process by which customers identify, purchase, and use products or services to satisfy their needs or desires. In today's highly competitive world, brands must adapt to survive. Kotler and Keller (2011) emphasized understanding consumer buying behaviour. Marketers can develop strategies that align with the target market's needs by better understanding the factors that drive customers' purchasing decisions. This allows them to communicate with customers more effectively (Ramya & Ali, 2016, cited in Hlela, 2019). Many factors affect the way customers make purchasing decisions. Making a buying decision can be quick and simple in certain circumstances, but it can also be a lengthy and time-consuming process in others. Product engagement is a key factor when consumers decide on buying (Barreto & Ramalho, 2019). Barreto and Ramalho (2019) differentiate between high and low goods and services participation levels. Highly engaged items are less frequently purchased, are more complex, and require more energy from consumers due to the higher risks.

Low-engagement goods are bought frequently, with less difficulty and lower risks. Compared with high-participation projects, low-participation products are less complex (Tanner & Raymond, 2012). When studying online consumer buying behaviour, Bashir, Mehboob and Bhatti (2015) pointed out that many factors affect online shopping buying behaviour. Trust and convenience are regarded as two important factors, of which trust is the dominant factor (Bashir et al., 2015). When consumers participate in the online purchase process, the decision depends on personally important factors (Usman & Kumar, 2021).

2.3.2 Purchasing Intentions

The structure that determines the strength of customers' online purchase intention is called online purchase intention (Takaya, 2019). Customers' purchase intentions and their transformation into actual purchase behaviours are key research areas for online companies. They should strive to improve those factors that significantly contribute to establishing good purchase intentions (Usman & Kumar, 2021).

Researchers have previously stated that online buying attitudes are a key prerequisite for generating online buying intentions (Akroush & Al-Debei, 2015; Arora & Rahul, 2018; Hsu, Lin & Chiang, 2013; McClure & Seock 2020). It has been found that consumers' attitudes towards the Internet affect how they find information online (Kim & Park, 2005, Asiedu & Dube, 2020). E-consumers' intent to find online products and price information is positively affected by their attitudes towards online purchases (Jadhav & Khanna, 2016). Furthermore, several studies found a connection between attitudes toward online buying and the likelihood of making an online purchase (Kaur, Lal & Bedi, 2017; Kusumah, 2015; Yeo, Goh & Rezaei, 2017). According to Kaur et al. (2017), consumers' perceptions of online purchases are an important aspect that contributes to people utilising the internet to make purchasing decisions. Purchase intention, purchase behaviour and information search are key elements in the online purchase process (Arora & Aggarwal, 2018).

2.4 Socio-economic variables affecting online shopping

To understand the complete background of online consumers, the demographic data of online consumers is important (Javadi, Dolatabadi, Nourbakhsh, 2012). Gain insights by identifying demographic data related to gender, age, education, income, and LSM. Researchers have found that demographic factors such as age, income, gender, marital status, and education level significantly impact Internet shopping behaviour (Akman & Rehan, 2014; Gong, Stump & Maddox, 2013; Pandey & Chawla, 2018). Pandey and Chawla (2018) studied the role of gender as a moderating factor in the connection between online customer experience characteristics and loyalty. Herter et al. emphasized the differences in purchasing behaviour between male and female customers. (2014). According to Chou et al. (2015), women are more active

online consumers than men. Some scholars have studied the influence of age on the atmosphere of online stores (Akram, 2016), while others, such as Yildirim et al. (2015), studied the influence of age, gender and education level on web design. According to the results of these studies, gender, age, and income all influence online purchasing decisions. E-retailers must thoroughly grasp the demographic characteristics of online purchasing behaviour (Chou, Chen & Lin, 2015). Demographic data such as age, education, and income have a significant impact on online shopping (Reddy & Srinivas, 2015).

Thamthada and Punnakitikashem (2015) believe that men are keener on online shopping because of specific factors such as personal attributes, attitudes and behaviours. Men's attitudes when shopping online and doing traditional shopping have not changed. Wu et al. (2015) argue that men often use the Internet. Women are more interested in groceries, clothing and household goods (Rajani & Nakhat, 2019). Today, online buyers are diverse, regardless of gender and income (Bhatti & Akram, 2020). However, consumers' preferences and willingness to shop online have changed how male and female consumers are affected by income and innovation. Researchers often use gender as a demographic variable to examine the impact of online shopping (Thaichon, 2017; Bhatti & Akram, 2020).

2.4.1. Age

Age is considered an important demographic factor that affects individuals' attitudes and behaviours towards adopting and using information and communication technologies. Different generations have different buying behaviours and interests. According to some studies, different age groups have different buying habits on the Internet (Chakraborty, Lee, Bagchi-Sen & Upadhyaya, 2016; Bhat & Darzi, 2019; Bhat, Islam & Lone, 2021). According to Bilgihan (2016), among young customers, trust is the most effective predictor of e-loyalty. Thaichon (2017) pointed out that the impact of satisfaction and commitment on behavioural loyalty differs by age group.

Research on traditional literature shows the relevance of user age in analysing their behaviour (Tan & Ooi, 2018; Yoon & Occeña, 2015). According to various research, young people are likely to learn computer skills (Bruan, 2013; Hunsaker & Hargittai,

2018). In addition, because young people have more experience with the Internet, they pay more attention to usefulness and attitude. At the same time, the elderly think that the risk is greater, it is more difficult to create complex commands, and they pay more attention to self-awareness (Madan & Yadav, 2018; Li et al., 2018). Therefore, in some studies, age has been added as an important part of explaining online purchase behaviour (Gaffar & Atrisia, 2015). According to Anshari, Alas, Hardaker, Jaidin & Smith (2016), the key barriers to the development of e-commerce make senior consumers more hesitant to purchase online, including no IT knowledge, a fear of change, and a need to test things before purchasing. Morris and Venkatesh (2000) found that age is positively correlated with the difficulty of processing information and is highly correlated with the time it takes for untrained users to familiarize themselves with computers (Choi & DiNitto, 2013).

Therefore, according to Bruan (2013), elderly users lack experience on the platform, so they cannot evaluate the benefits of the internet as a purchase channel. This type of data raises the question: It is not age that prevents online transactions from being completed, but the lack of user experience, which is more common among the elderly. Therefore, the elderly is reluctant to adopt new channels because they do not trust the Internet. This is due to little knowledge and expertise.

2.4.2 Income

Another element that has gained much academic interest to stimulate or restrict the usage of e-commerce is revenue (Lim et al., 2016; Akman & Rehan, 2014; Pandey & Chawla, 2018). A previous study showed that people who shop online are high-income earners with a good education background and middle-level managers (Smith, 2015). The increased currency reduces the hidden risks that Internet users perceive when conducting online transactions, thereby affecting their appetite for online products. Low incomes discourage internet purchasing, and income growth should improve easy usage and convenience because they can withstand possible economic losses. A person's income usually shows in their Work levels or social classification; different careers pay differently and have varying IT knowledge and experience levels. Therefore, such classification may lead to various attitudes and behaviours of users

towards information systems (Daştan & Gürler, 2016; Dominici, Boncinelli, Gerini & Marone, 2021, Phonthanukitithaworn, Sellitto & Fong, 2015).

The internet is a channel open to everyone and has nothing to do with their social class or purchase methods. However, its user profile is biased in its initial stage, caused by the decline in income, computer prices, and data connection. This means that most individuals can currently afford access. Furthermore, many users argue that one of the advantages of the Internet is that it allows them to buy the same things that they can buy offline at a lesser price. Therefore, the Internet has become increasingly accepted by the public in recent years, providing attractive options for customers who pay more attention to the price. According to research, people with higher incomes feel less risky when adopting new technologies (Mwangi & Kariuki, 2015). Once experience is gained, their salary does not determine users' technical performance. Therefore, revenue has little effect on the views, attitudes, and behaviours of experienced IT users (Tan & Ooi, 2018).

2.4.3 Gender

Gender is a social structure that affects almost every element of human behaviour. Previous studies have shown how gender affects consumption. According to Yoon and Occeña (2015), gender differences affect how product knowledge affects perceptions and obligations and how structure affects purchases. The researcher concluded that women and men return differently, which may be important in consumer scenarios.

Gender's impact on decision-making and shopping behaviour has piqued people's interest in marketing. It also examined the acceptability of new information technologies and concluded that IT quality and use vary according to the gender of the individual (Prashar, Sai Vijay & Parsad, 2017). Sun and Zhang (2006) believe that the variances stem from three characteristics: (1) Men are more realistic; (2) Women are more apprehensive when confronted with unfamiliar situations, and (3) Women are more influenced by their surroundings. Usefulness, self-efficacy, ease of usage, and subjective standards are all affected by these factors (Lai, 2017).

Despite these significant gender differences, the latest survey (Statistica, 2020) shows that more and more women are using the Internet, so the gender gap in the platform is narrowing. In addition, recent studies have shown that there is no significant difference in Internet use between men and women (Liang et al., 2016; Cai, 2017). Shopping has always been seen as a female task in most households rather than a male task (Raman, 2017). Previous research has shown that most men are more likely to adopt the latest advances in online technology and quickly adapt to online shopping.

2.5 Self-efficiency

Low electronic self-efficacy refers to a customer's lack of understanding of the internet. As a result, his or her fear of using the internet as a purchasing channel has increased (Pandey & Chawla, 2014). Electronic self-invalidation means that customers cannot use the instructions provided on the website to make online purchases, especially when no one can help them (Faqih, 2016).

When people's self-efficacy is high, they naturally worry about tasks (Srinivasan, 2015; Ganguly, Dash & Cyr, 2011). The user's perception of e-commerce depends on his or her previous Internet experience (Pappas, Kourouthanassis, Mikalef & Giannakos., 2018). According to Papas et al. (2018), the previous use of the Internet minimized the risk perceived by consumers during the online purchase process, thereby increasing user satisfaction and leading to repeated purchase behaviours. In addition, customers' adoption of technology is crucial to the development of e-commerce, and previous acceptance of the technology is an important forecaster of future behaviour (Pappas et al., 2018).

Based on identifying and evaluating the variables of Internet acceptance, regularity of usage, and fulfilment, the impact of a person's previous Internet use is analysed. Also, based on the expectation-confirmation theory, satisfaction has been used as a part of the variable (Rahi & Ghani, 2019). The "performance" variable is regarded as the achievement that an individual believes he or she has achieved. It reflects the individual's success in previous interactions and subsequently affects their buying behaviour (Hernández, Jiménez & Martín, 2011). The variables are intertwined because the adoption of online shopping determines how it is used (Sharif & Raza,

2017; Mathaba & Mkhize, 2018) and the joy of previous experiences (Choi & DiNitto, 2013; Mathaba & Mkhize, 2018). User satisfaction leads to acceptance of information technology and other related systems, leading to changes in attitudes, intentions, and intensity of use (Baturay, Gökçearsan & Ke, 2017). People looking for information on the Internet may feel confident, which affects their online purchase behaviour (Mathaba & Mkhize, 2018).

2.6 Theoretical Overview

This section focuses on an overview of theories of online shopping behaviour. Online consumer behaviour theories usually combine economic and psychological models with information technology (IT) adoption concepts and are utilised as pragmatic models by businesses. Experts in marketing have sought to explain the adoption of online purchasing using many classical "attitude-behaviour" theories. Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1975) (Fishbein & Ajzen, 2011) and the Theory of Planned Behaviour (TPB) (Ajzen, 1991) have been most used as theoretical models aimed at determining the influence of individual, attitudes, beliefs, and other social factors on online purchasing behaviour (Chawla, Khan & Pandey, 2015).

2.6.1 Theory of Reasoned Action (TRA)

The theory links human activity, behaviour, and attitudes (Ajzen & Fishbein, 1975). With the TRA, one may predict how people act depending on their objectives and current beliefs (Mishra et al., 2014). The TRA primarily aims to explain people's behaviour by assessing the underlying intention to act. The theory arose from advancement in the Information Integration theory (Chawla et al., 2015). This theory describes behavioural intention based on three essential elements: individual attitudes, subjective norms, and perceived behaviour control.

Individuals' attitudes represent their particular point of view on a particular behaviour, either positive or negative. Subjective norms highlight the social influence from people's perceptions and expectations. This is regarded from the individual's point of view (Head & Noar, 2014). A subjective norm comprises the person's motive and normative views. Individual motivation stems from the need or expectations of others.

On the other hand, individual normative views describe what the individual sees about the anticipation of others. An individual's perceived control of the behaviour indicates a person's view of his or her capacity to do a given activity.

As a result, the TRA emphasises the reality in which an individual may exhibit a certain behaviour. However, subjective norms may conflict with such behaviour, allowing for an opposite behaviour. The prediction of behavioural intention is predicated on this contradiction of the difference (Glanz, Rimer & Viswanath, 2015).

According to the TRA, internet businesses' marketing methods affect consumers' attitudes toward the brand (Burak, Rosenthal & Richardson., 2013). The person's conviction in internet purchasing to save money and time influences this mindset. In general, one's attitude regarding internet purchasing shapes one's real buying habits. Consumers are more inclined to buy online shopping based on previous experiences. Subjective norm outlines how marketers' pressure potential customers to purchase or not buy. As a result, this mindset and subjective standards lean toward behavioural intents, which determine online purchasing behaviour (Head & Noar, 2014).

2.6.2 Theory of Planned Behaviour (TPB)

The TPB is a modification of the theory of reasoned action. According to the theory, the major aspects of the TRA, such as perceived behavioural control, subjective norm, and intention, influence the intention to follow the behaviour (Kautonen, Van Gelderen & Fink, 2015). Thus, according to the TPB, all or some of the variables above affect intention, ultimately predicting whether the behaviour occurs. The following figure illustrates the TPB.

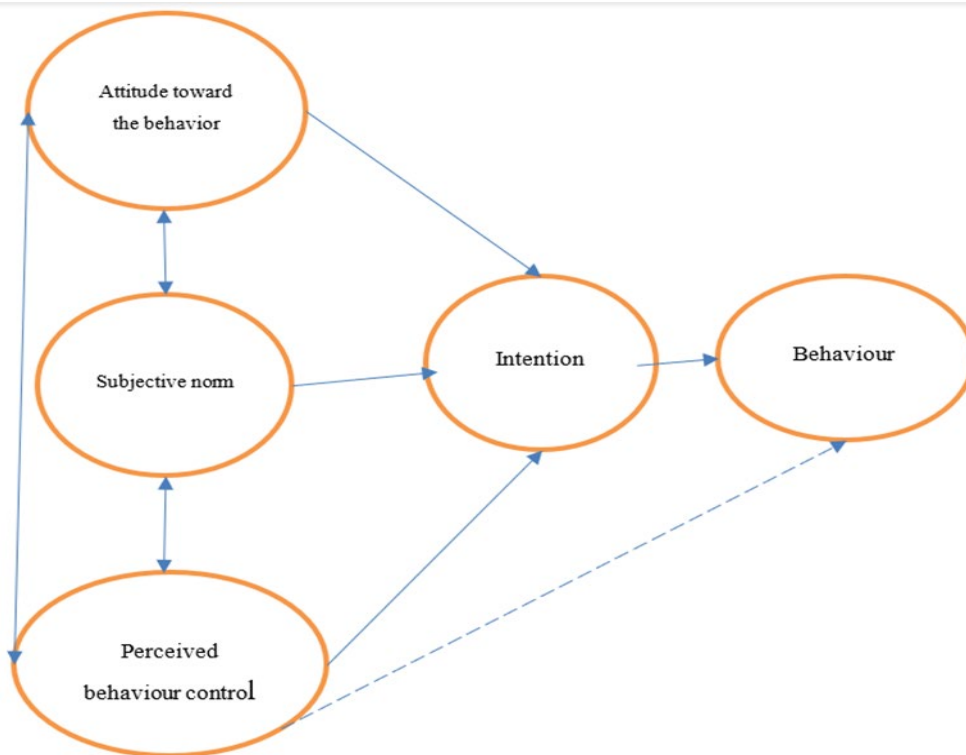


Figure 2.1: Theory of Planned Behaviour

Source: Ajzen (1991)

The inclusion of perceived behavioural control in the TRA cleared the way for the theory of planned behaviour model and alleviated many of the TRA's shortcomings (Ajzen & Sheikh, 2013). For instance, if a person has the subjective norm, the correct attitude, and the behavioural intent to purchase from an online retailer, he or she may have a behavioural intent to purchase. However, the consumer is not required to purchase online because he or she may be unfamiliar with the online payment method. This is called perceived behavioural control (Ajzen, 1991).

2. 7 Hypotheses Development

2.7.1 Online consumer attitude

Le and Nguyen (2014) believe that online consumer attitudes are a general assessment of individuals, which may sometimes include objects, problems, and advertisements. It can also be the mental state that people use to construct how they perceive their surroundings and respond to them (Albarracin & Shavitt, 2018). Attitudes towards objects and attitudes towards behaviour are two different attitudes.

It has been found that consumers' attitudes towards the Internet affect how they find information online (Yang et al., 2017). The intent of electronic consumers to find online products and price information is positively affected by their attitudes towards online purchases (Chen et al., 2016). Many researchers, such as Lim et al. (2016), Jin et al. (2015), Rana and Islam (2019), found a connection between attitudes towards online shopping and online purchase intentions.

According to Cheah, Phau & Liang (2015), consumers' attitudes towards online purchases are important in determining consumers' desire to search for product information. Searching for information on the Internet is vital in buying online (Arora & Aggarwal, 2018). Customers can become more capable when searching for bargaining deals and affordable costs online because they have access to price information (Flavián, Gurrea & Orus, 2020). A key criterion for e-shoppers is the combination of pricing information and time-saving (Saad, 2020). According to Nisar and Prabhakar (2017), the more comprehensive and high-quality information provided on the Internet enables customers to make informed decisions that give them a better shopping experience.

It is said that online consumers are very complex and can change with different types of environments. A model has been studied to understand consumer attitudes and three and three stages, namely the ABC method, influence, behaviour and cognition (van Harreveld, Nohlen & Schneider, 2015; Chi et al., 2018). In other behavioural contexts, effects can be classified as feelings or objects, which can then be defined as consumers' intentions for actions, and cognition can be interpreted as the consumer's belief in an object. These three stages have a very close relationship and are independent of each other (Mathew, 2016). Hasan (2010) pointed out three main components of online buying attitudes, and there are huge gender differences in these three aspects. The research results also show that the most significant gender difference lies in cognitive attitudes, which means that women pay less attention to the convenience of online shopping than men (Hasan, 2010). This led to the formation of the following hypotheses:

H1a: Online Attitude has a positive effect on online shopping.

H1b: Males have a more positive attitude towards online shopping than females.

2.7.2 Perceived Benefit

The term “perceived benefit” refers to the perception of the positive results of a given behaviour (Arora & Aggarwal, 2018). In an online environment, Ray, Bala & Dasgupta (2019) defined perceived benefit as a consumer’s belief in the amount that he or she will benefit from online transactions on a particular site. There are many reasons consumers shop online, but one of them is enjoyment (Bedi et al., 2017). According to other studies, convenience, price comparison function, time-saving, a wider variety of products and services, ease of searching for information, and personal motivation have all of these promoted the growth of online shopping (Gaur & Sidhuria, 2019; Akussah, 2019; Al-Debei, Akroush & Ashouri, 2015; Tandon, Kiran & Sah, 2017; Jayaprakash & Pavithra, 2017). Tanadi, Samadi & Gharleg (2015) studied the four perceived benefits of Internet purchases: shopping convenience, product selection, shopping convenience and enjoyment. In addition, Arora and Aggarwal (2018) put forward three advantages of online shopping: cost advantage, convenience advantage and fun advantage. Another advantage that online stores provide customers is that they have more variety and a wider range of welfare products (Nagar & Gandotra, 2016).

Kucukusta, Law, Besbes & Legohérel (2015) believe that convenience, shopping convenience and product choice are some of the factors that affect perceived usefulness. Perceived usefulness considers the antecedents of attitudes, including consumers’ beliefs about the usability provided on the website, the attractiveness of the design, and the structure of the information (Broekhuizen & Hoffmann, 2012). Usefulness is defined as the belief that using an application will improve the online performance of consumers (Sigar, 2016). For organisations, it is important to understand what motivates consumers to shop online, as this will guide their marketing strategies and technological advancement. Online shoppers will shop online because of perceived benefits and risks (Khan et al., 2015; Asiedu & Dube, 2020).

When considering the perceived benefits of online shopping, four aspects need to be considered: convenience, product selection, convenience, and enjoyment of shopping

(Tanadi et al., 2015; Bhat et al., 2021). Shopping convenience refers to the ability of consumers to shop anytime, anywhere without having to visit a physical store (Lian & Yen, 2014). Lian and Yen (2014) also mentioned Ease, pointing out that it is a process that can avoid the physical and emotional factors that consumers face when shopping in other channels. Product selection refers to the availability of a wide range of products and direct information to support consumer decision-making (Ozkara & Bagozzi, 2021). According to Fang, Wen, George & Prybutok (2016), there is a link between product quality and perceived value. Another study conducted by Arora and Aggarwal (2018) showed that female consumers' attitudes towards online shopping have three positive effects. Perceived benefits. This resulted in the formulation of the following hypotheses:

H2a: Perceived benefits have a positive effect on online shopping.

H2b: Females focus more on perceived benefits when shopping online than males.

2.7.3 Perceived Risk

Perceived risk greatly guides consumer behaviour because people avoid making mistakes (Farzianpour, Pishdar & Shakib., 2014). Consumers may lose the possibility of obtaining favourable results when shopping online, indicating personal uncertainty and the possibility that online purchases may produce negative results (Ariff, Sylvester & Zakuan, 2014). Perceived risk refers to consumers' nature and amount of risk when considering a particular purchase decision (Khan & Chavan, 2015). According to Wu et al. (2020), the Perceived risk is the consumer's perception of the uncertainty and cost of purchasing a service or product. Online shopping brings more uncertainty and risks (Akhlaq & Ahmed, 2015). Previous studies have identified social, time, financial, psychological, physical, and performance as components of perceived risk (Dayour, Park & Kimbu, 2019; Akhlaq & Ai Hamed, 2015).

According to Qiu et al. (2014), transaction security and privacy are two important factors affecting online shopping. The ability of individuals to manage the collection and use of their personal information is called information privacy (Miltgen & Smith, 2015). This ability of individuals to manage the way their information is collected,

transmitted, and used has been eroded by the Internet (Mansell, 2017). With the help of large-scale computational complexity, the rapid growth of emerging technologies to digest information has led to privacy becoming a more pressing issue. Specifically, the way the company collects customer data has undergone major changes. In the past 20 years, the Internet has greatly reduced the cost of collecting, analysing, and distributing customer information (Caron et al., 2016). On the other hand, are customers aware of the huge potential of the Internet in evading privacy?

Consumers have two key worries about privacy and the Internet, according Lwin, Wirtz & Stanalan (2016). To start with, their personal information will be discovered by people online. The second concern is what happens to the personal information consumers voluntarily provide (Lwin et al., 2016). As the amount of data, they collect grows, customers pay more and more attention to their privacy. Consumer concerns impact Internet purchases, given how several studies of consumers have shown that privacy issues affect their purchase intentions (Miltgen et al., 2016; Mousavizadeh et al., 2016; Lwin et al., 2016). Furthermore, one services study shows that consumers' concerns about privacy have slowed the growth of such services (Choi et al., 2018). Companies continue to seek additional and more information as internet databases become more and more important to normal business processes (Bandara et al., 2020). According to research, the internet has caused three key privacy issues: (1) Consumer identity recognition when online; (2) Increased marketing contacts for customers; (3) Third-party organisations utilising customer information, which have never been in contact with the customer. (Zhu et al., 2020; Anand et al., 2018).

According to academics, customers must face key issues when privacy issues arise: (1) They do not know when information sharing occurred between the organisations; (2) The customer cannot determine the organisation that shared the information. Information (Petrescu & Krishen, 2018; West, 2019). In many nations, businesses can change their privacy policies at any moment without informing customers, exacerbating the problem (Krishen et al., 2017). According to researchers, the Internet is responsible for one-eighth of all identity theft (LaRose & Rifon, 2007).

Consumers hate to provide companies with personal information, personally identifiable information, or other factors that make them a more attractive marketing target (Phelps et al., 2000). On the other hand, consumers are questioned whether they have the tools to evade the efforts of marketers. Approximately 64% of customers stated that they had never read the instructions on protecting personal information online, and 40% of customers did not know how to avoid websites collecting personal details (Wang & Yu, 2015). According to the previous paragraph, companies face almost insurmountable obstacles in obtaining customer information. On the other hand, the overall picture is much more complicated. Just because customers care about their privacy does not guarantee that they will change their online shopping behaviour. According to Lwin et al. (2016), privacy issues may reduce their intention to purchase products; nevertheless, the relationship between privacy issues and purchases is complicated. According to experts, consumer safety and privacy issues may not necessarily translate into cautious online behaviour. In contrast, others just assert that in the struggle between convenience and safety, convenience always wins” (Sauer, 2015).

For example, consumers’ increasing security concerns and desire to disclose information simultaneously are called the “privacy paradox” by scholars (Bath & Jong, 2017; Solove, 2021). The privacy paradox refers to the customer trade-off between sacrificing privacy to access products and services and executing activities (Bandara et al., 2020). Although customers regularly express that they are worried about gathering and using personal data, they frequently behave in a contradictory manner (Baek, 2014). This predisposition is demonstrated by their behavioural interactions, which may jeopardize their data security and conflict with their privacy choices. Some scholars are paying more attention to safety behaviours. According to these researchers, consumers who want promotional material are prepared will give up a bit of privacy in exchange for it, but those who do not want it are reluctant to do so (Turo et al., 2015). If these findings are correct, marketers should only target people willing to give up power.

Hong (2015) showed a strong and significant relationship between risk perceptions related to online shopping. Most online shopping transactions require personal, and

credit card information and customers worry that their information may be hacked or used improperly. Hsieh and Tsao (2014) believe that the elements and usability of the website will affect customers' perceived risk of online shopping. Hsieh and Tsao (2014) concluded that information quality and system quality have no significant negative impact on perceived risk. Only electronic service quality has a significant negative impact on perceived risk. Therefore, perceived risk has a significant negative impact on online shopping loyalty.

Garbarino and Strahilevitz (2004) conducted a study and found that women believe that online shopping is at higher risk than men. Another similar study by Bae and Lee (2011) found that women are anxious about the risks of online shopping. Women have better risk perception capabilities in different fields such as medical care, finance, and the environment. This shows that women are riskier to oppose and may act more similarly when making online shopping decisions. That is to say, women may think that online shopping is riskier than men. Therefore, women are less willing to purchase online (Garbarino & Strahilevitz, 2004). This resulted in the formulation of the following hypotheses:

H3a: Perceived risk has a negative effect on online shopping.

H3b: Females perceive a higher risk than males when shopping online.

2.7.4 Trust

Although e-commerce has become more and more popular over the years, consumer trust is still a huge issue (Bandara et al., 2020; Pappas, 2018). Given the impact of technological developments surrounding online purchases, such as big data analysis and massive data aggregation, these concerns are understandable. When customers see the favourable conditions for a successful transaction, they are more likely to trust the website (Ofori et al., 2017; Mou et al., 2017). Trust is defined as a state of mind characterized by a willingness to tolerate vulnerability based on favourable expectations of one's intentions (Han, 2016). Trust is also defined as an individual's

belief in the trustworthiness of others, which can be determined by their perceived integrity, ability, and kindness (Seckler et al., 2015).

Due to the risks associated with online shopping, Abbad et al. (2011) further pointed out that trust is regarded as one of the main influencing factors. Building trust is a continuous and dynamic process that will improve over time. Trust reflects consumers' overall perception of their willingness to trust online providers' compassion, integrity, ability, and reliability of the technological environment to meet their privacy expectations (Mou et al., 2017; Akter et al., 2011). According to multiple studies (Lwin et al., 2016; Vanhala, 2019), the trust factor can be measured as a one-dimensional structure. Some researchers have studied the role of privacy in trust investigations. Research has not systematically resolved its specific relationship with other privacy-related dimensions, but privacy issues and defensive behaviours act as antecedents, results, mediators or moderators (Miltgen and Smith, 2015).

One of the determinants of consumers' trust in online shopping is perceived online quality. Abad et al. (2011) claimed that higher trust in online shopping is achieved by perceiving a higher level of network quality. Aldebe et al. (2015) believe that perceived network quality directly predicts trust and overall perceived benefits. Aldebe et al. (2015) mentioned four trust levels, which determine the perceived risks and attitudes towards online shopping, and websites have a positive effect on attitudes towards online shopping. Customers' behaviour depends on the website to successfully conduct transactions (Chauhan et al., 2019). Past experiences with the website and the experience of others are positively correlated with loyalty (Bilgihan et al., 2015). There is a link between trust and the user experience on a website. The more satisfied customers are with the previously used services, the more they trust and buy more frequently positively impacting trust and loyalty (Pratminingsih et al., 2013). When choosing online shopping, women believe trust is more important than men (Chen et al., 2015). Another study by Riquelme and Román (2014) also mentioned that women's trust in online shopping sites is lower than men's. In addition, it turns out that Men are more likely than women to trust online shopping. This resulted in the formulation of the following hypotheses:

H4a: Trust has a positive effect on online shopping

H4b: Females have a lower level of trust than males when it comes to online shopping

2.7.5. Gender effect of online shopping

For decades, people have been exploring gender differences in decision-making and online shopping behaviour. Although the gender gap in Internet use is narrowing, men and women have different views, goals, reasons, and behaviours about online purchases (Pascual-Miguel et al., 2015; Zhou et al., 2020). Multiple studies have shown that men are more likely to purchase items through internet shopping and have more positive feelings and views about it compared with women. (Lian & Yen, 2014; Bae & Lee, 2011; Hasan, 2010; Pascual-Miguel et al. 2015; Fan & Miao, 2012). Furthermore, according to Garbarino and Strahilevitz (2004), women perceive risk in Internet purchases as higher than men. When men shop online, they feel more calm, effective, efficient, and less time-consuming. In addition, because of the perceived benefits of Internet purchases, men's goal-oriented and goal-driven attitudes are much stronger (Hasan, 2010). In addition, men consider shopping to meet demand, while women consider shopping to be a relaxing activity (Reimers & Clulow, 2014).

According to Laroche et al. (2000), men are more likely to leave the store immediately after finding what they were originally looking for, while women generally spend more time shopping. Men are more likely to become "fast shoppers" who avoid buying as much as possible but buy quickly when they cannot avoid it (Kooti et al., 2016; Chen et al., 2017). Looking at Lautiainen's (2015) review, it is understandable that women are willing to spend time looking for product information while men rarely work hard. Jadhav and Khanna (2016) also support that woman spend more time searching for information than men before purchasing. Rao et al. (2018) further showed that men believe that dialogue with suppliers is unnecessary and would rather use all the information they encounter to make decisions about products. Women prefer to have these dialogues.

Compared with men who buy leisure products and electronic equipment, women are more likely to buy fashion products (McMillan, 2002). Sebastianelli et al. (2008) also agree with Lian and Yen (2014), but further say that when women shop online, they

buy cosmetics, while men tend to buy computer programs. Chen et al. (2015) found differences in the influence of emotional factors, such as the relationship between purchase and emotional trust. Female customers have stronger online purchasing capabilities than male customers. Women and men have different views on the security issues of the online shopping environment, which leads to differences in the buying behaviour of men and women, which is also endorsed by Sarkar and Das (2016). This resulted in the formulation of the following hypotheses:

H5: Gender moderates the relationship between online shopping behaviour of men and women.

2.8 Conceptual Framework

The conceptual framework has been adapted from multiple studies and the theories of reason action and planned behaviour. The theories highlight that behaviour is a subject of individual perception and attitudes towards performing the action or executing the behaviour. Empirical studies also helped in developing the conceptual model in this study by identifying some of the antecedents of online shopping behaviour

Research shows a relationship between online consumer attitudes and online shopping (Asiedu & Dube, 2020; Usman & Kumar, 2021). Research also showed significant differences between men and women (Bhat et al., 2021). Another study was done by Arora and Aggarwal (2018), who sought to understand whether perceived benefits impact online shopping. The study found that perceived benefits positively impact online shopping, especially women. Earlier, Garbarino and Strahilevitz (2004) found a difference between men and women in terms of their online shopping behaviour.

Studies have shown that women positively impact trust and online shopping, and women are more worried about risks than men. The study also showed significant differences between men and women regarding online shopping. Riquelme and Román (2014) is the last study that the conceptual model used, which seeks to determine whether trust impacts online shopping and gender. Studies have shown

that this positively impacts trust and online shopping, and women’s trust in online shopping sites is lower than men’s.

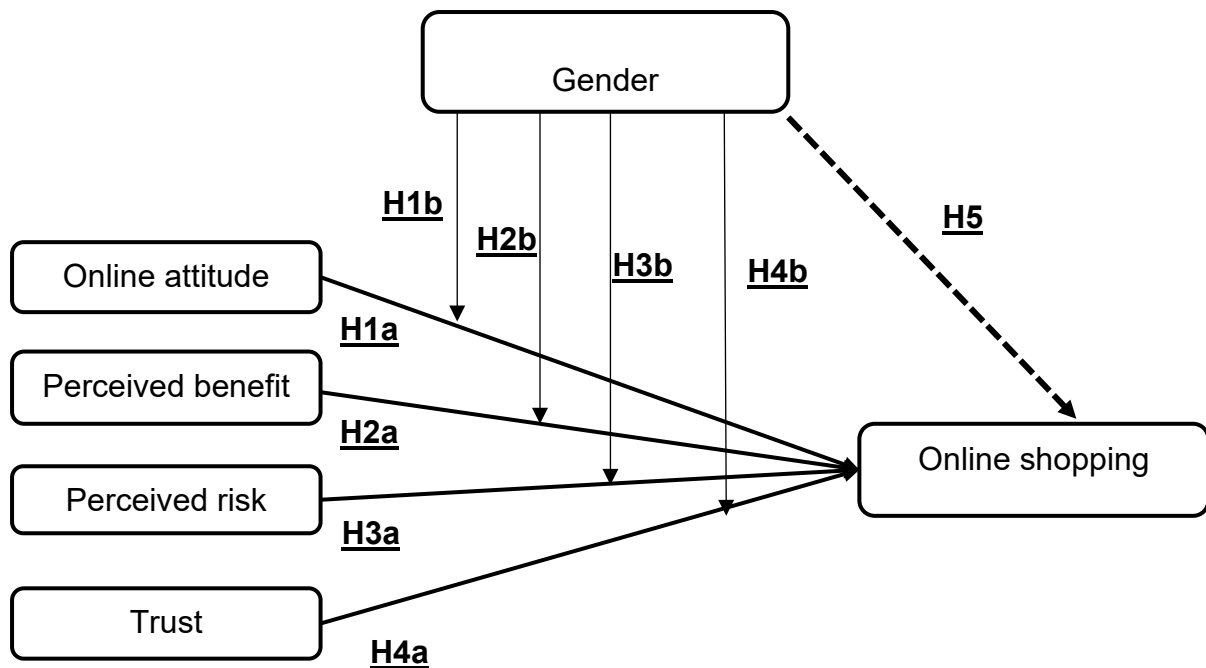


Figure 2.2: Conceptual model

Source: Researcher’s own Framework (2021)

From the conceptual model in Figure 2.1, gender (male or female) was expected to moderate the relationship between online shopping and its antecedents (Online Attitude, Perceived Benefits, Perceived Risk, and Trust). Therefore, this conceptual model was empirically tested, and results are presented in Chapter Four of this study.

2.9 Summary

This chapter highlighted online shopping behaviour. Gender is part of the socioeconomic factors that play a role in the four consumer behaviour factors discussed. There is a relationship with online shopping, whether positive or negative. Some findings have shown that gender plays a role in consumers' online shopping. Privacy issues and self-efficiency were also discussed. Hypothesis and conceptual

models were developed based on the findings of other studies. The next chapter looks at how hypotheses will be tested in this study by discussing the methodology.

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Introduction

According to Goundar (2012), the research method is a structured and detailed method for scientific analysis. The methodology of this research will be discussed in this chapter regarding the variety of techniques and methods that can be used (Kothari, 2017). The numerous research methods mentioned include research paradigms, research techniques and design, sampling methods, research tools, data collection procedures, data analysis, and reliability and validity. The ethical factors are considered, and limitations are discussed in this chapter.

3.2 Research Paradigm

According to Kankam (2019), a research paradigm is a view that leads to a method of generating a set of practices. Scientists use research paradigms as a handy approach to conduct studies (Antwi & Hamza, 2015). Examples of major research paradigms include positivism, post-positivism, critical theory, and constructivism (Creswell, 2014). Given the scientific nature of the research, the research adopted positivism. Positivism is a philosophy of logic through which scientists can fairly find complete evidence of causality in the corporate world (Kivunja & Kuyini, 2017).

Positivism was used because it allows the use of popular theories to generate hypotheses that can be verified and confirmed to determine gender and perceived benefits (PB), perceived risk (PR), perceived risk (PR), online attitudes (OA), and trust (TR), affecting online shopping behaviour. The paradigm also allows researchers to experiment with the causal relationship between gender and online shopping behaviour. In addition, given the scientific and mathematical tools used in the process, the paradigm is praised for its high degree of objectivity. Thus, positivism was chosen in this study because the aim is to test hypotheses using quantitative methods.

3.3 Research approach and methodology

This study followed a deductive research approach whereby the researcher looks at what others have done, examines existing theories about the problem under

investigation, and then evaluates hypotheses that emerge from those theories (Creswell, 2014).

According to Creswell (2014), research methodology involves collecting, analysing, and interpreting data. In addition, Neuman (2014) defined a research methodology as the development of research that guides researchers through the research process. Researchers can use three research methods: quantitative, qualitative, and mixed methods (Creswell, 2014). This research follows the positivism paradigm hence adopting quantitative research methods.

Quantitative research uses large samples and techniques (such as scale surveys) to develop statistics. It uses questionnaire surveys or structured interview techniques (Creswell, 2014). However, Brannen (2017) asserts that quantitative research aims to gain more knowledge of the interrelationships between concepts and emphasizes the qualifications of research data collection and analysis.

Because researchers maintain independence from data, the premise of using quantitative research methods is that they maintain a high degree of objectivity (Creswell & Creswell, 2017). Using statistical and mathematical tools helped reduce the researcher's bias in determining gender and PB, PR, OA, and TR, which affect online shopping behaviour. Considering the number of variables in the research, this method was considered sufficient. The highly structured quantitative method allowed checking the status quo, thereby maintaining impartiality.

3.4 Research Design

Research design is the process to collect and analysing data (Brannen, 2017). The research design clarifies the framework of the research problem and the strategies used to collect empirical data related to the problem. Similarly, Brannen (2017) further pointed out that research design helps researchers make decisions and inform others about the design to be used, collect data from interviewees, specify interviewees, analyse the collected data, and communicate survey results.

There are several research designs, which depend on the research method used in the research. Exploratory, explanatory, descriptive and causal-comparative are examples of research designs (Creswell & Creswell, 2017). This study followed a causal-comparative research design that involves the determination of cause-and-effect relationships between variables. In this research design, the researcher manipulates the independent variable to find their influence on the dependent variable. As a result, the causal-comparative research design aided in understanding the link between gender characteristics and online buying habits.

In terms of time horizon, this study was a cross-sectional study. According to Brannen (2017), cross-sectional design needs to collect data in several situations at a specific time to collect a large amount of quantitative or measurable data related to two or more variables and then evaluate it to discover the relationship. It includes any research that looks at information about various situations at a given point in time (Neuman, 2014; Babbie, 2015).

3.5 Population and Sampling

This section discusses the study's population, sample size, and sampling procedures.

3.5.1 Population

Clearly defined people or objects with comparable characteristics make up a population (Bell, 2014). According to Edmonds and Kennedy (2016), it is important to determine the population to be studied to develop and run the test. The target population's characteristics should be clearly defined and directly applied to research (Brannen, 2017). The large number of people targeted are the basis from which samples should be drawn and can summarise the survey results (Babbie, 2015). Statistica (2020) estimates 34.5 million online shoppers in South Africa, and the number of users in Gauteng is 19 million. The population of this study were 19 million females and males who live in Gauteng who have done online shopping, starting from 18 years old and above.

Table 3.1: Population composition of Gauteng online shoppers

Gender	Percentage	The population of online shoppers
Males	47.5%	9 025 000
Females	52.5%	9 975 000
Total	100%	19 000 000

Source: Statistica (2019)

3.5.2 Sample size

According to Kaliyadan and Kulkarni (2019), the sample is a subset of the entire population and a representative group from which inferences about the population can be drawn. According to Boddy (2016), the sample size will affect whether the survey results truly reflect the overall situation. In this study, a sample was determined adhering to Creswell (2014)'s attestation that a sample of at least 100 respondents is ideal enough to offer generalisations to the target population in quantitative research. In this regard, convenience sampling was used, making sure that the observations are above 100. Convenience sampling was used because the researcher did not have the database or list of online shoppers in Gauteng to apply probability sampling methods. Therefore, only those who were available and willing to participate were included in the sample. Therefore, the researcher needed a large sample size of 200 to establish generalisable results. The following table shows the breakdown of the sampling framework of the study.

Table 3.2: Sampling framework

Population	19 000 000 online shoppers
Sample	200 online shoppers
Geographic Area	Gauteng Province, South Africa
Sampling method	Convenience sampling
Collection Method	Online survey
Sampling Frame	Male and Female online shoppers in Gauteng province and at least 18 years old

Source: Researchers Own Compilation

3.5.3 Sampling methods

Zeeman (2013) distinguished two types of research sample designs: probability sampling and non-probability sampling. In probability sampling, everyone has an equal opportunity to participate in the study, whilst there is no random selection in non-probability sampling. The researcher used subjective approaches to identify who was included in the sample (Neuman, 2014). In the absence of a complete population list, non-probability sampling methods can be used (Kaliyadan and Kulkarni, 2019). According to Bremer (2017), there are five non-probability sampling procedures: purposive sampling, self-selection, convenience sampling snowball, self-selection, and purpose sampling quota. For the sake of this study, a convenience sampling technique was used in the study. Convenience sampling is probably the simplest sampling process because participants are selected based on availability and willingness to participate (Etikan, Musa & Alkassim, 2016). This is the best method for a large enough sample size because it has high external validity, and the sample represents the characteristics of a larger population (Thomas, 2020).

Although the results are prone to significant deviations, useful results can be obtained from this sampling process because those who voluntarily participate may differ from those who choose not to participate. The sample may not represent other characteristics such as gender or age (Etikan et al., 2016). Convenience sampling has the disadvantage of allowing for sample error; it may not fully reflect the larger situation (Alvi, 2016).

3.6 Data collection techniques

This study collected primary data and secondary data. The primary data are information collected specifically for the survey at hand. On the other hand, the secondary data are statistics obtained for reasons different from direct research (Johnston, 2014).

3.6.1 Primary research

Primary research collects unprocessed data on unpublished research questions (Johnston, 2014). A sample of 200 online shoppers living in Gauteng was selected,

and data were collected using a self-managed questionnaire. In this study, 200 online questionnaires were completed.

3.6.2 Secondary research

Materials that have been published and are available to researchers are referred to as secondary research (Widaman, Little, Preacher & Sawalani, 2011). The Google Scholar search engine is widely utilized to obtain secondary literature sources for different studies and was used for this study. Academic articles from different databases (such as Emerald, Science Direct, and J-STOR) were accessed through the Wits Library website. StatsSA, Statistica, the Ministry of Justice, and the Ministry of Constitutional Development websites were also used. The following table shows the breakdown of primary and secondary sources used in this study.

Table 3.3: Data sources

Primary research	Secondary research
Questionnaire	Statistica website
	StatsSA website
	Ministry of Justice and the Ministry of Constitutional Development
	Academic Journals

Source: Researcher’s Own Compilation (2021)

3.7 Research instrument and measurement

A questionnaire was employed as a research tool in this study. Babbie (2015) defines a questionnaire as a series of written questions where participants can choose a platform to describe their attitudes to the questions asked. A series of questions or statements were provided in the questionnaire to determine participants’ views, opinions, and attitudes.

The questionnaire consisted of two sections. Section A comprised respondents’ demographic details such as gender, age group and income level. Section B comprised of measurement scales for the constructs used in the study. All the items

in the constructs were measured on a 7-point Likert scale (1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Neutral, 5= Somewhat Agree, 6= Agree, 7= Strongly Agree). There were no reverse coded questions in the scales, implying no point in reversing the Likert scale. The following table summarises the number of items per construct and the sources from which the scales were adapted.

Table 3.3: Research Instrument

Construct	Number of items	Sources
Online shopping	7	Hasan (2010); Faqih (2016)
Online consumer attitude	8	Hasan (2010); Garbarino and Strahilevitz (2004).
Trust	9	Garbarino and Strahilevitz (2004).
Perceived risk	7	Arora and Aggarwal (2018)
Perceived benefit	11	Faqih (2016)

Source: Researchers compilation

The questionnaire was delivered online using Google forms. Google form is an online platform that research surveys can be conducted and sent to respondents to complete (Simanjuntak & Limbong, 2018). A link was shared through various WhatsApp, Facebook, Twitter, and E-mail platforms. This method was selected as it was the most convenient to gather data throughout Gauteng.

3.7.1 Pilot Study

A pilot study refers to a small version or part of a comprehensive study and a specific pre-test on specific research tools (such as interviews or questionnaires) (Creswell, 2014). Conducting pilot studies increases the likelihood of successful results, though this may not be guaranteed (Creswell, 2014). According to Neuman (2014), a pilot study is necessary to determine whether the research instrument consists of questions or measures that are reliable and valid. Modifications can ensure that the questions asked are not ambiguous to the respondents. The study was piloted to ten random

respondents who did not form part of the final sample. The questionnaire was shared with the ten respondents. Upon questionnaire completion, the respondents were requested to provide an easy-to-understand opinion on whether the questionnaire was relevant to the target population. The respondents received the questionnaire well and confirmed that they had no difficulties understanding it. Thus, respondents understood the questionnaire well, so there was no need to change. The pilot study process was essential to ensure that all respondents understood the survey instructions and collected data relevant to the research.

3.8 Data collection process

The study collected 206 responses from all over the province, of which only 200 were usable. The survey notice explained the purpose of the research and contained a link to the questionnaire. The notice was distributed to male and female consumers in Gauteng through mobile chat applications such as social networking sites (Facebook and LinkedIn), email, and WhatsApp. The announcement mainly encouraged Internet customers to complete online surveys. The link remained active for one month, and responders could visit the survey URL provided in the message at any time during the period to fill out the survey. The online questionnaire was voluntarily filled out by participants free of charge. One month after receiving valid response data, unavailable responses questionnaires were deleted, such as incomplete questionnaires.

3.9 Data Analysis

Data analysis is the process of using different tools to organize and aggregate data to determine whether there are any similarities within variables (Treiman, 2014). Using quantitative data analysis, data can be conveniently presented in graphs, tables, and summary statistics (Treiman, 2014).

This research followed a causal-comparative research design, and data were analysed using inferential statistics, such as the Independent samples t-test and multiple linear regression analysis. Statistical inference analysis is the process of using data analysis to infer the characteristics of potential probability distributions (Maree, 2018). For example, this technique infers the attributes of the population by testing

hypotheses and deriving estimates. The analysis results are presented in tables and graphs to solve the research goals. The link between the variables in this study was investigated using Pearson correlation analysis.

Moderation was tested using Akram, Merunka & Akram (2011) four-step approach. According to Akram et al. (2011, p. 298), the first step is “to examine the relationship between the independent variable and the dependent variable”, without necessarily considering the adjustment factors. The second step is “to assess the existence of the relationship between the independent variable and the adjustment factor”, and the importance of the intermediate component to the dependent variable is determined in the third phase. Finally, the first fourth step involve looking at the model as a whole to see whether the dependent-independent variable relationship is affected by the addition of a moderator variable, of which, in this study, gender was the moderator variable.

3.10 Reliability and validity

To ensure that the measured hypotheses are consistent with theoretical concepts, reliability and validity play an essential role in quantitative research (Creswell, 2003). In addition, Heale and Twycross (2015) define validity as the magnitude of the correct measurement hypothesis in quantitative research. Convergent validity and discriminative validity are two available measures of validity (Creswell, 2003).

3.10.1 Validity

Tasios and Giannouli (2017) believe that validity refers to the degree to which empirical evidence and theoretical basis support the sufficiency and appropriateness of explanations and actions based on test scores. Maree (2017) regards validity as a mechanism for measuring attributes, and changes in attributes will lead to measurements. Therefore, validity as a concept in social research refers to the appropriateness of inferences made on evaluation results (Neuman, 2014).

3.10.1.1 Types of Validity

According to Salkind and Van Zyl (2014), validity indicates to what extent the test represents the project's scope from which it came. In the same respect, Neuman (2017) stated that effectiveness refers to when the measurement tool performs its intended purpose. This research constructs the questionnaire by decomposing the research objectives. The research tool uses experts to determine whether it solves the problem it wants to identify. The research tool corrects the discrepancies found as a measure to improve reliability and effectiveness. There are multiple ways to evaluate the validity of the measurement, as shown below (Edmonds & Kennedy, 2017).

According to Leedy and Ormrod (2015), content validity is the degree to which the content of a tool measures its intended measurement. In this study, the questionnaire was distributed to 10 participants for a pilot study to ensure the validity of the content. Participants in the pilot study act as agents to help determine that the tool has appropriate content.

The research also ensures face validity. According to Edmonds and Kennedy (2017), face validity is another method of evaluating validity measures. The degree to which a test measures its expected variables is face validity. In this study, research experts participated and asked about their understanding of the research tools, assessed face validity and made changes until the questionnaire measured the features of interest.

In addition, construct validity is another method of evaluating validity measures which refer to the level at which the tool measures a representative sample that cannot be publicly viewed but is speculated to occur due to human behaviour (Salkind & Van Zyl, 2014). Exploratory Factor Analysis (EFA) was used to ensure construct validity in this study. The EFA process was performed using SPSS software. The process helped identify underlying factors among all the items of the measurement scale. Items that fell under one factor with a factor loading of at least 0.4 implied that the items were measuring the same construct. Results of EFA presented in Chapter Four showed that all items converged to their respective factors with high factor loading, suggesting evidence of convergent validity (Field, 2018).

3.10.2 Reliability

Salkind and Van Zyl (2014) explained that when a test measures the same structure multiple times, the result is the same, which leads to reliability. Zikmund (2015) believes that reliability refers to the degree to which measurement measures are error-free and achieve consistent results. This relates to the consistency of estimates for repeated use where possible or similar results produced by similar individuals. Therefore, this research conducted a preliminary study to check consistency and improve reliability. According to Leedy and Ormrod (2015), various methods can measure reliability.

In this study, a pilot study was conducted, and the instrument was retested to check consistency to determine the instrument's reliability. Test-retest reliability refers to the degree to which a single tool presents similar results to ordinary people in different situations (Tasios & Giannouli, 2017). To ensure test-retest reliability, the researcher distributed the questionnaires on the same demographic data on the same day but at different times and compared the data on different dates of the questionnaires.

More importantly, the reliability between evaluators is achieved by distributing the same test to different people and obtaining similar results (Tasios & Giannouli, 2017).

Finally, the extent to which tool objects provide the same outputs is internal consistency reliability (Leedy & Ormrod, 2015). Cronbach's alpha measures internal consistency, or how closely a group of things are related to one another (Field, 2018). The pilot test before the main study reviewed and improved the data collection process. Internal consistency was assessed by using Cronbach's Alpha coefficient (α). Cronbach's alpha results indicated that the research instrument was internally consistent, at $\alpha = 0.872$, since all the constructs had an overall alpha greater than 0.7, as shown in the table below; at least 0.7.

Table 3.4: Overall Reliability

Construct	No. of items	Alpha
Online shopping	7	0.832
Online consumer attitude	8	0.923
Trust	9	0.912

Perceived risk	7	0.822
Perceived benefits	11	0.827
Overall alpha		0.872

Research tools include assertions derived from research goals. In addition, similar research methods were adhered to in the research, and preliminary research was conducted before the actual research to strengthen the data collection process.

3.11 Ethical Considerations

Ethics is about conflicts, worries, and dilemmas about what is considered the right way to conduct research (Babbie, 2015). Many of these ethical issues focus on the researcher's balance between scientific knowledge and the morality of all participants.

- **Ensuring no harm comes to participants**

Creswell (2014) believes that the respondents in the study must be protected from any type of harm, including psychological and physical harm. During the COVID-19 pandemic, it was important to ensure that respondents were protected from any harm associated with the data collection process. As such, data collection was done online in order to avoid physical conduct with respondents.

- **Ensuring participants have given informed consent**

Devin (2018) pointed out that the informed consent form provides detailed information about the research, the nature of the research, the rights of respondents, and any incentives for participants. In the study, informed consent was ensured by sending a request letter to the target population. Agreeing to the request helps provide information for the research and prepare them because a copy of the research instrument accompanied the request letter.

- **Ensuring participant's details are kept confidential**

O'Reilly and Kiyimba (2015) define anonymity as a condition where researchers do not know the identity of individual subjects. The study did not request or identify any

names of respondents. In addition, the researcher ensured that no third party could access the information provided by the respondent during the research process (Flick, 2016). The collected data was only accessible to researchers and Wits University.

3.12 Limitations

The study used self-administered questionnaires as part of the quantitative research method. This limited the respondent to a set of statements that they must agree or disagree with. It ignored personal opinions or opinions on online shopping consumer behaviour, which qualitative research methods may have discovered. The information could not be connected to the respondent's life. In addition, it is impractical to change the instrument after the research is in progress. Since the respondent filled out the questionnaire independently, the researcher did not know whether the respondent answered the questionnaire honestly.

In addition, the study was only conducted in Gauteng; hence it did not include other provinces with a higher online shopping base, so more research is needed to extend this research to a wider range of South African online shoppers.

3.13 Summary

This chapter looked at the overview of quantitative research, and it looked at research approach, design and paradigm and how it is appropriate for this study. The sample size, population and sampling methods were also discussed. Data collection methods were outlined, followed by the research instrument and measurements that were adapted. Lastly, data analysis, reliability, validity, including ethical considerations and limitations, were discussed.

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter analyses and interprets the study results as detailed in Chapter 3. The first part discusses sample characteristics, followed by the reliability and validity of assessment scales, as measured by Cronbach's alpha and exploratory factor analysis, respectively. The last section discusses hierarchical multiple regression analysis and diagnostic tests for multiple linear regression assumptions.

4.2 Sample characteristics and demographic profiles of respondents

A total of 206 responses were received from the online survey conducted. The target sample for this study was individuals living in Gauteng province who have done online shopping and are at least 18 years old. Age, province, and previous online shopping history were used as screening questions. Therefore, the study ensured that the sample came from Gauteng Province, had done online shopping before, and was at least 18 years old. Further, out of the 206 responses received, 6 were eliminated from the sample, leaving a final sample of 200 respondents. The 6 responses were eliminated from the sample because they had more than 10 percent missing values (Field, 2018). Descriptive statistics for the sample's demographic characteristics are presented in this section in terms of frequency tables.

Table 4.1: Gender of respondents

		Frequency	Percent
Valid	Female	118	59.0
	Male	81	40.5
	Prefer not to say	1	.5
	Total	200	100.0

Source: Question 1

Table 4.1 reports the gender distribution of the sample. Results show that the sample was dominated by females, constituting 58.7% of the sample, whereas 40.3% were

males. Only 0.5% of the respondents preferred not to disclose their gender identity. Age statistics are presented in the following table.

Table 4.2: Age of respondents

		Frequency	Percent
Valid	18 to 29 years	73	36.7
	30 to 39 years	67	33.7
	40 to 49 years	46	23.1
	50 to 59 years	10	5.0
	above 60 years	4	1.5
	Total	200	100.0

Source: Question 2

Age statistics presented in Table 4.2 show that the sample was dominated by the 18 to 29 years age group, accounting for 36.7% of the sample. This is followed by the 30 to 39 age group, which accounted for 33.7% of the sample. Respondents between 40 and 49 years accounted for 23.1% of the sample, and 5% of the respondents were between 50 and 59 years. Only 1.5% of the respondents were above 60 years old. Table 4.3 presents the income range of participants.

Table 4.3: Respondent's monthly income

		Frequency	Valid Percent
	Less than R5 000	64	31.8
	R5 000 to R10000	15	7.5
	R1 0001 to R20 000	32	15.9
	R20 001 to R30 000	23	11.4
	R30 001 to R40 000	12	6.0
	R40 0001 and above	48	24.4
	Total	200	100.0

Source: Question 3

The results in Table 4.3 show that the majority of the respondents (31.8%) were earning less than R5 000 per month, followed by 24.4% earning more than R 40 000 per month. Further, the third-highest group (15.9%) earned R10 001 to R20 000 per

month, 7.5% earned between R5 000 and R10 000, 6% earned between R30 001 and R40 000.

4.3 Reliability analysis

This study involved five constructs, which are online shopping behaviour (OS), online consumer attitude (OCA), trust (TR), perceived risk (PR) and perceived benefits (PB). All constructs were measured on a 7-point Likert scale (1= strongly disagree, 7= strongly agree).

The reliability of the instrument was assessed by Cronbach's Alpha coefficient. The alpha was calculated per each scale. If the alpha coefficient value is greater than 0.7, the instrument is internally consistent and reliable (Field, 2018). Results of the Cronbach's alpha are shown in Table 4.4 below.

Table 4.4: Reliability analysis

Construct	Code	No. of items	α (before adjustment)	Items deleted	α (after adjustment)
Online shopping	OS	7	0.832	None	0.832
Online consumer attitude	OCA	8	0.923	None	0.923
Trust	TR	9	0.912	None	0.912
Perceived risk	PR	7	0.822	None	0.822
Perceived benefits	PB	11	0.810	1	0.827
Overall Alpha					0.872

Source: Survey (2021)

Results in Table 4.4 show that all the alpha coefficients for all the variables and the overall alpha were greater than 0.7, suggesting that the scales were reliable. Cronbach's alpha before and after modification was also calculated to see if removing an item would enhance the scale's consistency. To check the scale's consistency, the two alphas should be quite closer to each other. Except for the perceived benefits

scale, there is no change in the alphas, as indicated in table 4.4. With the removal of one item from the perceived benefits construct, the total alpha increased from 0.812 to 0.827. Therefore, based on the reliability analysis, the whole instrument was considered reliable. The following section focuses on the validity of the research instrument.

4.4 Validity of the research instrument

The validity of the research instrument was assessed using Exploratory Factor Analysis (EFA). Nevertheless, before starting with factor analysis, it was critical to ensure that the sample size was acceptable and appropriate for EFA (Field, 2018). The Kaiser-Meyer-Olkin (KMO) sample adequacy metric was used in the analysis. If the KMO statistic is more than 0.5, the sample size is large enough for factor analysis.

The principal axis factoring (PAF) method was used to determine the number of components that should be associated. The number of factors to extract was determined using the Scree plot and Kaiser's criteria of eigenvalues, which states that only factors with eigenvalues greater than one are extracted (Field, 2018). Characteristic variables with the largest factor loadings on the essential factor and relatively low loadings on other factors complicate interpretation, necessitating factor rotation that distinguishes across factors (Stevens, 2002). The oblique rotation using Promax was utilised in this study to rotate the variables, allowing them to relate.

In choosing which factors to keep or discard, a cut-off of 0.3 was employed. Factors with loadings larger than 0.3 were kept, which was allowed in this investigation because the sample size was at least 200 observations (Stevens, 2002). The pattern matrix and total variance explained were employed in this study to determine the proportion of variation explained by each component. The following table presents the sampling adequacy test.

Table 4.5: Sampling Adequacy Test

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.889

Bartlett's Test of Sphericity	Approx. Chi-Square	3853.047
	Df	741
	Sig.	.000

Source: Survey (2021)

The KMO score (0.794) is more than the 0.5 cut-off and statistically significant, indicating that EFA can be carried out. The plot of Eigen values for the extracted factors is shown in the figure below.

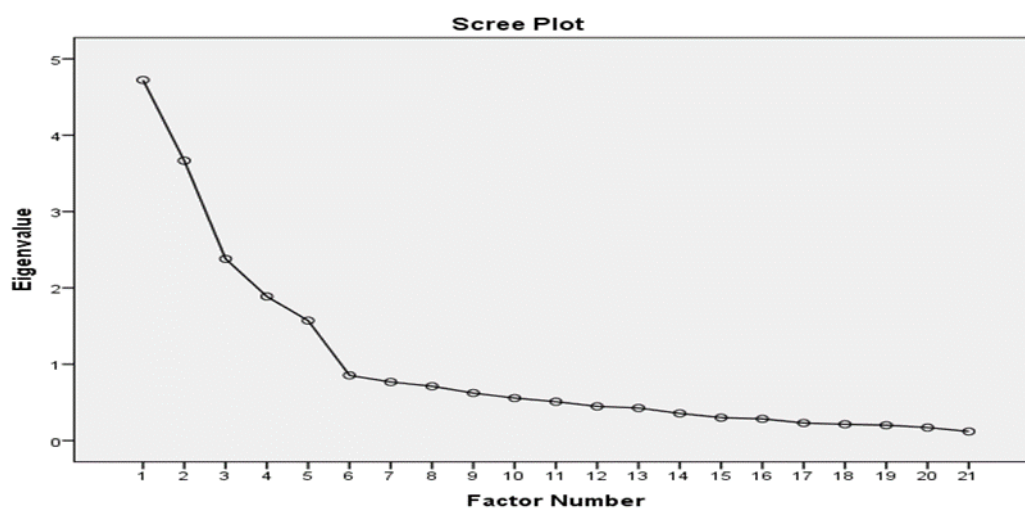


Figure 4.1 Scree plot for the extracted factors

Source: Survey (2021)

The eigenvalue plot revealed that 5 factors had eigenvalues greater than one and were thus selected. The overall variance explained is shown in Table 4.6 below.

Table 4.6: Total Variance Explained

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.723	22.489	22.489	4.438	21.134	21.134	4.382
2	3.666	17.457	39.946	3.242	15.437	36.571	2.632
3	2.380	11.335	51.281	1.965	9.356	45.927	2.368
4	1.887	8.987	60.268	1.448	6.896	52.823	2.213
5	1.571	7.482	67.750	1.260	6.002	58.825	2.042

Extraction Method: Principal Axis Factoring.

Source: Survey (2021)

According to Table 4.6 results, the 5 extracted variables explained at least 67.75 percent of the overall changes in the collected data. The pattern matrix findings are shown in the table below, with extracted factors and respective factor loadings for each item on the scale.

Table 4.7: Pattern Matrix

Pattern Matrix ^a					
	Factor				
	1	2	3	4	5
OS1		.673			
OS2		.763			
OS3		.543			
OS4		.764			
OS5		.654			
OS6		.764			
OS7		.654			
OCA1			.532		
OCA2			.541		
OCA3			.876		
OCA4			.567		
OCA5			.677		
OCA6			.544		

OCA7			.655		
OCA8			.544		
TR1				.801	
TR2				.629	
TR3				.650	
TR4				.522	
TR5				.588	
TR6				.877	
TR7				.899	
TR8				.452	
TR9				.654	
PR1					.870
PR2					.878
PR3					.453
PR4					.567
PR5					.456
PR6					.765
PR7					.676
PB1	.676				
PB2	.851				
PB3	.914				
PB4	.879				
PB5	.871				
PB6	.852				
PB7	.452				
PB8	.654				
PB9	.543				
PB10	.453				
Extraction Method: Principal Axis Factoring.					
Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 5 iterations.					

Source: Survey (2021)

that the 5 factors were extracted using principal axis factoring (PFA), which results can be seen in Table 4.7, which all items had a factor loading of at least 0.4, implying that each item explained more than 16% of the variance, suggesting that the factors loading were significant at the 1% level ($p=0.01$). As a result, the factors were deemed relevant for further use in the research. The research instrument was therefore considered valid.

4.5 Descriptive statistics

After conducting reliability and validity analyses, this part gives descriptive statistics for all numerical variables, including online shopping behaviour (dependent variable) and customer online attitudes, trust, perceived risk, and perceived benefits (independent variable). Total scores were obtained for each variable, and the summated scales were employed in this study for further analysis. Table 4.8 following contains descriptive statistics for the 5 variables.

Table 4.8: Descriptive statistics

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
OS	200	5.983	1.110	-.828	.173	1.072	.344
OCA	200	5.191	1.008	-1.244	.173	1.172	.344
TR	200	4.798	.854	-.096	.173	.606	.345
PR	200	4.132	.697	-.457	.173	1.241	.344
PB	200	5.181	.973	-.636	.175	1.169	.348
Valid N (listwise)	200						

Source: Survey (2021)

Results reported in Table 4.8 above show that there were 200 observations included in this study. The mean, which is based on the 7-point Likert scale, shows the average score for each construct. On average, respondents somewhat agreed with the items in the online shopping scale (mean=5.983), online consumer attitude (mean =5.19) and perceived benefits scale (mean= 5.181). Further, results show that, on average,

respondents answered “neutral” to items in the trust scale (mean= 4.798) and also for items in the perceived risk scale (mean= 4.23). The Kurtosis and Skewness statistics all fall within the range of -2 to +2, suggesting that the data satisfied the normal distribution assumption (Creswell & Creswell, 2017).

4.6 Correlation analysis

Correlation analysis was carried out to identify the direction and magnitude of the correlations between the variables investigated. It was also significant since correlation analysis allows the researcher to assess the model's linearity and multicollinearity. The Pearson correlation matrix was used for correlation analysis. Correlation coefficients vary from -1 to 1, with an absolute value of 1 indicating perfect correlation. Negative coefficients indicate negative correlations between variables, whereas values less than 0.3 indicate weak association. Table 4.9 displays the results of a correlation study performed on the constructs utilized in this research.

Table 4.9: Pearson correlation

		Correlations				
		OS	OCA	TR	PR	PB
OS	Pearson Correlation	1				
	Sig. (2-tailed)					
OCA	Pearson Correlation	.699**	1			
	Sig. (2-tailed)	.000				
TR	Pearson Correlation	.609**	.660**	1		
	Sig. (2-tailed)	.000	.000			
PR	Pearson Correlation	-.675**	.227**	.177*	1	
	Sig. (2-tailed)	.001	.001	.013		
PB	Pearson Correlation	.528**	.545**	.599**	.017	1
	Sig. (2-tailed)	.000	.000	.000	.817	
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Source: Survey (2021)

The results in Table 4.9 illustrate the independent variables significantly correlated with online shopping behaviour ($p < .01$). There is a moderate positive relationship

between online consumer attitude and online shopping ($r=.699$). Further, trust is positively correlated with online shopping, with a moderate correlation ($r=.609$). The results also reveal that online shopping and perceived risk are negatively correlated ($r=.675$). Lastly, there is a moderate positive relationship between online shopping and perceived benefits ($r=.528$). The following section presents t-tests for mean differences between males and females.

4.7 Independent sample t-tests

The independent sample t-test was used to test for differences between males' and females' online shopping behaviour, perceived risk, perceived benefits and trust. The t-test compares whether there are any significant differences between the means of females and males in terms of their behaviour or attitude towards online shopping. Results of the t-test are presented in this section.

Gender and online shopping

The gender variable consisted of two categories: male and females. Therefore, the independent t-test was used to compare means differences between males and females regarding online shopping behaviour. Results are reported in the following table.

Table 4.10: Gender and OS

	Gender	Mean	Std. Deviation	Std. Error Mean
OS	Female	5.1141	.99237	.09254
	Male	4.8349	1.23709	.13745

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
OS	Equal variances assumed	1.408	.237	2.750	194	.002	.27925	.15955	-.03542	.59393

	Equal variances not assumed			2.685	147.666	.004	.27925	.16570	.04820	.60671
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Source: Survey (2021)

The results in Table 4.10 show that the t-statistic is statistically significant ($p < .01$), suggesting significant mean differences between males and females in terms of their online shopping behaviour. Thus, online shopping differs as a result of gender.

Table 4.11: Gender and Perceived risk (PR)

	Gender	Mean	Std. Deviation	Std. Error Mean
PR	Female	5.1317	.63216	.05895
	Male	4.1446	.78555	.08728

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
PR	Equal variances assumed	2.611	.108	2.128	194	.001	.9871	.10147	.21306	.18718	
	Equal variances not assumed			2.123	148.015	.002	.9871	.10533	.22108	.19519	

Source: Survey (2021)

Table 4.11 shows that the difference between the two means is statistically significant ($p < .01$). Therefore, the perceived risk differs based on gender.

Table 4.12: Gender and Perceived Benefit

	Gender	Mean	Std. Deviation	Std. Error Mean
PB	Female	5.2435	.87300	.08141
	Male	5.1276	1.09125	.12517

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PB	Equal variances assumed	3.894	.050	.812	189	.418	.11585	.14273	-.16571	.39740
	Equal variances not assumed			.776	135.870	.439	.11585	.14932	-.17944	.41114

Source: Survey (2021)

The t-test results in Table 4.12 shows that the t-statistic is statistically insignificant ($p > .05$). Therefore, the different perceived benefits do not differ based on gender.

Table 4.13: Gender and Trust

Group Statistics					
	Please indicate your Gender	N	Mean	Std. Deviation	Std. Error Mean
TR	Female	116	4.8030	.74330	.06901
	Male	79	4.8210	.98987	.11137

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper

TR	Equal variances assumed	4.843	.029	.145	193	.885	-.01802	.12422	.26303	.22699
	Equal variances not assumed			.138	135.823	.891	-.01802	.13102	.27712	.24108

Source: Survey (2021)

Results shown in Table 4.13 reveal that the difference between the two means is statistically insignificant, indicating that differences in trust are not based on gender.

4.8 Regression analysis

Regression analysis was conducted to assess the effect of online consumer attitude (OCA), perceived risk (OCA), trust (TR) and perceived benefit (PB) on online shopping (OS). Results of multiple linear regression analysis are presented in the following table:

Table 4.14: Regression results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.744 ^a	.553	.543	.76328	2.106

a. Predictors: (Constant), PB, PR, OCA, TR

b. Dependent Variable: OS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.242	.464		.521	.603
	OCA	.576	.079	.518	7.306	.000
	TR	.243	.096	.187	2.540	.012
	PR	-.061	.086	-.036	-1.901	.045
	PB	.160	.075	.139	2.117	.036

a. Dependent Variable: OS

Source: Survey (2021)

In Table 4.11, the dependent variable was online shopping (OS), explained by four predictor variables: OCA, TR, PR and PB. The R-square of the model was 0.553, implying that the four predictor variables explained about 55% of the variations in online shopping. All the coefficients of the predictor variables are statistically significant ($p < .05$), suggesting that the four variables significantly affect online shopping. The coefficient of online consumer attitude (OCA) is positive and statistically significant (Beta=.518; $p < .001$). Further, trust (TR) has a positive and statistically significant coefficient (Beta=.187, $p < .05$). Perceived benefit also has a statistically significant positive coefficient (Beta=.139, $p < .05$). However, Perceived risk (PR) has a negative and statistically significant coefficient (Beta=. -036, $p < .05$).

The following section focuses on moderation analysis.

4.9 Moderation Analysis

Moderation analysis was conducted to determine the moderating role of gender on the antecedents of online shopping behaviour. Results for moderation analysis are presented in this section.

Table 4.15: Regression results of online consumer attitude (OCA) with Gender as a moderator

Model Summary ^c									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.699 ^a	.488	.486	.80193	.488	184.264	1	199	.000
2	.700 ^b	.490	.484	.80299	.001	.491	1	198	.484
a. Predictors: (Constant), OCA									
b. Predictors: (Constant), OCA, OCAxGen									
c. Dependent Variable: OS									

Source: Survey (2021)

Results show that the first model, Model a, had only online consumer attitude as the predictor variable. In Model b, the interaction term between gender and online consumer attitude was added. However, this addition did not significantly change the R-square or predictive power of the model, which means that there was no evidence

to support that gender moderates the relationship between online shopping and online consumer attitude.

Table 4.16: Regression results of Trust (TR) with Gender as a moderator

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.609 ^a	.371	.367	.88499	.371	113.006	1	199	.000
2	.616 ^b	.479	.473	.98098	.108	12.749	1	198	.009
a. Predictors: (Constant), TR									
b. Predictors: (Constant), TR, TRxGen									

Source: Survey (2021)

Results in table 4.16 show that the addition of the interaction term between trust and gender significantly change the predictive power of the model ($p < .01$). Therefore, there is evidence that the relationship between trust and online shopping is moderated by gender.

Table 4.17: Regression results of perceived risk with Gender as a moderator

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.115 ^a	.013	.008	1.11378	.013	2.579	1	199	.110
2	.700 ^b	.490	.485	.80278	.477	179.505	1	198	.000
a. Predictors: (Constant), PR									
b. Predictors: (Constant), PR, PRxGen									

Source: Survey (2021)

Results in Table 4.17 show that Model a is statistically insignificant ($p > .05$). However, the addition of the interaction term (PRxGen) in Model b shows that the change in the

predictive power was statistically significant. This suggests that there is evidence that the relationship between online shopping and perceived risk is moderated by gender.

Table 4.18: Regression results of perceived risk with Gender as a moderator

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.528 ^a	.279	.275	.94934	.279	72.853	1	199	.000
2	.533 ^b	.385	.377	.94837	.106	11.383	1	198	.007
a. Predictors: (Constant), PB									
b. Predictors: (Constant), PB, PBxGen									

Source: Survey (2021)

According to the results in table 4.18, there was a significant change in the predictive power of the model following the addition of the moderator variable (PBxGen). Therefore, gender moderates the relationship between online shopping and perceived behaviour.

4.10 Results and Hypotheses

Hypothesis 1a: *Online Attitude has a positive effect on online shopping.*

Regression results reported in Table 4.14 show that the coefficient of online consumer attitude (OCA) is positive and statistically significant ($\beta=.518$; $p<.001$). This suggests that online consumer attitude positively affects online shopping, holding other factors constant. Therefore, hypothesis 1a was supported.

Hypothesis 1b: *Males have a more positive attitude towards online shopping than females.*

The study also hypothesised that males have a more positive attitude towards online shopping than females. This hypothesis was tested using the independent samples t-test. Results in Table 4.10 show that the difference between the means for the two groups (females and males) was not statistically significant. The results suggest no

difference between males' and females' attitudes towards online shopping. Therefore, hypothesis 1b was not supported.

Hypothesis 2a: Perceived benefits have a positive effect on online shopping.

This hypothesis was tested using regression analysis. As reported in Table 4.14, the study results showed that perceived benefit has a statistically significant positive coefficient (Beta=.139, $p < .05$). The result implies that perceived benefit has a positive effect on online shopping. Thus, if consumers anticipate more benefits from shopping online, they will likely increase online shopping. Hypothesis 2a was therefore supported.

Hypothesis 2b: Females focus more on perceived benefits when shopping online than males.

Comparison between males and females was conducted using an independent t-test. Results reported in Table 4.12 show that there was no significant difference between females' mean and males in terms of their perceived behaviour. Therefore, hypothesis 2b was not supported.

Hypothesis 3a: Perceived risk has a positive effect on online shopping.

Regression analysis results reported in Table 4.14 show that perceived risk (PR) has a negative and statistically significant coefficient (Beta=. -036, $p < .05$). The result suggests that perceived risk has a negative effect on online shopping. Thus, consumers are likely to do less online shopping if they think it is riskier to shop online. Therefore, hypothesis 3a was accepted.

Hypothesis 3b: Females have a higher perceived risk than males when shopping online.

Comparison results between the mean score of females and males in terms of perceived are presented in Table 4.11. Results show that there was a significant mean difference between males and females, with females having a higher mean score (Female= 5.1317; Male= 4.1446). This implies that females' risk perception is significantly higher than males' on average. Therefore, hypothesis 3b was supported.

Hypothesis 4a: Trust has a positive effect on online shopping

Results reported in Table 4.14 confirm that trust has a positive effect on online shopping since trust (TR) has a positive and statistically significant coefficient (Beta=.187, $p < .05$). This means that the more a consumer trusts online shopping, the more she is likely to increase online shopping. Hypothesis 4a was therefore accepted.

Hypothesis 4b: Females have a lower level of trust than males when it comes to online shopping

Independent sample t-test results presented in Table 4.13 showed no significant difference between the means of females and males. This suggests that there is no evidence to suggest that females have a lower level of trust than males when it comes to online shopping. Therefore, hypothesis 4b was not supported.

Hypothesis 5: Gender moderates the relationship between online shopping behaviour and its antecedents

Moderation analysis was conducted to test this hypothesis. Results for the moderation role of gender on the relationship between online shopping and online consumer attitude are shown in Table 4.15. Results show that there was no significant change in the predictive power of the model if the moderator variable was added. Therefore, gender does not moderate the relationship between online shopping and online consumer attitude.

Results for the moderation role of gender on the relationship between trust and online shopping are reported in Table 4.16. Results show that the addition of the interaction term between trust and gender significantly changed the model's predictive power ($p < .01$). Therefore, gender moderates the relationship between trust and online shopping.

As reported in Tables 4.17 and 4.18, there were significant changes in the predictive power of the models by adding the moderator variable. Therefore, results confirm gender moderates the relationship between perceived risk and online shopping.

Gender also moderates the relationship between perceived benefit and online shopping.

Table 4.19: Summary of hypotheses

Hypothesis	Beta (β)	p-value	Result
H1a	.518	$p < .001$	Supported
H1b	-	$p > .05$	Not supported
H2a	.139	$p < .05$	Supported
H2b	-	$p > .05$	Not supported
H3a	-.036	$p < .05$	Supported
H3b	-	$p < .001$	Supported
H4a	.187	$p < .05$	Supported
H4b	-	$p > .05$	Not supported
H5 (Gender and OCA)	-	$p > .05$	Not supported
H5 (Gender and TR)	-	$p < .05$	Supported
H5 (Gender and PR)	-	$p < .05$	Supported
H5 (Gender and PB)	-	$p < .05$	Supported

Source: Survey (2021)

4.11 Chapter summary

The first section of this chapter provided demographic statistics of the respondents. This study's ultimate sample size was 200 online shoppers from Gauteng province. The gathered data was cleaned and analysed with SPSS version 25. The data analysis approach began with a check for missing values before moving on to factor analysis. Because the constructs utilized in this study included latent variables, validity and reliability testing was required before hypothesis testing.

Cronbach's alpha coefficient was used to determine the internal consistency of the measuring scale, and exploratory factor analysis was utilized to extract items that belong to the same factor. Five components were identified, and a regression model with five variables (one dependent and four independent variables) was developed.

Correlation analysis was used to assess the direction and degree of correlations between variables based on factor analysis. The regression analysis was followed by

moderation analysis, which evaluated the interactions between the independent constructs and the moderator variable.

In conclusion, the results of the study revealed that trust, perceived benefit and online consumer attitude positively affect online shopping. Perceived risk was found to have a positive relationship with online shopping. Further, the study found that gender moderates the relationships between online shopping and perceived risk, online shopping and perceived benefit, and online shopping and trust. In Chapter 5, these findings are discussed in line with theories and empirical studies.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

This chapter reviews the findings and compares them to the theories and empirical investigations presented in chapter two of this study. The discussions on the hypotheses proposed in this study will lead to conclusions and recommendations.

5.2 Discussion of survey results, reliability and validity

An online survey was conducted to assess the antecedents of online shopping and the moderating role of gender. Data on sample demographics (age, gender and income) was collected via a questionnaire and the measurement scales of the study constructs. Results from the survey show that a final sample of 200 online shoppers was usable. Gender statistics showed that females dominated the sample, constituting 59% of the sample size. The dominant age group was the 18 to 29 years, suggesting that a youthful population dominated the sample. Further, results showed that the majority of the sample were earning less than R5 000 per month.

The reliability and validity of the research instrument were also assessed. Reliability analysis results show that the overall reliability was above 0.7, confirming that the scales were internally consistent. Further, construct validity was also assessed using EFA and results show that the research instrument was valid. Therefore, results from this study were considered reliable for further use. The next section focuses on a detailed discussion of the results of the study's hypotheses.

5.3 Discussion pertaining to the hypotheses

This study aimed to assess the antecedents of online shopping and the moderating role of gender on relationships. Hypotheses were developed following the literature and examined in the manner presented in Chapter 4. As a result, this section examines the outcomes of the tests and compares them to the literature.

5.3.1 Online consumer attitude and online shopping

The first hypothesis of this study was that online Attitude has a positive effect on online shopping. Results of the study supported this hypothesis. The result conforms to the expectation of this study that consumers' intention to find online products and price information would be positively affected by their attitudes towards online purchases (Chen et al., 2016). Further, the result is consistent with Lim et al. (2016); Jin et al. (2015); Rana and Islam (2019) and Asiedu and Dube (2020), who also found that positive attitude of consumers to utilise the internet to find information is positively associated with increased online shopping. Alsoud et al. (2021) also found that consumers' attitudes towards online purchases are an important factor in determining consumers' desire to use the Internet for information search and thus determine their intention to use the Internet to make purchases.

The study also hypothesised that males have a more positive attitude towards online shopping than females. However, the study's findings revealed no evidence to support the notion, contrary to expectations.

5.3.2 Perceived benefits and online shopping

The second hypothesis of this study was that perceived benefit positively affects online shopping. The study revealed that online shopping was positively affected by online shopping. This result is in line with Ray et al. (2019), who noted that the amount that a consumer thinks he or she will benefit from online shopping on a particular site is positively associated with more online shopping. Some prior studies also found that perceived benefit positively influences online shopping (e.g. Akussah, 2019; Al-Debei et al., 2015; Gaur & Sidhpuria, 2019; Tandon et al., 2017). Further, Bhatti and Akram (2020) found that when considering the perceived benefits of online shopping, consumers consider four aspects: convenience, product selection, convenience and enjoyment of shopping. These four factors drive consumers to want to do more online shopping.

The study also hypothesised that females focus more on perceived benefits when shopping online than males. However, results showed that there was so empirical evidence to support this hypothesis.

5.3.3 Perceived risk and online shopping

Further, the study hypothesised that perceived risk has a negative effect on online shopping. The study results confirmed the hypothesis as it was found that online shopping was negatively influenced by perceived risk. This result is consistent with Khan and Chavan (2015) and Usman and Kumar (2021). They found that the nature and amount of risk perceived by consumers when considering a particular purchase decision greatly influences their decision to go ahead and make an online purchase. Akhlaq and Ahmed (2015) noted that when compared with traditional physical shopping, the online shopping brings more uncertainty and risks, and these risks reduce the number of online shopping transactions. Previous studies have identified social, time, financial, psychological, physical, and performance as components of a perceived risk that negatively influence online shopping (Akhlaq & Ai Hamed, 2015, Dayour et al., 2019).

Moreover, it was hypothesised in this study that females have a higher perceived risk than males when shopping online. The results of the study supported this hypothesis. Further, the result is consistent with a couple of prior studies (Garbarino & Strahilevitz, 2004; Bae & Lee, 2011, Bhat et al., 2021). Garbarino and Strahilevitz (2004) found that women believe online shopping is at higher risk than men. Another similar study by Bhat et al. (2021) found that women are anxious about the risks of online shopping.

5.3.4 Trust and online shopping

Hypothesis four of this study was that trust has a positive effect on online shopping. This hypothesis was supported since results revealed that online shopping was positively influenced by trust. The result is in line with Ofori et al. (2017), who found that when customers see the favourable conditions for a successful transaction, they are more likely to trust the website and go ahead to make an online purchase. Abbad

et al. (2011) found that trust is one of the main influencing factors of online shopping, and if consumers have trust issues with online purchases, they are likely not going to make an online purchase. One of the determinants of consumers' trust in online shopping is perceived online quality. Abad et al. (2011) claimed that higher trust in online shopping is achieved by perceiving a higher level of network quality. Aldebe et al. (2015) believe that perceived network quality directly predicts trust and overall perceived benefits.

Further, the study also hypothesised that females have a lower level of trust than males regarding online shopping. However, the study results contradicted the hypothesis, revealing that the difference in trust levels of males and females was not significantly different.

5.3.5 Moderating role of gender

This study also hypothesised that gender moderates the relationship between online shopping and its antecedents. Results revealed that gender moderates the relationship between perceived risk and online shopping. The results are supported by Garbarino and Strahilevitz (2004), who found that women have a higher perceived risk in Internet purchases than men. Men feel calmer, effective, efficient, and less time-consuming when shopping online.

Results also revealed that the relationship between online shopping and perceived benefit is moderated by gender. This result conforms to the finding of Reimers and Clulow (2014), Hasan (2010), and Bhat et al. (2021). Reimers and Clulow (2014) found that due to the perceived benefits of Internet purchases, men's goal-oriented and goal-driven attitudes are much stronger than those of women. In addition, men consider shopping to meet demand, while women consider shopping to be a relaxing activity (Hasan, 2010).

The study also found that gender moderates the relationship between trust and online shopping. The result is consistent with Jadhav and Khanna (2016), who found that because of trust issues, women spend more time searching for information than men before making a purchase decision. Rao et al. (2018) further found that men believe

that dialogue with suppliers is not necessary and would rather use all the information they come into contact with to make decisions about products, while women prefer to have these dialogues and address all trust concerns before proceeding to make an online purchase. However, results revealed that there was no evidence to support the hypothesis that gender moderates the relationship between consumer online attitudes and online shopping.

5.4 Chapter summary

This chapter focused on discussing the results of the study as presented in Chapter Four the study. Based on a literature review, this study expected that online shopping is influenced by its antecedents: online consumer attitude, perceived risk, perceived benefits, and trust. Further, it was expected that the relationship between online shopping and gender would be moderated by gender.

The discussion of results revealed that online shopping behaviour in Gauteng province was positively influenced by perceived benefit, trust, and online consumer attitude. It was also revealed that perceived risk negatively influences online shopping behaviour. The discussion on moderation analysis revealed that gender moderates the relationships between online shopping and perceived risk, online shopping and perceived benefit, and online shopping and trust. Thus, the study confirmed that women have higher risk perceptions than males, and they trust online shopping less than their male counterparts. As such, gender plays a key role in influencing online shopping behaviour. The summary and conclusions of the study are presented in the next chapter.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter six aims to draw conclusions based on the results of the whole study. The first section provides the study's conclusions, followed by recommendations. The last section of the chapter provides areas for future research.

6.2 Conclusions of the study

The main objective of this study was to assess the antecedents of online shopping behaviour and the moderating role of gender. Driven by the need to expand the knowledge of digital marketing and consumer behaviour, research on consumer behaviour and gender was imperative. This study was motivated by the lack of studies in the South African context that have investigated the online shopping antecedents and how the relationship between these antecedents and online shopping is influenced by gender. To achieve the aim of the study, this study utilised a sample of 200 online shoppers from Gauteng province, South Africa. A causal-comparative research design was employed to investigate the effect of perceived benefit, online consumer attitude, perceived risk and trust on online shopping, and how gender influences these relationships.

6.2.1 The effect Perceived Benefit and the role of gender on consumer online shopping

The first objective was to investigate the effect of perceived benefit on online shopping behaviour and how this relationship is moderated by gender. Results from the survey show that perceived benefit had a significant positive influence on online shopping behaviour ($\beta=.139$, $p<.05$). Moderation analysis also revealed that the relationship between perceived benefit and online shopping behaviour was positively influenced by gender. As such, the conclusion is that perceived benefit is a significant determinant of online shopping behaviour, and its relationship with online shopping can change with gender.

6.2.2 The effect of Perceived Risk and the role of gender on consumer online shopping

The second objective was to investigate how perceived risk affects online shopping behaviour and how the relationship changes with gender. The results concluded a negative relationship between perceived risk and online shopping behaviour ($\beta = -.036$, $p < .05$). Moderation analysis revealed that gender significantly affected the relationship between perceived risk and online shopping behaviour. It can be concluded that perceived risk is a significant predictor of online shopping behaviour. The study found that females' risk perception was significantly higher than males. Thus risk-averse females may do less online shopping.

6.2.3 The effect of Online Attitude and the role of gender on consumer online shopping

The third objective was to investigate the influence of online consumer attitude on online shopping behaviour and the moderating role of gender. According to survey results, online attitude significantly influences online shopping behaviour ($\beta = .518$; $p < .001$). Further, it was revealed that gender does not affect the relationship between online shopping behaviour and online attitudes. Thus, there were no significant differences in online attitude between males and females.

6.2.4 The effect of Trust and the role of gender on consumer online shopping

The fourth objective was to investigate the influence of trust on online shopping behaviour and the moderating role of gender in the relationship. The study showed that trust significantly influenced online shopping behaviour ($\beta = .187$, $p < .05$). Results also revealed that gender moderates the relationship between trust and online shopping. Therefore, it can be concluded that trust has a positive effect on online shopping behaviour in Gauteng province, which can change due to gender.

6.2.5 The difference between males and females when it comes to online shopping behaviour

This study's fifth and final objective was to investigate how males and females differ in terms of online shopping behaviour. The independent samples t-test results revealed significant mean differences between males and females, with females

having the highest mean (5.11>4.83). This implies that females tend to shop more online than males in Gauteng province.

In summary, empirical results from the study revealed that perceived benefit, trust, and online consumer attitude positively affect online shopping. Perceived risk was found to have a negative effect on online shopping. The results imply that online businesses should pay attention to these four antecedents of online shopping in order to increase their online sales. Building trust and reducing the perceived risks would enhance online business growth. Further, results revealed that gender plays a key role in influencing online shopping behaviour. This suggests that gender-specific and/or gender-sensitive marketing strategies should be implemented to increase online shopping.

6.3 Recommendations

Understanding consumer behaviour is key to every business decision making. The findings of this research have important consequences for marketing management and policymakers in the marketing fraternity. The following recommendations were made based on the study's findings:

6.3.1 Pay special attention to consumer characteristics, habits and lifestyles

Businesses that utilise online shopping platforms should pay special attention to consumer characteristics, habits, and lifestyles to compete on a larger global scale and obtain a good return on investment.

6.3.2 Engage in continuous research to understand online consumer behaviour

In order to survive and maximise profits in this fast-growing industry, online transaction businesses should fully understand online consumer behaviour, especially the different online shopping attributes. These attributes are divided into four categories: goods, customers, services, and security. Understanding the nature of online consumer shopping behaviour will help businesses produce and sell goods that satisfy customer preferences while guaranteeing the security of the transaction.

6.3.3 Business should offer customers relevant goods and services

The success of online stores depends on companies that provide services tailored to consumers and meet their requirements. Therefore, businesses should understand the needs and behaviour of different groups. In this study, it was found that gender plays a key role in influencing online shopping behaviour. As such, marketing strategies should be made in line with gender-specific behaviours in terms of risk perception and trust.

6.3.4 Businesses should keep up with the changing consumer preferences

Consumers' changing needs and expectations require that businesses keep up with the dynamic environment to succeed. Marketers need to ensure that their marketing and sales strategies are flexible enough to cater to consumer and environmental behaviour changes.

6.3.5 Provide customer reviews

Proving customer reviews help the business to gain the trust of customers. Customers are more likely to trust online goods if they know others have already purchased them. That is why so many of the larger online retailers incorporate consumer reviews. It enables customers to make an informed decision about whether to purchase.

6.4 Suggestions for further research

This study focused only on four factors that affect online shopping. However, many factors influence online shopping behaviour, such as culture and normative aspects of society. Future research could also focus on other factors not included in this study.

This study was only limited to studying online shopping behaviour in Gauteng; hence it may not be generalizable to other South African provinces. As such, future studies could study the same topic but focus on more provinces or the rest of South Africa.

This study was cross-sectional, implying that it only focused on studying consumer behaviour at a point in time. However, the behaviour might change over time, hence the need to conduct a longitudinal study that considers the effect of changes over time. Future studies could conduct the same study utilising longitudinal approaches.

REFERENCES

- Abbad, M., Abbad, R., & Saleh, M. (2011). Limitations of e-commerce in developing countries: Jordan case. *Education, Business and Society: Contemporary Middle Eastern Issues*, 7(35), 421-435.
- Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological Bulletin*, 82(2), 261.
- Ajzen, I. (1991). The theory of planned behaviour. *Organisational behaviour and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I., & Sheikh, S. (2013). Action versus inaction: Anticipated effect in the theory of planned behaviour. *Journal of Applied Social Psychology*, 43(1), 155-162.
- Akar, E., & Nasir, V. A. (2015). A review of literature on consumers' online purchase intentions. *Journal of Customer Behaviour*, 14(3), 215-233.
- Akhlaq, A., & Ahmed, E. (2015). Digital commerce in emerging economies: Factors associated with online shopping intentions in Pakistan. *International Journal of Emerging Markets*, 3(45), 65-82.
- Akhlaq, A., & Ahmed, E. (2015). Digital commerce in emerging economies: Factors associated with online shopping intentions in Pakistan. *International Journal of Emerging Markets*, 8(23), 103-114.
- Akman, I., & Rehan, M. (2014). Online purchase behaviour among professionals: a socio-demographic perspective for Turkey. *Economic research-Ekonomiska istraživanja*, 27(1), 689-699.
- Akram, A., Merunka, D., & Akram, M. S. (2011). Perceived brand globalness in emerging markets and the moderating role of consumer ethnocentrism. *International Journal of Emerging Markets*, 16(1), 22-28.
- Akram, U., Hui, P., Khan, M. K., Hashim, M., & Rasheed, S. (2016). Impact of store atmosphere on impulse buying behaviour: Moderating effect of demographic variables. *International Journal of u-and e-Service, Science and Technology*, 9(7), 43-60.
- Akroush, M. N., & Al-Debei, M. M. (2015). An integrated model of factors affecting consumer attitudes towards online shopping. *Business Process Management Journal*, 16(1), 22-28.
- Akussah, C. S. (2019). *Perceived Benefits of Online Shopping and Attitude Formation of Women Shoppers in Urban Ghana*. Doctoral dissertation. Accra: University of Ghana.
- Albarracín, D., & Shavitt, S. (2018). Attitudes and attitude change. *Annual review of psychology*, 69(1), 299-327.
- Al-Debei, M. M., Akroush, M. N., & Ashouri, M. I. (2015). Consumer attitudes towards online shopping: the effects of trust, perceived benefits, and perceived web quality. *Internet Research*, 25(5), 707-733.

- Aliyu, A. A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and non-positivist paradigm in social science research: Conflicting paradigms or perfect partners. *Journal of Management and Sustainability*, 10(4), 79-88.
- Almarashdeh, I. (2016). Sharing instructors' experience of learning management system: A technology perspective of user satisfaction in distance learning course. *Computers in Human Behaviour*, 63(1), 249-255.
- Almoussa, M. (2011). Perceived risk in apparel online shopping: a multi-dimensional perspective. *Canadian Social Science*, 7(2), 23-31.
- Alsoud, A. R., Balhareth, H., Ab Yajid, M. S., Khatibi, A., Abdeljaber, O., & Shukri, S. M. (2021). Factors determining consumer buying behaviour in online shopping. *International Journal of e-Business and e-Government Studies*, 13(2), 205-222.
- Alvi, M. (2016). *A manual for selecting sampling techniques in research*. Karachi, Pakistan: University of Karachi, Iqra University.
- Anshari, M., Alas, Y., Hardaker, G., Jaidin, J. H., Smith, M., & Ahad, A. D. (2016). Smartphone habit and behaviour in Brunei: Personalization, gender, and generation gap. *Computers in Human Behaviour*, 64(1), 719-727.
- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of business and management*, 7(3), 217-225.
- Anwar, M. (2016). What does It Mean to be Ethical in Research? What should it mean? *Jurnal Bisnis dan Manajemen*, 16(1), 22-28.
- Ariff, M. S. M., Sylvester, M., Zakuan, N., Ismail, K., & Ali, K. M. (2014, June). Consumer perceived risk, attitude and online shopping behaviour; empirical evidence from Malaysia. In *IOP Conference Series: Materials Science and Engineering* (Vol. 58, No. 1, p. 012007). IOP Publishing.
- Arora, N., & Aggarwal, A. (2018). The role of perceived benefits in formation of online shopping attitude among women shoppers in India. *South Asian Journal of Business Studies*, 11(2), 201-214.
- Arora, N., & Rahul, M. (2018). The role of perceived risk in influencing online shopping attitude among women in India. *International Journal of Public Sector Performance Management*, 4(1), 98-113.
- Asiedu, R., & Dube, F. N. M. (2020). Antecedents of Chinese consumer's online shopping behaviour. *Asian Journal of Business Research*, 10(2), 91-110.
- Babbie, E. R. (2015). *The practice of social research: Nelson Education* (14th ed.). Boston, MA: Cengage Learning.
- Bae, S., & Lee, T. (2011). Gender differences in consumers' perception of online consumer reviews. *Electronic Commerce Research*, 11(2), 201-214.
- Baek, Y. M. (2014). Solving the privacy paradox: A counter-argument experimental approach. *Computers in Human Behaviour*, 38(1), 33-42.

- Bandara, R., Fernando, M., & Akter, S. (2020). Explicating the privacy paradox: A qualitative inquiry of online shopping consumers. *Journal of Retailing and Consumer Services*, 52(1), 52-66.
- Bandara, R., Fernando, M., & Akter, S. (2020). Managing consumer privacy concerns and defensive behaviours in the digital marketplace. *European Journal of Marketing*. 9(1), 1-13.
- Barth, S., & De Jong, M. D. (2017). The privacy paradox—Investigating discrepancies between expressed privacy concerns and actual online behaviour—A systematic literature review. *Telematics and informatics*, 34(7), 1038-1058.
- Barreto, A. M., & Ramalho, D. (2019). The impact of involvement on engagement with brand posts. *Journal of Research in Interactive Marketing*, 13(3), 277-301.
- Bashir, R., Mehboob, I., & Bhatti, W. K. (2015). Effects of Online Shopping Trends on Consumer-Buying Behaviour: An Empirical Study of Pakistan. *Journal of Management and Research*, 2(2), 1-24.
- Basias, N., & Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology. *Review of Integrative Business and Economics Research*, 7(1), 91-105.
- Baturay, M. H., Gökçearslan, Ş., & Ke, F. (2017). The relationship among pre-service teachers' computer competence, attitude towards computer-assisted education, and intention of technology acceptance. *International Journal of Technology Enhanced Learning*, 9(1), 1-13.
- Bell, J. (2014). *Doing Your Research Project: A guide for first-time researchers*. London: McGraw-Hill Education.
- Bhat, S. A., & Darzi, M. A. (2019). Exploring the influence of consumer demographics on online purchase benefits. *FIIB Business Review*, 8(4), 303-316.
- Bhat, S., Islam, S. B., & Lone, U. M. (2021). Antecedents and consequences of online buying behaviour: a mediation study. *South Asian Journal of Business Studies*. (Ahead-of-print).
- Bhatti, A., & Akram, H. (2020). The moderating role of subjective norms between online shopping behaviour and its determinants. *International Journal of Social Sciences and Economic Review*, 1(1) 1-9.
- Bilgihan, A., & Bujisic, M. (2015). The effect of website features in online relationship marketing: A case of online hotel booking. *Electronic commerce research and applications*, 14(4), 222-232.
- Bilgihan, A., Nusair, K., Okumus, F., & Cobanoglu, C. (2015). Applying flow theory to booking experiences: An integrated model in an online service context. *Information & Management*, 52(6), 668-678.
- Bleier, A., Harmeling, C. M., & Palmatier, R. W. (2019). Creating effective online customer experiences. *Journal of Marketing*, 83(2), 98-119.

- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19(4), 426-432.
- Boparai, J. K., Singh, S., & Kathuria, P. (2018). How to design and validate a questionnaire: a guide. *Current clinical pharmacology*, 13(4), 210-215.
- Brannen, J. (Ed.). (2017). *Mixing methods: Qualitative and quantitative research*. New York: Routledge.
- Braun, M. T. (2013). Obstacles to social networking website use among older adults. *Computers in human behaviour*, 29(3), 673-680.
- Bremer, J. (2017). *12 Types of Non-Probability Sampling*. Available: <http://www.researchscape.com/blog/12-types-of-non-probability-sampling> [Accessed August 8, 2020].
- Broekhuizen, T., & Hoffmann, A. (2012). Interactivity perceptions and online newspaper preference. *Journal of Interactive Advertising*, 12(2), 29-43.
- Bryman, A., & Bell, E. (2014). *Research methodology: Business and management contexts*. Pretoria: Oxford University Press, Southern Africa.
- Burak, L. J., Rosenthal, M., & Richardson, K. (2013). Examining attitudes, beliefs, and intentions regarding the use of exercise as punishment in physical education and sport: an application of the theory of reasoned action. *Journal of Applied Social Psychology*, 43(7), 1436-1445.
- Büyükköçkan, G., & Çifçi, G. (2012). A combined fuzzy AHP and fuzzy TOPSIS based strategic analysis of electronic service quality in healthcare industry. *Expert systems with applications*, 39(3), 2341-2354.
- Cai, Z., Fan, X., & Du, J. (2017). Gender and attitudes toward technology use: A meta-analysis. *Computers & Education*, 12(105), 1-13.
- Carlson, K. D., & Herdman, A. O. (2012). Understanding the impact of convergent validity on research results. *Organisational Research Methods*, 15(1), 17-32.
- Caron, X., Bosua, R., Maynard, S. B., & Ahmad, A. (2016). The Internet of Things (IoT) and its impact on individual privacy: An Australian perspective. *Computer Law & Security Review*, 32(1), 4-15.
- Chakraborty, R., Lee, J., Bagchi-Sen, S., Upadhyaya, S., & Rao, H. R. (2016). Online shopping intention in the context of data breach in online retail stores: An examination of older and younger adults. *Decision Support Systems*, 12(83), 47-56.
- Chang, E. C., & Tseng, Y. F. (2013). Research note: E-store image, perceived value and perceived risk. *Journal of business research*, 66(7), 864-870.
- Chang, M. K., Cheung, W., & Tang, M. (2013). Building trust online: Interactions among trust building mechanisms. *Information & Management*, 50(7), 439-445.

- Chang, S. H., Chih, W. H., Liou, D. K., & Yang, Y. T. (2016). The mediation of cognitive attitude for online shopping. *Journal of Information Technology and People*, 8(5), 167-178.
- Charumathi, D., & Rani, S. S. (2017). An empirical study on consumers buying behaviour towards online shopping. *International Journal of Research in Commerce & Management*, 8(10), 44-55.
- Chauhan, S., Banerjee, R., & Banerjee, S. (2019). The impact of website quality and reputation on purchasing intention towards online shopping. *Journal of Content, Community & Communication*, 10(1), 1-8.
- Chawla, M., Khan, M. N., & Pandey, A. (2015). Online buying behaviour: a brief review and update. *Journal of Management and Research*, 9(2/4).
- Cheah, I., Phau, I., & Liang, J. (2015). Factors influencing consumers' attitudes and purchase intentions of e-deals. *Marketing Intelligence & Planning*, 9(83), 47-56.
- Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. *International Journal of Information Management*, 37(6), 627-638.
- Chen, J., Teng, L., Yu, Y., & Yu, X. (2016). The effect of online information sources on purchase intentions between consumers with high and low susceptibility to informational influence. *Journal of Business Research*, 69(2), 467-475.
- Chen, Y., Yan, X., & Fan, W. (2015). Examining the effects of decomposed perceived risk on consumer's online shopping behaviour: A field study in China. *Engineering Economics*, 26(3), 315-326.
- Chen, Y., Yan, X., Fan, W., & Gordon, M. (2015). The joint moderating role of trust propensity and gender on consumers' online shopping behaviour. *Computers in Human Behaviour*, 43, 272-283.
- Chi, Y., Jeng, W., Acker, A., & Bowler, L. (2018, March). Affective, behavioural, and cognitive aspects of teen perspectives on personal data in social media: A model of youth data literacy. In *International Conference on Information* (pp. 442-452). New York: Springer, Cham.
- Chinomona, R. (2011). Non-mediated channel powers and relationship quality: A case of SMES in Zimbabwe channels of distribution. Unpublished PhD. Taiwan: National Central University,
- Chiu, C. M., Wang, E. T., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85-114.
- Choi, H., Park, J., & Jung, Y. (2018). The role of privacy fatigue in online privacy behaviour. *Computers in Human Behaviour*, 81, 42-51.

- Choi, N. G., & DiNitto, D. M. (2013). The digital divide among low-income homebound older adults: Internet use patterns, e-Health literacy, and attitudes toward computer/Internet use. *Journal of medical Internet research*, 15(5), e93.
- Chou, S., Chen, C. W., & Lin, J. Y. (2015). Female online shoppers: Examining the mediating roles of e-satisfaction and e-trust on e-loyalty development. *Internet Research*, 7(2), 93-114.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. & Creswell, J.D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Daştan, İ., & Gürler, C. (2016). Factors affecting the adoption of mobile payment systems: An empirical analysis. *EMAJ: Emerging Markets Journal*, 6(1), 17-24.
- Dayour, F., Park, S., & Kimbu, A. N. (2019). Backpackers' perceived risks towards smartphone usage and risk reduction strategies: A mixed methods study. *Tourism Management*, 72(1), 52-68.
- Department of Justice and Constitutional Development. (2021). Retrieved from [11 September 2021]. *Resources*.
<https://www.justice.gov.za/results.htm?cx=015343561227489587018%3Awzc1thdksxm&q=POPIA&ie=ISO-8859-1&sa=Search>
- Dominici, A., Boncinelli, F., Gerini, F., & Marone, E. (2021). Determinants of online food purchasing: The impact of socio-demographic and situational factors. *Journal of Retailing and Consumer Services*, 60(1), 102473.
- Donner, J., Gitau, S., & Marsden, G. (2019). Exploring mobile-only Internet use: Results of a training study in urban South Africa. *International Journal of Communication*, 5(1), 24.
- Edmonds, W. A., & Kennedy, T. D. (2016). *An applied guide to research designs: Quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage Publications.
- Edwards, J. R. (2019). The peaceful coexistence of ethics and quantitative research. *Journal of Business Ethics*, 2(4), 1-10.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied statistics*, 5(1), 1-4.
- Faisal, A. S., Haque, R., Pang, A. K., Rahman, A., & Connie, G. (2020). The Influence of e-Service Quality Dimensions on Customer Satisfaction and Purchase Intention: An Indian e-Market Perspective. *Asian Journal of Technology & Management Research*, 10(1), 1-15.

- Fan, Y. W., & Miao, Y. F. (2012). Effect of electronic word-of-mouth on consumer purchase intention: The perspective of gender differences. *International Journal of Electronic Business Management*, 10(3), 175-188.
- Fang, J., Wen, C., George, B., & Prybutok, V. R. (2016). Consumer heterogeneity, perceived value, and repurchase decision-making in online shopping: The role of gender, age, and shopping motives. *Journal of Electronic Commerce Research*, 17(2), 116-130.
- Faqih, K. M. (2016). An empirical analysis of factors predicting the behavioural intention to adopt Internet shopping technology among non-shoppers in a developing country context: Does gender matter? *Journal of Retailing and Consumer Services*, 30(1), 140-164.
- Farzianpour, F., Pishdar, M., Shakib, M. D., & Toloun, M. R. S. H. (2014). Consumers'perceived risk and its effect on adoption of online banking services. *American Journal of Applied Sciences*, 11(1), 47-59.
- Featherman, M. S., & Hajli, N. (2016). Self-service technologies and e-services risks in social commerce era. *Journal of Business Ethics*, 139(2), 251-269.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage Publishers.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Thousand Oaks, CA: Sage publishers.
- Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behaviour: The reasoned action approach*. East Sussex, UK: Psychology Press.
- Flavián, C., Gurrea, R., & Orus, C. (2020). Combining channels to make smart purchases: The role of webrooming and showrooming. *Journal of Retailing and Consumer Services*, 52(1), 101923.
- Ganguly, B., Dash, S. B., & Cyr, D. (2011). The interrelationship of personal variables, website characteristics and trust in online travel portals. *Tourism Recreation Research*, 36(1), 57-68.
- Garbarino, E., & Strahilevitz, M. (2004). Gender differences in the perceived risk of buying online and the effects of receiving a site recommendation. *Journal of Business Research*, 57(7), 768-775.
- Gaur, S. M., & Sidhuria, M. V. (2019). Shoppers' Motivation and Preference towards Online Shopping in the rural areas of Surat and Tapi Districts. *GH Patel Postgraduate Institute of Business Management*, 10(2), 32-44.
- Girardi, P., & Chiagouris, L. (2018). The digital marketplace: Early adopters have changed. *Journal of Marketing Development and Competitiveness*, 12(1), 84-95.
- Glanz, K., Rimer, B.K. & Viswanath, K. (2015). *Health behaviour: Theory, research, and practice* (1st ed). New York: John Wiley & Sons.

- Gong, W., Stump, R. L., & Maddox, L. M. (2013). Factors influencing consumers' online shopping in China. *Journal of Asia Business Studies*, 4(1), 101-113.
- Goundar, S. (2012). *Research Methodology and Research Methods*. Berlin: Research Gate Publications.
- Ha, S., & Stoel, L. (2012). Online apparel retailing: roles of e-shopping quality and experiential e-shopping motives. *Journal of Service Management*, 5(3), 221-235.
- Han, H., Kim, W., & Jeong, C. (2016). Workplace fun for better team performance: Focus on frontline hotel employees. *International Journal of Contemporary Hospitality Management*, 3(2), 88-106.
- Hasan, B. (2010). Exploring gender differences in online shopping attitude. *Computers in Human Behaviour*, 26(4), 597-601.
- Head, K. J., & Noar, S. M. (2014). Facilitating progress in health behaviour theory development and modification: The reasoned action approach as a case study. *Health Psychology Review*, 8(1), 34-52.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18(3), 66-67.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.
- Hernández, B., Jiménez, J., & Martín, M. J. (2011). Age, gender and income: do they really moderate online shopping behaviour? *Online information review*.
- Herter, M. M., dos Santos, C. P., & Pinto, D. C. (2014). "Man, I shop like a woman!" The effects of gender and emotions on consumer shopping behaviour outcomes. *International Journal of Retail & Distribution Management*, 16(4), 587-601.
- Hlela, S. (2019). *The impact of brand equity on consumer buying behaviour among bottom of the pyramid consumers in South Africa: A case study of Parmalat yoghurt*. Master's Thesis. Cape Town: University of Cape Town. <http://hdl.handle.net/11427/31580>
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of interactive marketing*, 28(2), 149-165.
- Hong, I. B. (2015). Understanding the consumer's online merchant selection process: The roles of product involvement, perceived risk, and trust expectation. *International Journal of Information Management*, 35(3), 322-336.
- Hox, J. J., & Dillman, D. A. (2008). Mixed mode surveys: when and why. Edith D. de Leeuw, Jon J. Hox y Don A. Dillman (eds.), *International Handbook of Survey Methodology*. Nueva York: Lawrence Erlbaum Associates y Asociación Europea de Metodología.

- Hsieh, M. T., & Tsao, W. C. (2014). Reducing perceived online shopping risk to enhance loyalty: a website quality perspective. *Journal of Risk Research*, 17(2), 241-261.
- Hsu, C. L., Lin, J. C. C., & Chiang, H. S. (2013). The effects of blogger recommendations on customers' online shopping intentions. *Internet Research*, 5(2), 70-89.
- Hunsaker, A., & Hargittai, E. (2018). A review of Internet use among older adults. *New Media & Society*, 20(10), 3937-3954.
- Jadhav, V., & Khanna, M. (2016). Factors influencing online buying behaviour of college students: A qualitative analysis. *The Qualitative Report*, 21(1), 1-12.
- Javadi, M. H. M., Dolatabadi, H. R., Nourbakhsh, M., Poursaeedi, A., & Asadollahi, A. R. (2012). An analysis of factors affecting on online shopping behaviour of consumers. *International Journal of Marketing Studies*, 4(5), 81-95.
- Jayaprakash, K., & Pavithra, A. (2017). Rural customer satisfaction towards online shopping in Pollachi taluka. *International Journal of Interdisciplinary Research in Arts and Humanities (IJIRAH)*, 2(1), 67-80.
- Jin, L. Y., Osman, A., Manaf, A. H. A., & Abdullah, M. S. (2015). The mediating effect of consumers' purchase intention: A perspective of online shopping behaviour among generation Y. *Journal of Marketing and Consumer Research*, 18(1), 101-112.
- Johnston, M. 2014. *Secondary data analysis: A method of which the time has come*. Alabama: University of Alabama.
- Jusoh, Z. M., & Ling, G. H. (2012). Factors influencing consumers' attitude towards e-commerce purchases through online shopping. *International Journal of Humanities and Social Science*, 2(4), 223-230.
- Kaliyadan, F., & Kulkarni, V. (2019). Types of variables, descriptive statistics, and sample size. *Indian Dermatology Online Journal*, 10(1), 82-90.
- Kankam, P. K. (2019). The use of paradigms in information research. *Library & Information Science Research*, 41(2), 85-92.
- Katherine Spradley, M., & Jantz, R. L. (2016). Ancestry estimation in forensic anthropology: geometric morphometric versus standard and nonstandard interlandmark distances. *Journal of Forensic Sciences*, 61(4), 892-897.
- Kaur, S., Lal, A. K., & Bedi, S. S. (2017). Do vendor cues influence purchase intention of online shoppers? An empirical study using SOR framework. *Journal of Internet Commerce*, 16(4), 343-363.
- Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behaviour in predicting entrepreneurial intentions and actions. *Entrepreneurship theory and practice*, 39(3), 655-674.
- Kemp, S. E., Ng, M., Hollowood, T., & Hort, J. (2018). Introduction to descriptive analysis. *Descriptive analysis in sensory evaluation*, 4(1), 143-150.

- Khan, A., & Chavan, C. R. (2015). Factors affecting online shoppers' behaviour for electronic goods purchasing in Mumbai: An empirical study. *International Journal in Management and Social Science*, 3(3), 467-476.
- Khan, S. A., Liang, Y., & Shahzad, S. (2015). An empirical study of perceived factors affecting customer satisfaction to re-purchase intention in online stores in China. *Journal of Service Science and Management*, 8(03), 291-299.
- Kim, J., & Park, J. (2005). A consumer shopping channel extension model: attitude shift toward the online store. *Journal of Fashion Marketing and Management: An International Journal*, 9(2), 59-66.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, 6(5), 26-41.
- Kooti, F., Lerman, K., Aiello, L. M., Grbovic, M., Djuric, N., & Radosavljevic, V. (2016, February). Portrait of an online shopper: Understanding and predicting consumer behaviour. In *Proceedings of the ninth ACM international conference on web search and data mining*, 10(1), 205-214).
- Kothari, C. (2017). Research methodology methods and techniques by CR Kothari. *Published by New Age International*, 4(2), 91-101.
- Kotler, P., & Keller, K. (2011). *Marketing management* (14th ed.). New York: Prentice Hall.
- Krishen, A. S., Raschke, R. L., Close, A. G., & Kachroo, P. (2017). A power-responsibility equilibrium framework for fairness: Understanding consumers' implicit privacy concerns for location-based services. *Journal of Business Research*, 7(3), 20-29.
- Kucukusta, D., Law, R., Besbes, A., & Legohérel, P. (2015). Re-examining perceived usefulness and ease of use in online booking: The case of Hong Kong online users. *International Journal of Contemporary Hospitality Management*, 2(1), 32-45.
- Kusumah, R. (2015). Analyse the effect of trust, price, quality and perceived risk toward consumer purchase behaviour in online shops. *Jurnal Berkala Ilmiah Efisiensi*, 15(5), 166-172.
- Lai, P. C. (2017). The literature review of technology adoption models and theories for the novelty technology. *JISTEM-Journal of Information Systems and Technology Management*, 14(2), 21-38.
- LaRose, R., & Rifon, N. J. (2007). Promoting i-safety: effects of privacy warnings and privacy seals on risk assessment and online privacy behaviour. *Journal of Consumer Affairs*, 41(1), 127-149.
- Lautiainen, T. (2015). Factors affecting consumers' buying decision in the selection of a coffee brand. *Journal of Information Management*, 12(4), 213-222.
- Le, T. D., & Nguyen, B. T. H. (2014). Attitudes toward mobile advertising: A study of mobile web display and mobile app display advertising. *Asian Academy of Management Journal*, 19(2), 87-94.

- Lian, J. W., & Yen, D. C. (2014). Online shopping drivers and barriers for older adults: Age and gender differences. *Computers in Human Behaviour*, 37(7), 133-143.
- Liang, L., Zhou, D., Yuan, C., Shao, A., & Bian, Y. (2016). Gender differences in the relationship between internet addiction and depression: A cross-lagged study in Chinese adolescents. *Computers in Human Behaviour*, 63(10), 463-470.
- Liao, C. H., and Hsieh, I. Y. (2013). Determinants of consumer's willingness to purchase gray-market smart phones. *Journal of Business Ethics*, 114(3), 409-424.
- Lim, P. L., & Yazdanifard, R. (2014). Does gender play a role in online consumer behaviour? *Global Journal of Management and Business Research*, 5(2), 27-39.
- Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors influencing online shopping behaviour: the mediating role of purchase intention. *Procedia Economics and Finance*, 35(11), 401-410.
- Lwin, M. O., Wirtz, J., & Stanaland, A. J. (2016). The privacy dyad: antecedents of promotion-and prevention-focused online privacy behaviours and the mediating role of trust and privacy concern. *Internet Research*, 4(2), 123-142.
- Mansell, R. (2017). Are we losing control? *Intermedia*, 45(3), 4-7.
- Manzoor, A. (2020). Designs of mixed method research. In *Cognitive Analytics: Concepts, Methodologies, Tools, and Applications* (95-121). IGI Global.
- March, C., Smyth, I., & Mukhopadhyay, M. (2011). *UNESCOs Gender Mainstreaming Implementation Framework: A Guide to Gender-Analysis Framework*. New York: UNESCO.
- Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. *European Journal of Business and Management*, 5(6), 76-87.
- Mathaba, R., & Mkhize, N. (2018). Exploring the Relationships between Antecedents of Online Purchasing Behaviour. *Journal of Information and Management Dynamics*, 4(2), 184-196.
- Mathew, P. M. (2016). Attitude segmentation of Indian online buyers. *Journal of Enterprise Information Management*, 35(11), 401-410.
- McClure, C., & Seock, Y. K. (2020). The role of involvement: Investigating the effect of brand's social media pages on consumer purchase intention. *Journal of retailing and consumer services*, 53(17), 101975.
- McLean, G., Osei-Frimpong, K., Wilson, A., & Pitardi, V. (2020). How live chat assistants drive travel consumers' attitudes, trust and purchase intentions: the role of human touch. *International Journal of Contemporary Hospitality Management*, 23(8), 322-331.
- McMillan, S. J. (2002). Exploring models of interactivity from multiple research traditions: Users, documents, and systems. *Handbook of New Media*, 4(2), 205-229.

- Miltgen, C. L., & Smith, H. J. (2015). Exploring information privacy regulation, risks, trust, and behaviour. *Information & Management*, 52(6), 741-759.
- Mostafa, R. H., & Elseidi, R. I. (2018). Factors affecting consumers' willingness to buy private label brands (PLBs): Applied study on hypermarkets. *Spanish Journal of Marketing-ESIC*, 2(1), 48-59.
- Mou, J., Shin, D. H., & Cohen, J. (2017). Understanding trust and perceived usefulness in the consumer acceptance of an e-service: a longitudinal investigation. *Behaviour & Information Technology*, 36(2), 125-139.
- Mousavizadeh, M., Kim, D. J., & Chen, R. (2016). Effects of assurance mechanisms and consumer concerns on online purchase decisions: An empirical study. *Decision Support Systems*, 9(2), 79-90.
- Mwangi, M., & Kariuki, S. (2015). Factors determining adoption of new agricultural technology by smallholder farmers in developing countries. *Journal of Economics and sustainable development*, 6(5), 118-228.
- Nagar, K., & Gandotra, P. (2016). Exploring choice overload, internet shopping anxiety, variety seeking and online shopping adoption relationship: Evidence from online fashion stores. *Global Business Review*, 17(4), 851-869.
- Neelankavil, J. P. (2015). Primary data collection: Exploratory research. In *International Business Research* (pp. 122-145). Routledge.
- Neuman, W. (2014). *Social Research Methods: Qualitative and Quantitative Approaches* (7th ed.). Essex: Pearson Education Limited.
- Nisar, T. M., & Prabhakar, G. (2017). What factors determine e-satisfaction and consumer spending in e-commerce retailing? *Journal of retailing and consumer services*, 3(9), 135-144.
- Noel, H. (2009). *Basics marketing 01: Consumer behaviour* (Vol. 1). London: Ava Publishing.
- Ofori, K. S., Boateng, H., Okoe, A. F., & Gvozdanovic, I. (2017). Examining customers' continuance intentions towards internet banking usage. *Marketing Intelligence & Planning*, 14(7), 388-399.
- Ozkara, B. Y., & Bagozzi, R. (2021). The use of event related potentials brain methods in the study of conscious and unconscious consumer decision making processes. *Journal of Retailing and Consumer Services*, 58(17), 102202.
- Pandey, S., & Chawla, D. (2014). E-lifestyles of Indian online shoppers: A scale validation. *Journal of Retailing and Consumer Services*, 21(6), 1068-1074.
- Pandey, S., & Chawla, D. (2018). Online customer experience (OCE) in clothing e-retail: exploring OCE dimensions and their impact on satisfaction and loyalty—does gender matter? *International Journal of Retail and Distribution Management*, 6(2), 17-26.
- Pandy, P. (2015). *Research methodology: tools and techniques*. Romania: Bridge Centre.

- Pappas, I. O., Pateli, A. G., Giannakos, M. N., & Chrissikopoulos, V. (2014). Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. *International Journal of Retail and Distribution Management*, 7(3), 147-155.
- Pappas, I., Kourouthanassis, P., Mikalef, P., & Giannakos, M. (2018). Combining system success factors with trust to explain e-government adoption using fsQCA. *Journal of Information Technology*, 2(1), 103-112.
- Park, S., & Tussyadiah, I. P. (2017). Multidimensional facets of perceived risk in mobile travel booking. *Journal of Travel Research*, 56(7), 854-867.
- Parks, S. (2008). 7 Reasons why people shop online. *Articlesbase. com*, available at: [www. articlesbase. com/home-business-articles/7-reasons-why-people-shop-online-554620. html](http://www.articlesbase.com/home-business-articles/7-reasons-why-people-shop-online-554620.html) (accessed November 22, 2021).
- Pascual-Miguel, F. J., Agudo-Peregrina, Á. F., & Chaparro-Peláez, J. (2015). Influences of gender and product type on online purchasing. *Journal of Business Research*, 68(7), 1550-1556.
- Patten, M. (2016). *Questionnaire research: A practical guide*. Cambridge: Routledge.
- Payne, E. M., Peltier, J. W., & Barger, V. A. (2017). Omni-channel marketing, integrated marketing communications and consumer engagement: A research agenda. *Journal of Research in Interactive Marketing*, 7(2), 74-82.
- Petrescu, M. and Krishen, A.S. (2018). Analysing the analytics: data privacy concerns. *Journal of Marketing Analytics*, 6(2), 41-43.
- Phelps, J., Nowak, G., & Ferrell, E. (2000). Privacy concerns and consumer willingness to provide personal information. *Journal of public policy & marketing*, 19(1), 27-41.
- Phonthanakitithaworn, C., Sellitto, C., & Fong, M. W. L. (2015). User intentions to adopt mobile payment services: A study of early adopters in Thailand. *Journal of Internet Banking and Commerce*, 20(1):18-20.
- Prashar, S., Sai Vijay, T., & Parsad, C. (2017). Effects of online shopping values and website cues on purchase behaviour: A study using S–O–R framework. *Vikalpa*, 42(1), 1-18.
- Pratap, A. (2017). *Effect of demographic factors on consumer behaviour: age, sex, income and education*. <https://notesmatic.com/effect-of-demographic-factors-on-consumer-behavior-age-sex-income-and-education/> (Retrieved on May, 24, 2021).
- Pratminingsih, S. A., Lipuringtyas, C., & Rimenta, T. (2013). Factors influencing customer loyalty toward online shopping. *International Journal of Trade, Economics and Finance*, 4(3), 104-110.
- Prawira, N. A., & Sihombing, S. O., (2021). Antecedents of online impulse buying behaviour: An empirical study in Indonesia. *The Journal of Asian Finance, Economics, and Business*, 8(2), 533-543.

- Radojka, K., & Filipović, Z. (2017). Gender differences and consumer behaviour of millennials. *Acta Economica Et Turistica*, 3(1), 5-13.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Rahi, S., & Ghani, M. A. (2019). Integration of expectation confirmation theory and self-determination theory in internet banking continuance intention. *Journal of Science and Technology Policy Management*, 8(2), 96-105.
- Rahi, S., & Ghani, M. A. (2019). Integration of expectation confirmation theory and self-determination theory in internet banking continuance intention. *Journal of Science and Technology Policy Management*, 3(1), 32-40.
- Rahman, M. S. (2020). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: A literature review. *Journal of Education and Learning*, 12(4), 212-220.
- Rahman, S. (2016). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: a literature review. *Journal of Education and Learning*, 6(1), 102-112.
- Rajani, V. T., & Nakhat, P. (2019). Consumer Behaviour in Online Shopping: What they think before they buy. *Journal of Psychosocial Research*, 14(2), 156-167.
- Ramya, N., & Ali, S. M. (2016). Factors affecting consumer buying behaviour. *International journal of applied research*, 2(10), 76-80.
- Rana, S. S., & Islam, A. (2019). An empirical study on the factors influencing online shopping behaviour. *The Business & Management Review*, 10(5), 206-217.
- Rao, M. B., Hymavathi, C. L., & Rao, M. M. (2018). Factors affecting female consumer's online buying behaviour. *Academy of Marketing Studies Journal*, 22(2), 1-20.
- Ray, A., Bala, P. K., & Dasgupta, S. A. (2019). Role of authenticity and perceived benefits of online courses on technology based career choice in India: A modified technology adoption model based on career theory. *International Journal of Information Management*, 4(7), 140-151.
- Reddy, N. H., & Srinivas, A. (2015). Impact of Demographic Factors of Indian Consumers on Online Shopping Behaviour. *International Journal of Accounting and Business Management*, 3(1), 310-317.
- Reimers, V., & Clulow, V. (2014). Spatial convenience: bridging the gap between shopping malls and shopping strips. *International Journal of Retail & Distribution Management*, 10(4), 221-231.
- Resnik, D. 2015. What is ethics in research & Why is it Important? <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>

- Richa, D. (2012). Impact of demographic factors of consumers on online shopping behaviour: A study of consumers in India. *International journal of engineering and management sciences*, 3(1), 43-52.
- Riquelme, I. P., & Román, S. (2014). Is the influence of privacy and security on online trust the same for all type of consumers? *Journal of Electronic Markets*, 24(2), 135-149.
- Saad, A. T. (2020). Factors affecting online food delivery service in Bangladesh: an empirical study. *British Food Journal*, 3(1), 29-37.
- Salim, M., Alfansi, L., Dart, E., Anggarawati, S., & Amin, A. (2019). Indonesian millennials online shopping behaviour. *International Review of Management and Marketing*, 9(3), 41-50.
- Sander, T & Lee, T. (2014). *SmartPLS for the human resources field to evaluate a model*. Latvia: University of Latvia.
- Sarkar, R., & Das, S. (2016). The role of gender in online shopping. *International Journal of Scientific Development and Research*, 1(5), 866-867.
- Sarkar, R., & Das, S. (2017). Online shopping vs. Offline shopping: A comparative study. *International Journal of Scientific Research in Science and Technology*, 3(1), 83-89.
- Sauer, J. (2015). Convenience versus Security: Challenges of a Wireless World. *Journal of Information Technology*, 4(1), 114-123.
- Sebastianelli, R., Tamimi, N., & Rajan, M. (2008). Perceived quality of online shopping: Does gender make a difference? *Journal of Internet Commerce*, 7(4), 445-469.
- Seckler, M., Heinz, S., Forde, S., Tuch, A. N., & Opwis, K. (2015). Trust and distrust on the web: User experiences and website characteristics. *Computers in human behaviour*, 4(1), 39-50.
- Setia, M. S. (2016). Methodology series module 5: Sampling strategies. *Indian journal of dermatology*, 61(5), 505-511.
- Shanthi, R., & Desti, K. (2015). Consumers' perception on online shopping. *Journal of Marketing and Consumer Research*, 1(3), 14-21.
- Sharif, A., & Raza, S. A. (2017). The influence of hedonic motivation, self-efficacy, trust and habit on adoption of internet banking: a case of developing country. *International Journal of Electronic Customer Relationship Management*, 11(1), 1-22.
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International journal of applied research*, 3(7), 749-752.
- Sigar, J. F. (2016). The Influence of Perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment to Intention to Use Electronic Money in Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 4(2), 70-79.

- Simanjuntak, B., & Limbong, T. (2018). Using Google form for student worksheet as learning media. *International Journal of Engineering & Technology*, 7(3.4), 321-324.
- Smith, C. (2015). *Gen X and baby boomers present a huge opportunity for online retailers*. New York: Business Insider.
- Solove, D. J. (2021). The myth of the privacy paradox. *George Washington Law Review*, 89(1), 1-51.
- Srinivasan, R. (2015). Exploring the impact of social norms and online shopping anxiety in the adoption of online apparel shopping by Indian consumers. *Journal of Internet Commerce*, 14(2), 177-199.
- Stanley, L. M., & Edwards, M. C. (2016). Reliability and model fit. *Educational and Psychological Measurement*, 76(6), 976-985.
- Statista. (2019). *Number of digital buyers worldwide from 2014 to 2021 (in billions)*. <https://www.statista.com/statistics/251666/number-of-digital-buyers-worldwide/> (Accessed: 21 April 2021).
- Statista. (2019). Statista. *Number of online shoppers in Africa from 2017 to 2019, with a forecast from 2020 to 2024 (in millions)*. <https://www.statista.com/statistics/1190579/number-of-online-shoppers-in-africa/> (Accessed: 22 April 2021).
- StatsSA. (2019) SA Population reaches 58.8 million. <http://www.statssa.gov.za/?p=12362> (Accessed: 14 October 2021).
- Steinhoff, L., Arli, D., Weaven, S., & Kozlenkova, I. V. (2019). Online relationship marketing. *Journal of the Academy of Marketing Science*, 47(3), 369-393.
- Sun, H., & Zhang, P. (2006). The role of moderating factors in user technology acceptance. *International Journal of Human-computer Studies*, 64(2), 53-78.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016)*.
- Takaya, R. (2019). Antecedents Analysis of Purchase Intention. *Business and Entrepreneurial Review*, 16(1), 1-16.
- Tan, G. W. H., & Ooi, K. B. (2018). Gender and age: Do they really moderate mobile tourism shopping behaviour? *Telematics and Informatics Journal*, 35(6), 1617-1642.
- Tanadi, T., Samadi, B., & Gharleghi, B. (2015). The impact of perceived risks and perceived benefits to improve an online intention among generation-y in Malaysia. *Asian Social Science*, 11(26), 226-233.
- Tandon, U., Kiran, R., & Sah, A. (2017). Analysing customer satisfaction: Users perspective towards online shopping. *Nankai Business Review International*, 8(3), 266-288.

- Tanner, J., & Raymond, M. A. (2012). *Principles of Marketing*. New York: Flat world Press.
- Thaichon, P. (2017). Consumer socialization process: The role of age in children's online shopping behaviour. *Journal of Retailing and Consumer Services*, 12(34), 38-47.
- Thamthada, W., & Punnakitikashem, P. (2015). Exploring Thai Men Shopping Behaviour for Clothing and Fashion Products. *Social Science Asia*, 1(3), 46-59.
- Thomas, L. (2020). An introduction to simple random sampling. Retrieved December, 4, 2020.
- Treiman, D. J. (2014). *Quantitative data analysis: Doing social research to test ideas*. New Jersey: John Wiley & Sons.
- Tucker, A. (2018). *A Quantitative Study of the Relationship between Pre-Service and In-Service Teacher Violence Training to Reduce Stress and Attrition* (Doctoral dissertation, Northcentral University).
- Turow, J., Hennessy, M., & Draper, N. (2015). The trade-off fallacy: How marketers are misrepresenting American consumers and opening them up to exploitation. Available at SSRN 2820060.
- Usman, M. U., & Kumar, P. (2021). Factors influencing consumer intention to shop online in Nigeria: A conceptual study. *Vision*, 25(4), 407-414.
- van Harreveld, F., Nohlen, H. U., & Schneider, I. K. (2015). The ABC of ambivalence: Affective, behavioural, and cognitive consequences of attitudinal conflict. In *Advances in experimental social psychology*, 52(7), 285-324.
- Vanhala, M. (2019). Trust as an organisational knowledge sharing enabler—validation of the impersonal trust scale. *VINE Journal of Information and Knowledge Management Systems*, 4(3), 58-67.
- Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A longitudinal field investigation of gender differences in individual technology adoption decision-making processes. *Organisational behaviour and human decision processes*, 83(1), 33-60.
- Vogt, C., & Alldredge, K. (2012). Understanding the Role of the Internet in the Lives of Consumers. *Information Research Journal*, 3(1), 24-33.
- Wagner, G., Schramm-Klein, H., Steinmann, S., & Mau, G. (2017). Understanding the New Online Customer Journey: The Multichannel E-Commerce Framework—An Abstract. In *Marketing at the Confluence between Entertainment and Analytics* (pp. 109-110). New York: Springer, Cham.
- Wang, W., & Kim, S. (2019). Lady first? The gender difference in the influence of service quality on online consumer behaviour. *Nankai Business Review International*, 5(2), 43-51.

- Wang, Z. and Yu, Q. (2015). Privacy trust crisis of personal data in China in the era of big data: the survey and countermeasures. *Computer Law and Security Review*, 31(6), 782-792.
- West, S. M. (2019). Data capitalism: Redefining the logics of surveillance and privacy. *Journal of Business and Society*, 58(1), 20-41.
- Widaman, K. F., Little, T. D., Preacher, K. J., & Sawalani, G. M. (2011). On creating and using short forms of scales in secondary research. In K. H. Trzesniewski, M. B. Donnellan, & R. E. Lucas (Eds.), *Secondary data analysis: An introduction for psychologists* (pp. 39–61). Washington, DC: American Psychological Association. <https://doi.org/10.1037/12350-003>
- Wu, C. Y., Lee, M. B., Liao, S. C., & Chang, L. R. (2015). Risk factors of internet addiction among internet users: An online questionnaire survey. *Information Research Journal*, 10(10), e0137506.
- Wu, L., Chiu, M. L., & Chen, K. W. (2020). Defining the determinants of online impulse buying through a shopping process of integrating perceived risk, expectation-confirmation model, and flow theory issues. *International Journal of Information Management*, 52(21), 102099.
- Yang, K. C., Huang, C. H., Yang, C., & Yang, S. Y. (2017). Consumer attitudes toward online video advertisement: YouTube as a platform. *Kybernetes*, 46(5), 840-853.
- Yeo, V. C. S., Goh, S. K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioural intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer services*, 35(1), 150-162.
- Yildirim, K., Cagatay, K., & Hidayetoğlu, M. L. (2015). The effect of age, gender and education level on customer evaluations of retail furniture store atmospheric attributes. *International Journal of Retail and Distribution Management*, 12(2), 341-350.
- Yoon, H. S., & Occeña, L. G. (2015). Influencing factors of trust in consumer-to-consumer electronic commerce with gender and age. *International journal of information management*, 35(3), 352-363.
- Yoon, H. S., & Occeña, L. G. (2015). Influencing factors of trust in consumer-to-consumer electronic commerce with gender and age. *International journal of information management*, 35(3), 352-363.
- Zeeman, R. (2013). *Hedonic and utilitarian shopping motivations among South African black generation Y students*. Doctoral Thesis. Potchefstroom: North West University.
- Zhou, D., Peng, L., & Dong, Y. (2020). The impact of Internet usage on gender role attitudes. *Applied Economics Letters*, 27(2), 86-92.
- Zhu, R., Srivastava, A., & Sutanto, J. (2020). Privacy-deprived e-commerce: the efficacy of consumer privacy policies on China's e-commerce websites from a legal perspective. *Information Technology and People*, 6(2), 52-61.

APPENDICES

Appendix A: Actual Research Instrument

ONLINE QUESTIONNAIRE

This research is being conducted by Khanyisa Sikhalela, a Masters of Management in Strategic Marketing Student at Wits Business School.

The purpose of the study is to examine the Antecedents of online shopping behaviour: the moderating role of gender in Gauteng.

I, Khanyisa, therefore, request your assistance to complete the questionnaire below. The research is purely for academic purposes, and the information obtained will be kept confidential. No information will be given or sold to any third party.

This questionnaire will take approximately 15 minutes to complete.

If you engage in this study, you will incur no personal fees and will not gain any direct benefits, but there will be no downsides or penalties if you do not choose to participate or if you withdraw from the study.

This questionnaire will be anonymous and confidential. No identifying information will be asked of you, and all information will not be shared with anyone. The completion of this questionnaire will imply that you have given consent.

This study was approved by the Wits Business School Ethics Committee. Should you have any queries relating to the research, please contact me at: 1492760@students.wits.ac.za, alternatively you may contact my supervisor of this research paper Dr Fanny Saruchera. (fanny.saruchera@wits.ac.za).

SCREENING INFORMATION

This section requires screening information about the research respondents. Please indicate by marking X next to the relevant item.

A1. Do you reside In Gauteng?

Yes	1
No	2

A2. Are you 18 years and older?

Yes	1
No	2

A3. Do you or have you done online shopping?

Yes	1
No	2

SECTION A: DEMOGRAPHIC INFORMATION

This section requires general information about the research respondents. Please indicate by marking X next to the relevant item.

B1. Please indicate your sex

Male	1
Female	2
Other	3
Prefer not to say	4

B2. Please indicate your age group

18 – 29	1
30 – 39	2
40 -49	3
50 -59	4
60+	5

B4. Do you get an income?

Yes	1
No	2

B5. Please indicate your monthly income

less than R5000	1
R5000 – R10000	2
R10001 – R20000	3
R20001 – R30000	4
R30001- R40000	5
R40001+	6

SECTION B

Please indicate the extent to which you agree or disagree with the statement by ticking the corresponding number in the 7 point scale below:

1	2	3	4	5	6	7
Strongly Disagree	7 Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

Online Shopping

Item	Question	1	2	3	4	5	6	7
OS1	I prefer making a purchase from the internet							
OS2	I prefer online shopping over other home shopping services							
OS3	I consider the internet to be my first choice when I need products or services of this type							
OS4	I like to browse through online shopping websites even when I don't plan to buy anything							
OS5	I search various online shopping websites just to find out more about the latest styles							
OS6	I usually read online advertisements just out of curiosity							
OS7	I am confident that buying online is a good decision							
	I like to get as much information as I can before I purchase online							

Online Consumer Attitude

Please indicate to what extent you agree or disagree with each statement

OCA1	The look and feel of the webstore motivates me to purchase	1	2	3	4	5	6	7
OCA2	When a website has more information, it motivates me to purchase	1	2	3	4	5	6	7
OCA3	When a website is easy to manoeuvre, it motivates me to purchase.	1	2	3	4	5	6	7
OCA4	I think products are cheaper online than at the store.	1	2	3	4	5	6	7
OCA5	Price is important to me when making online purchases.	1	2	3	4	5	6	7
OCA6	I think shopping online is safe in general	1	2	3	4	5	6	7
OCA7	I am more likely to purchase from a website if I think the website is safe.	1	2	3	4	5	6	7
OCA8	Products that I purchase online are of good quality	1	2	3	4	5	6	7

Trust

Please indicate to what extent you agree or disagree with each statement

T1	Privacy policies are important to me when it comes to online shopping.	1	2	3	4	5	6	7
T2	I trust privacy policies on online stores	1	2	3	4	5	6	7
T3	Privacy concerns prevent me from buying products online	1	2	3	4	5	6	7
T4	I am confident that my personal information is kept confidential when buying products online?	1	2	3	4	5	6	7
T6	I generally trust online stores	1	2	3	4	5	6	7
T7	Security is very important to me when it comes to online stores	1	2	3	4	5	6	7
T8	I trust that my personal information is safe and will not be hacked when placing orders online.	1	2	3	4	5	6	7
T9	I trust that my payment/ banking information will not be secure and could get to the wrong people.	1	2	3	4	5	6	7
T10	Security concerns from buying products online	1	2	3	4	5	6	7

Perceived Risk

Please indicate to what extent you agree or disagree with each statement

PR1	I find it risky to buy products online.	1	2	3	4	5	6	7
PR2	I fear landing on fraudulent webstores when shopping online.	1	2	3	4	5	6	7
PR3	I fear that the goods I order online will not get delivered.	1	2	3	4	5	6	7
PR4	I fear that the good that I order will not be the same quality as the ones you purchase at a store	1	2	3	4	5	6	7
PR5	I am comfortable purchasing online from a company I do not know	1	2	3	4	5	6	7
PR6	I will most likely purchase from a website if someone I know (friend or family) has recommended it.	1	2	3	4	5	6	7
PR7	Other people's experiences on online shopping on a webstore is important in influencing my decision to purchase on that webstore.	1	2	3	4	5	6	7

Perceived Benefits

Please indicate to what extent you agree or disagree with each statement

PB1	I am confident that I will receive the same quality of the products that I order online versus the ones in a physical store	1	2	3	4	5	6	7
PB2	The products I received from purchasing online is what I expected	1	2	3	4	5	6	7

PB3	I am satisfied with the products that I bought online.	1	2	3	4	5	6	7
PB4	The products offered by the webstores is a good value for the money.	1	2	3	4	5	6	7
PB5		1	2	3	4	5	6	7
PB6	I find that shopping online to be easy	1	2	3	4	5	6	7
PB7	I find online shopping fun and enjoyable.	1	2	3	4	5	6	7
PB8	Placing an order online takes less time	1	2	3	4	5	6	7
PB9	I have access to range of products online	1	2	3	4	5	6	7
PB10	It is easy to access information on products I need online	1	2	3	4	5	6	7
PB11	It is easy to get support/ assistance online when I need it	1	2	3	4	5	6	7
PB12	The products that I received from the online purchase was on time.							

THE END - Thank you, your submission has been received.

Appendix B: Research title approval letter

UNIVERSITY OF THE
WITWATERSRAND
JOHANNESBURG



Private Bag 3 Wits, 2050

Tel: 02711 7173582

Reference: Ms Jennifer Mgolodela
E-mail: jennifer.mgolodela@wits.ac.za

11 December 2020
Person No: 1492760
PAG

Ms K Sikhalela
12 Thornbrook Place
Thornbrook Estate
Theresa Park
0001
South Africa

Dear Ms Khanyisa Sikhalela

Master of Management: Approval of Title

We have pleasure in advising that your proposal entitled *Antecedents of online shopping behaviour: the moderating role of gender in Gauteng* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Bosman'.

Mrs Marike Bosman
Faculty Registrar
Faculty of Commerce, Law and Management



Appendix C: Ethics Clearance Certificate

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg



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

Ethics Clearance Certificate

Ethics protocol number: WBS/SM1492760/613

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title	Antecedents of online shopping behaviour: the moderating role of gender in Gauteng.
Investigator / Researcher	Ms Khanyisa Rebecca Sikhalela
Nature of Project	MM (Strategic Marketing)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed anonymity and confidentiality.
Issue Date of Certificate	2021-05-17
Expiry date	Date of submission of the project report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 ☎ +27 82 880 4531 ✉ Anthony.Stacey@wits.ac.za

A handwritten signature in black ink, appearing to read 'A Stacey'.

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.

KRSikhalela

Signature

17/05/2021

Date:

Appendix D: Language editing confirmation

EDITING CONFIRMATION

To whom it may concern:

This memo serves to confirm that the manuscript/research project detailed below has been language-edited and/or proof-read.

Regards,

-IETS-

IET Innocent (Cert. Lang. Ed.)
Language Editor

Manuscript Title:

Antecedents of Online shopping behaviour: the moderating role of
gender in Gauteng

Author:

Khanyisa Sikhalela

Issued on:

25/02/2022

Disclaimer:

The editor/proofreader makes no claim as to the accuracy of the manuscript contents nor the objectives of the author. While all possible efforts have been made to ensure the text as edited is readable and grammatically correct, the author(s) have the option to accept or reject suggestions and trackable changes made to the document before submission.



*** Professional Editors ***

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