Gordon Institute of Business Science
University of Pretoria

The influence of online behavioural targeting on consumers' online shopping experience, satisfaction and subsequent shopping behaviour

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirement for the degree of Master of Business Administration

14 November 2021

Abstract

Online behavioural targeting (OBT) is an advertising strategy widely adopted by marketing practitioners in the online shopping environment. It is a process that monitors and gathers online behavioural data from online users with the primary intent to present them with personalised, targeted advertising derived from their online activities and the data collected. However, the advertising strategy has raised significant concerns amongst consumers, regulators, and governing bodies across the globe, especially because of its methods in obtaining and using consumers' online behavioural data. The advertising strategy can be a "double-edged sword", resulting in both positive and negative outcomes.

The purpose of this research study was to determine the influence of (OBT) on consumers' online shopping experiences, their online satisfaction, and subsequent online shopping behaviour (attending to their purchase intentions having experienced OBT adverts, their acceptance or avoidance of OBT adverts, and their continued use of online shopping in the future). The study acknowledged factors related to the effectiveness of OBT as a phenomenon, namely consumers' knowledge of personalised ads, the perceived benefits of OBT ads, personalisation, privacy concerns and perceived intrusiveness. It aimed to understand online consumers perceptions, attitudes and behaviour regarding OBT advertising tactics and online shopping.

The study adopted a quantitative, deductive approach that implemented highly structured data collection techniques and collected quantifiable data from 229 respondents through an electronic self-administered survey questionnaire. The data collected from respondents were statistically analysed to test the research hypotheses empirically. The findings reveal that respondents' perceptions of OBT advertising tactics significantly influence and predict their online shopping experience, specifically the perceived benefits and personalisation associated with OBT advertising and the perceived intrusiveness of OBT advertising. The findings also reveal that respondents' online shopping experiences significantly influence and predict their online satisfaction. Additionally, the results from the study revealed that online shopping satisfaction significantly influences and predicts OBT ad purchase intentions and acceptance, OBT ad avoidance, and continuation with online shopping.

Overall, the study revealed that respondents' perception of OBT advertising significantly influences their online shopping experiences. Respondents' satisfaction (positive or negative) with their online shopping experiences influences their subsequent shopping

behaviour accordingly, leading to either favourable or unfavourable outcomes. Therefore, it is imperative for organisations, marketers, and advertisers that utilise OBT advertising to ensure that the tactics enhance consumers' online shopping experiences, leaving them satisfied and subsequently leading to favourable shopping experiences.

Keywords: Online Behavioural Targeting, Personalised Advertising, Privacy Concerns, Online Shopping, Online Shopping Satisfaction, Online Shopping Behaviour

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Sashen Moodley

14 November 2021

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Chapter 1: Introduction to Research Problem

1.1. Introduction

Online behavioural targeting (OBT), also referred to as online behavioural advertising (OBA), is an advertising strategy that has been widely adopted and utilised by many organisations, marketers and advertisers in the online shopping environment. It is a process that monitors and gathers online behavioural data from online users with the primary intent to present them with personalised, targeted advertising derived from their online activities and the data collected (Boerman et al., 2017). The practice can be advantageous compared to traditional marketing tactics because of its ability to target consumers directly with relevant, personalised offerings based on their individual preferences and needs in real-time (Aguirre et al., 2015; Boerman et al., 2017; Van Doorn & Hoekstra, 2013), often across various online devices, platforms, web applications, and websites.

The online information is gathered, tracked, and analysed from consumers' search history, website visits, commodities viewed or purchased, and their overall online browsing activity and behaviour (Boerman et al., 2017). Consumers' online data is mostly tracked, collected and analysed without them being aware of it (Aguirre et al., 2015; Boerman et al., 2017; Ham & Nelson, 2016). This information is then shared across various online organisations, platforms, devices, applications and sites to provide online consumers with so-called "targeted" personalised advertising. For example, suppose an online consumer browses to get information about a specific product/service; in that case, when the consumer is browsing online, advertisements of the same or similar products/services or alternative service providers will pop up or appear, broadening the consumer's selection.

Online retailers and advertisers benefit from OBT by engaging consumers with more relevant and personalised content, increasing brand engagement and the likelihood of purchases, and at the same time optimising their marketing initiatives and budgets (Boerman et al., 2017). Consumers benefit from OBT personalised advertising through the ads' relevance, usefulness, convenience and ease of navigation to the products or service, saving them time and money. However, for consumers, the benefits of OBT ads can be perceived to come with a cost or risk associated with providing their personal online behavioural information for targeting purposes, and the advertising tactics can produce adverse outcomes. Research has shown that

consumers consider the effects of OBT ads to be both beneficial and harmful to their online experiences, and they may develop ambivalent attitudes towards the tactic (Ham & Nelson, 2016). Depending on how consumers perceive and understand the tactic, including their assessment of the benefits versus risks associated, they react positively or negatively to OBT ads (Aguirre et al., 2015; Ham & Nelson, 2016).

Consumers' reactance and the favourable or adverse outcomes of the advertising tactics depend on their knowledge of OBT (or lack thereof) and their perceptions of this practice (Boerman et al., 2017). A significant issue for online consumers relates to their privacy concerns, the perceived intrusive nature of the tactics and the use of their personal information, especially considering that OBT often tracks and collects consumers' data without their knowledge (Boerman et al., 2017). This technique has raised significant concerns amongst consumers, regulators and governing bodies, particularly concerning the privacy and the use of consumers' online information (Boerman et al., 2017). A South African study has indicated that related concerns negatively impact consumers' attitudes towards these advertising tactics and affect the effectiveness of OBT ads (Mpinganjira & Maduku, 2019). Furthermore, this apprehension of OBT advertising can influence and heighten consumers' concerns, adversely impacting their online shopping experience.

OBT studies analysing various degrees of ad personalisation (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Tucker, 2014; Van Doorn & Hoekstra, 2013) have found that online consumer characteristics influence how they perceive and react to OBT ads. Consumers can perceive highly personalised advertising as intrusive and invasive, negatively impacting their purchase intent (Van Doorn & Hoekstra, 2013) and reactance to the tactic. Particularly when they have privacy concerns and value trust highly (Mpinganjira & Maduku, 2019).

When experiencing personalised advertising from highly trusted sources, it can enhance the perceived usefulness of the targeted ads, whilst ads from lesser trusted sources can prompt adverse reactions and heighten privacy concerns (Bleier & Eisenbeiss, 2015). OBT advertising tactics have been found to be more effective when consumers' data is collected and used transparently, with their knowledge, compared to when it is done covertly and unknowingly (Aguirre et al., 2015). Eventually, the inherent benefits, concerns and characteristics concerning OBT

advertising influence how the tactic is perceived and can impact the ads' effectiveness, consumers' engagement and purchase intentions, including their online shopping experience and satisfaction (positively or negatively).

1.2. Research Problem

The widespread mass adoption of the internet, globalisation and technological advancements have altered and redesigned the traditional retail landscape. These developments, particularly in the online shopping environment, have enabled consumers to shop or search for commodities online at their convenience, from any location, using an array of electronic devices, with numerous products, services and information at their disposal, saving them time and money in terms of physical product searches (Amaro & Duarte, 2015). These attractive and efficient online shopping characteristics and features have persuaded many consumers to adopt and use online shopping.

In addition, the adoption of online shopping has further accelerated across the world due to the impact of the COVID-19 global pandemic when consumers encountered strict rules and regulations concerning access to physical stores during enforced lockdown periods, with online shopping providing an ideal solution to do shopping. Within a short period of time, consumers opted to start ordering their goods online. Online purchases went beyond movie, theatre and airline tickets to purchases of essential commodities, foods and groceries, pharmaceutical products, clothing, hardware, and a range of diverse products and services. For some consumers, it presented an enormous amount of variety, convenience and an opportunity that they may have been reluctant to pursue before (OECD, 2020). While the long-term effects of the pandemic are still unknown, online shopping is not expected to decline (Deloitte, 2021).

A significant factor for adopting and using online shopping is convenience, and characteristics that provide consumers with convenience can often influence their online shopping experience and satisfaction, including their behavioural intentions (Duarte et al., 2018). In addition, the ability for consumers to easily navigate and search for information, products or services, including the ability to customise the online experience according to their needs and circumstances in the pre-purchase, purchase, and post-purchase stages, can also influence their satisfaction and

repurchase intention (Pham & Ahammad, 2017). However, the perceived risks (Soopramanien, 2011) and trust concerns of online shopping can also impact how consumers experience and engage with the shopping medium and shape their attitudes towards it (Akroush & Al-Debei, 2015).

In the online shopping environment, information and digital technology advancements have also transformed digital marketing and advertising, enabling tactics such as OBT to become more accurate, informative, personalised, cost-effective and widely adopted by marketing practitioners. It has enabled marketers and advertisers to efficiently personalise and target their messages to consumers who are most likely to purchase the products or services advertised in real-time while browsing online (Aiolfi et al., 2021; Moore et al., 2015). Additionally, it has become highly effective and attractive for organisations, marketers and advertisers to utilise because it can personalise and deliver the right content to the right consumer at the right time (Aguirre et al., 2015). OBT strategies allow marketing practitioners to track, gather and analyse consumers online activities and target them with personalised adverting communications by making inferences about their personal preferences and needs.

However, as beneficial as targeted behavioural advertising is to organisations, marketing practitioners and consumers, it also raises significant privacy concerns regarding its techniques and can have adverse outcomes (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Ham, 2017). OBT advertising tactics can therefore be a "double-edged sword" in the online shopping environment. It can enhance consumers' online shopping experiences and satisfaction by offering them relevance, convenience, and easy navigation to products and services online, that are aligned to their personal needs and preferences. However, at the same time, it can heighten their privacy concerns and perceived risks associated with online shopping depending on whether they perceive the personalised ads as intrusive or invasive and whether they are aware of their personal information being tracked and used (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Boerman et al., 2017; Mpinganjira & Maduku, 2019). How consumers experience and engage with online shopping and their attitudes towards it can be influenced by OBT characteristics and how online consumers assess the benefits and risks associated with advertising tactics.

Online shopping has become an integral part for many consumers, transforming how they shop or obtain information for goods or services. As part of online shopping, OBT advertising tactics have also been integrated into the shopping experience and utilised by marketing practitioners to persuade consumers to engage or purchase the advertised products or services. OBT presents users with personalised ads based on their online activity; the personalisation can offer consumers many benefits while at the same time heightening privacy concerns, creating a so-called "personalisation paradox" (Aguirre et al., 2015). Both online shopping and OBT can offer consumers various benefits and advantages; however, it also raises concerns amongst many.

The primary concerns for consumers relate to their privacy and the use of their personal information. These concerns are because the tactic tracks, collects and analyses users' online behavioural data, often without them knowing, to infer their needs and preferences and present them with personalised ads (Aguirre et al., 2015). The advertising tactic and its converted nature have raised considerable concerns amongst organisations, policymakers and consumers relating to privacy intrusion and the misuse of personal information (Boerman et al., 2017). It can make consumers feel that their privacy has been violated in generating the targeted ads and that the ads are intrusive, impacting their purchase intent and click-through (Aguirre et al., 2015).

In addressing these concerns, authorities globally have implemented several privacy regulations, policies and frameworks such as the EU General Data Protection Regulation (GDPR), the South African Protection of Personal Information Act (POPIA), and the OECD privacy framework requiring organisations to be more ethical, transparent and responsible with consumers' data. Its main objective is to protect consumers and empower them with some control over their personal information and its use (Boerman et al., 2017). These efforts typically allow consumers to make more informed decisions about their personal information and its use. However, Ham (2017) indicated that consumers have limited knowledge about OBT tactics and how their data is tracked, gathered or used. Furthermore, it can also be incredibly onerous for consumers to read lengthy privacy statements for all the websites or platforms they use, considering the time required to do so (McDonald & Cranor, 2008). Many, therefore, simply accept the so-called cookies in order to proceed with their shopping or browsing.

In African countries, online shopping is not as established as it is in First-World countries. Apart from infrastructure challenges, consumers' concerns about online shopping have also inhibited it from growing as fast as it has in other parts of the world (KPMG, 2017). Some of the issues that jeopardise people's trust in online shopping are privacy, security, and OBT tactics, as consumers may find themselves bombarded with ads and information relating to their past online behaviour, searches, and activities. This online advertising tactic can make consumers distrust the brands, online sites and platforms utilising the tactic and find their online shopping experience intrusive, wondering to what extent their personal information is being shared and used. These concerns make consumers hesitant to engage with OBT ads, even though it may be highly beneficial in providing tailored, personalised information that can save the user time, effort and money. According to the expectation disconfirmation paradigm, it is imperative to compare consumers' online shopping experience and exposure to OBT against their online shopping expectations to determine their level of online satisfaction (Oliver, 1977, 1980) and subsequent positive attitudes towards the tactic and shopping medium.

1.3. Scope and Context of the Research

The scope of the research study was limited to consumers' perceptions of OBT advertising tactics, specifically their knowledge of the tactic, perceived benefits, perceived personalisation, privacy concerns, perceived intrusiveness, and perceived level of control of their personal information. It focused only on consumers' overall online shopping experiences and online satisfaction, assessing whether these experiences meet or exceed their expectations and whether they are satisfied or dissatisfied with these experiences. In addition, consumers' subsequent online shopping behaviour was limited to online consumers' purchase intentions of OBT adverts, their acceptance or avoidance of OBT adverts, and their continued use of online shopping in the future.

The theoretical perspective used was the Stimulus-Organism-Response (S-O-R) framework (Mehrabian & Russell, 1974), which served as the lens through which the research was structured and analysed, including how the information was interpreted and evaluated. This framework has been widely used to study and explain consumer behaviour, including retail and online shopping research studies. Furthermore, the

study was limited to only South African online consumers, 18 years or older, who have experienced OBT advertising tactics in the preceding six months while shopping or browsing online for products and services.

1.4. Academic Need for the Research

OBT advertising has been widely adopted and implemented by many organisations and marketing practitioners. However, literature and research in the field of OBT remains fragmented and is still in the early stages of adopting a solid holistic theoretical foundation (Boerman et al., 2017; Varnali, 2021). Further research in this field can advance the knowledge, understanding and implications of OBT in digital marketing and consumer behaviour (Boerman et al., 2017; Varnali, 2021), an essential step in defragmenting and developing theoretical literature (Boerman et al., 2017). Some of the theories used in understanding the implications of OBT on consumers' behaviour and their reaction towards this tactic have been the persuasion knowledge model, psychological reactance theory, social contract theory and Stimulus-Organism-Response (S-O-R) framework (Aguirre et al., 2015; Baek & Morimoto, 2012; Bleier & Eisenbeiss, 2015; Ham & Nelson, 2016; Jai et al., 2013; Miyazaki, 2008).

A review of the extant literature, although not exhaustive, did not yield any studies that assessed or measured the influence of OBT on consumers' overall online shopping experience and online satisfaction. Much of the previous research reviewed focused on how OBT directly impacts outcomes such as click-throughs, purchase intentions, ad avoidance, ad acceptance, and brand value (Aguirre et al., 2015; Baek & Morimoto, 2012; Bleier & Eisenbeiss, 2015; Ham, 2017; Lambrecht & Tucker, 2013; Mpinganjira & Maduku, 2019; Schumann et al., 2014; Smit et al., 2014; Summers et al., 2016; Tucker, 2014; Van Doorn & Hoekstra, 2013). Therefore, this research study builds to the existing body of knowledge and understanding of OBT advertising by incorporating these extant theories and elements in assessing how consumers' perceptions of the tactics directly enhance or impede their online shopping experiences in meeting or exceeding their expectations, and subsequently their online satisfaction.

In addition, much of the extant OBT studies in the literature reviewed have been conducted in America and Europe (Aguirre et al., 2015; Baek & Morimoto, 2012;

Bleier & Eisenbeiss, 2015; T. T. Gao et al., 2013; Ham, 2017; Ham & Nelson, 2016; Schumann et al., 2014; Summers et al., 2016; Van Doorn & Hoekstra, 2013). With minimal studies conducted in the African context where online shopping is still in the early wide adoption stage. One study identified in the literature relating to the African context was by researchers Mpinganjira and Maduku (2019), who analysed South African consumers, looking at mobile behavioural advertising and ethical brand value. This study, therefore, contributes to the growing literature on OBT advertising and to understanding the tactic in other contexts, particularly in South Africa, where the broad adoption of online shopping is still in its early stages, and consumers' online behaviours may also differ.

1.5. Business Rationale for the Research

Online shopping, over the years, has seen significant innovation and technological advancements that have impacted both organisations and consumers (V. Kumar & Gupta, 2016). These have facilitated and pioneered the efforts of organisations in their attempts to decipher their customers' needs and behaviours more aptly to create a seamless online experience that will ensure customer satisfaction. In the online environment, organisations need to understand their consumers and manage the factors influencing their shopping experience and its effects, from pre-purchase to post-purchase (Pham & Ahammad, 2017). Doing so, can ensure that consumers' online shopping experiences meet or exceed their expectations, leaving them satisfied. Therefore, it is essential for organisations that utilise OBT tactics to positively engage with consumers rather than irritate and dissuade them from shopping online. Ensuring their online satisfaction can enable organisations to potentially attract new customers, maintain their existing base, and get both to spend more with them. Addressing consumers' online shopping experiences and satisfaction is of particular importance to organisations, marketers and advertisers considering the accelerated adoption of online shopping due to the impact brought about by the COVID-19 global pandemic.

Additionally, online organisations invest substantially in digital advertising to remain competitive and ensure that they engage with online consumers, addressing their needs and preferences. Digital advertising spending worldwide continues to experience investment and growth and is forecasted to continue. The total digital ad spending is expected to reach US$455.30 billion in 2021 (eMarketer, 2021).

Underlying and driving digital advertising spending is done through tactics such as OBT. Therefore, marketing practitioners utilising OBT advertising tactics need to ensure that it effectively enhances consumers' shopping experiences, delivering positive outcomes and a greater return on their digital advertising spending. Utilising OBT advertising so that consumers do not perceive the tactic as intrusive, threatening their privacy, and heightening their online concerns is, therefore, an important challenge.

1.6. The Purpose of the Research

The purpose of this research project was to investigate and determine how OBT advertising tactics and associated characteristics influence consumers' online shopping experiences, their online satisfaction, and subsequent online shopping behaviour (attending to online shoppers' purchase intentions having experienced OBT adverts, their acceptance or avoidance of OBT adverts, and their continued use of online shopping in the future). The study acknowledges factors related to the effectiveness of OBT as a phenomenon, namely consumers' knowledge of personalised ads, the perceived benefits of OBT ads, personalisation, privacy concerns and perceived intrusiveness.

The study aims to understand how consumers' perceptions of OBT advertising tactics may impact their online shopping experiences in meeting or exceeding their expectations, potentially leaving them satisfied or dissatisfied with online shopping. Furthermore, it aims to determine how online shoppers' satisfaction (positive or negative) with online shopping influences their subsequent shopping behaviour, leading to favourable or unfavourable outcomes. Particularly regarding the effectiveness of OBT advertising tactics and their prolonged continual use of online shopping in the future.

1.7. Research Methodology

The study adopted a positivist research philosophy. It implemented highly structured data collection techniques and collected quantifiable data that was statistically analysed to empirically test the research hypotheses derived from existing theory (Lincoln & Guba, 2005; Saunders & Lewis, 2018). It utilised a deductive research approach using a logical, rational, and systematic process to address the study's

objectives and outcomes (Zikmund et al., 2013), which is generally associated with quantitative research, where theory is evaluated and tested, using data generated in a selected context (Saunders et al., 2016). This approach also guided the collection of data and the statistical analysis of the data.

The research strategy entailed utilising an electronic self-administered survey questionnaire which allowed for structured, accurate, timeous and cost-effective data collection, with less risk of bias (Creswell, 2014; Saunders & Lewis, 2018; Zikmund et al., 2013). A mono method quantitative approach was adopted in this study, using a cross-sectional single data collection method. The quantitative approach supported the study's objectives in determining the relationships and influence between the key constructs using numeric data and relevant statistical techniques (Creswell, 2014; Saunders et al., 2016). The target population for this study were all online consumers residing in South Africa who had purchased or browsed online before and experienced OBT tactics during their online shopping encounters during the preceding six months. Details of the research methodology and design are presented in Chapter 4.

1.8. Measures to Eliminate Error

In this study, throughout the research process, appropriate measures were taken to eliminate errors and ensure the study's validity and reliability. A thorough review of the extant literature was conducted to ensure the theoretical validity of the study; this included consulting renowned academic quality ranked journals and peer-reviewed research. Doing so allowed the researcher to correctly identify the relevant key concepts and constructs pertinent to the study's objectives and understand the academic work done in its respective fields (Mouton & Marais, 1996; Welman et al., 2009).

The study ensured construct validity by using constructs that were obtained and verified through an extensive literature review, ensuring that they were relevant and accurately addressed the research objectives. All measurement scales used in the survey questionnaire were previously validated in prior research studies. Furthermore, the researcher's supervisor examined the face and content validity of the study's survey questionnaire prior to data collection. The measurement instrument consisted of previously tested and reliable scales, with acceptable

Cronbach's alpha measurements (Pallant, 2010), ensuring the reliability and internal consistency of the measurement scales. Furthermore, Cronbach's alpha and exploratory factor analysis statistical procedures were also conducted to assess the measurement scales reliability and validity in the context of this study.

1.9. Ethics

The researcher made certain that various measures and procedures were in place to ensure the integrity of this study and that ethical considerations and conduct were applied throughout the research process. As part of the process, ethical clearance was obtained from the Gordon Institute of Business School (GIBS) ethical committee (see Appendix A for the Ethics approval letter). Throughout the research report, the researcher refrained from any kinds of plagiarism, and all ideas, concepts and thoughts presented, including authors from the literature, were acknowledged using the appropriate and recommended referencing techniques (De Vos et al., 2011; Kumar, 2014; Walliman, 2011).

When conducting the survey, it was considered ethically appropriate to request consent from respondents before they participated in the study, also to inform them that their participation was voluntary and could opt-out and withdraw from the study at any time (De Vos et al., 2011; Kumar, 2014; Salkind, 2013). In this study, respondents participation was anonymous, and only willing respondents were included. All through the process, participants were not misled in any way, and careful consideration was given to ensure that the questionnaire did not offend or upset any respondents and that it refrained from any sensitive topics, views or contexts (Kumar, 2014; Walliman, 2011). In conducting this research, no data or results were fabricated or reported unethically in any such way whatsoever. The researcher's supervisor was also consulted throughout and reviewed the process all the way through, providing guidance and support to ensure the quality and validity of the research, including it being conducted ethically (De Vos et al., 2011).

1.10. Layout

The research report is structured and outlined as follows:

Chapter 2: Literature Review

This chapter presents a review of the relevant extant academic literature and theory pertinent to this research study, OBT advertising phenomena, consumers' perceptions and attitudes concerning this phenomenon, their online shopping experience, online satisfaction and online shopping behaviour. In this chapter, the key theoretical constructs of the research study are outlined, explored and discussed in detail, including the theoretical perspective underpinning this research study.

Chapter 3: Research Questions and Hypotheses

This chapter presents the research questions and hypotheses derived from the literature, focusing on the study's objectives. In addition, it presents the study's theoretical conceptual model, visually illustrating the hypotheses and relationships investigated between the key constructs in the research.

Chapter 4: Research Methodology and Design

This chapter outlines the methodology and design of the research conducted to address the research questions and empirically test the study's hypotheses. In this chapter, the methodological choices, as well as the rationale for decisions, are discussed.

Chapter 5: Results

This chapter presents the results recorded from the data analysis and the statistical techniques and tests performed to answer the research questions and empirically test the study's hypotheses.

Chapter 6: Discussion of Results

This chapter presents a discussion of the results from the previous chapter in offering an interpretation and understanding of the results presented.

Chapter 7: Conclusion

This chapter presents a concluding summary of the research and its principal findings, including acknowledging the study's limitations and suggestions for future research areas.

Chapter 2: Literature Review

2.1. Introduction

This chapter presents a review of extant academic literature and theory to provide insights and an overview into the key constructs and associated relationships pertinent to this research study. In this chapter, the key theoretical constructs of the research study are outlined, explored and discussed in detail. It outlines the theoretical perspective underpinning this research study being the lens through which the information is structured, analysed, interpreted and evaluated. The chapter focuses on consumers' knowledge of OBT advertising phenomena, their perceptions and attitudes concerning this phenomenon, and how it influences their online shopping behaviour. It further discusses consumers' online shopping experience and its association with their online satisfaction; also attending to consumers' shopping behaviour: their purchase intentions of OBT adverts, their acceptance or avoidance of OBT adverts, and their continuance of the use of online shopping. The literature review firstly introduces the stimulus-response theoretical framework that underpinned the study.

2.2. Theoretical Framework - The Stimulus-Response (S-O-R) Framework

The Stimulus-Organism-Response (S-O-R) framework (see Figure 2.1), initially introduced by Mehrabian and Russel (1974), is an established theoretical framework from environmental psychology that researchers often use to explain consumers' subjective and behavioural responses when encountering contextual stimuli. According to the theory, a stimulus (S) from the external environment triggers cognitive and/or affective responses within an organism (therefore, within a person's/consumer's) brain (O), hence changing the individual's internal state that consequently leads to a related behavioural response (R) (Rodríguez-Torrico et al., 2019). Precisely, the framework affirms that the perceived stimuli trigger and generate particular reactions, or so-called reactance in consumers, leading to a response from them.

The S-O-R framework suggests reaction, and it has been used in multiple studies before to explain consumers' behaviour (Chang et al., 2011; Jacoby, 2002; Kim et al., 2020; Laato et al., 2020; Vieira, 2013), including studies related to retail and online shopping (Eroglu et al., 2001, 2003; L. Gao & Bai, 2014; Jiang et al., 2010;

Parboteeah et al., 2009; Wu & Li, 2018). In addition, the S-O-R framework has also been used in studies related to OBT advertising to understand consumers' behaviour and their responses to online stimuli (Bleier & Eisenbeiss, 2015; Jai et al., 2013). According to the S-O-R theory, external factors can vary but are generally contextual (Bitner, 1992; Donovan & Rossiter, 1982).

In the context of this study, consumers' knowledge and understanding of personalised adverts, triggered by OBT tactics and exposure to the adverts, is regarded as the external stimuli that are not part of the consumer's essential online search encounter or experience. Therefore, stimuli that may be unexpected and often disruptive inevitably change an online shopper's mood state (O). For example, the consumer experiences the OBT advertising tactics as relevant, useful, surprising, annoying, disruptive or intrusive. OBT adverts can present personalised and relevant offers that can positively enhance consumers' online searches so that their online searches are more effective and efficient, enhancing the shopping experience (Chopdar & Balakrishnan, 2020). However, OBT tactics could also instigate negative emotions, such as possible breach of privacy and perceived intrusiveness (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Boerman et al., 2017; Ham & Nelson, 2016; Jai et al., 2013; Mpinganjira & Maduku, 2019; Smit et al., 2014). An online consumer will then react accordingly (R) by either positively attending to the OBT adverts culminating as increased purchase intentions or could disregard these stimuli (Aguirre et al., 2015; Aiolfi et al., 2021; Baek & Morimoto, 2012; Bleier & Eisenbeiss, 2015; Mpinganjira & Maduku, 2019; Schumann et al., 2014; Smit et al., 2014; Tucker, 2014), even terminating the online search.

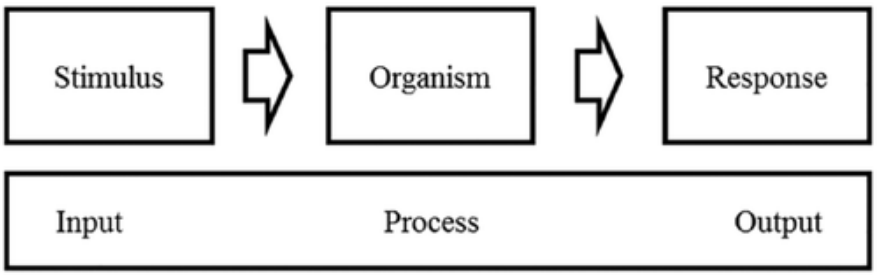

Figure 2. 1: A visual presentation of the conceptual S-O-R framework (Kim et al., 2020)

2.3. Online Behavioural Targeting (OBT)

2.3.1. Understanding the Phenomenon

Technological advancements and big data in digital marketing and the online environment have revolutionised how organisations, marketers, and advertisers use online data. They have capitalised on this opportunity and are increasingly gathering and analysing behavioural data concerning online users to target and present them with tailored, personalised and appealing advertisements that are more likely to engage with or lead to purchases in real-time (Boerman et al., 2017). OBT advertising, specifically, refers to the practice where users' online behaviour activity is collected, monitored and analysed to provide them with personalised ads across multiple devices, platforms, sites or applications. This data is collected and tracked across various data sources such as web browsing data, app usage data, media consumption data, communication content, online shopping activity, and general online activity (Boerman et al., 2017; Mpinganjira & Maduku, 2019). Users are then targeted online with personalised ads in multiple ways, such as through pop-ups, banner displays or recommendations when browsing online or on social network platforms. OBT, unlike other types of online advertising, focuses on personal relevance. Advertisers can create more relevant ads personalised to consumers' needs and preferences by tracking and collecting a user's personal online behavioural data.

In digital marketing, OBT advertising has become a widely adopted practice that is likely to continue and be a significant component of personalised digital marketing in the future (Kumar & Gupta, 2016). Mainly due to its one-to-one personalisation ability and cost-effectiveness. The ability to accurately tailor and personalise adverts aligned to consumers' needs and preferences can provide greater relevance and boost purchase intentions. Conversely, ads that are not aligned and deliver a low fit to consumers' needs and preferences can produce adverse effects (Van Doorn & Hoekstra, 2013). OBT can be advantageous compared to traditional marketing tactics because of its ability to offer consumers a form of convenience, presenting the right product at the right time, which helps them avoid wasting time and effort with information searches on products or services (Aguirre et al., 2015; Van Doorn & Hoekstra, 2013). When aligned well, OBT advertising is an effective tactic that can improve consumers' online shopping experience.

OBT, with all its benefits, has shown to be a "double-edged sword" that can also produce negative consequences depending on how consumers perceive and react to the personalised, targeted advertisements. It is difficult for consumers to determine which companies are collecting and using their behavioural data, and a focal area of concern for consumers is their privacy and data concerns. Often consumers' online activities and information are tracked and collected covertly without their knowledge (Ham & Nelson, 2016). This covert aspect of OBT advertising, in particular, has raised significant concerns and can have adverse outcomes (Aguirre et al., 2015), depending on how consumers perceive the tactic when they become aware that their data is being tracked and used. When organisations collect and use consumers' personal information covertly, it causes them to distrust the organisation, OBT ads, or online shopping altogether. Consumers have found this tactic to be intrusive and invasive, especially when there are very high levels of personalisation in the OBT ads (Van Doorn & Hoekstra, 2013). These concerns have all led to a call for greater transparency in OBT advertising (Boerman et al., 2017).

OBT advertising can be a highly effective tactic to increase purchase intent, consumers' online shopping experience, and online satisfaction. However, its effectiveness can be affected and influenced by various factors controlled by advertisers (Boerman et al., 2017). This study focuses on these various factors and will primarily concentrate on the following OBT factors: consumers' knowledge of personalised ads, benefits of OBT ads, ad personalisation, consumers' privacy concerns and perceived ad intrusiveness.

2.3.2. Consumers' Knowledge of Personalised Ads

Consumers are generally aware that their data is being collected and used for online advertising. However, they often have misconceptions regarding OBT advertising tactics and the personalised ads associated with them. Several studies have highlighted consumers' misconceptions of OBT advertising, and indicate that consumers have little or limited knowledge of how advertisers, using consumers' online behavioural information, deploy OBT advertising tactics, and the mechanics behind how these tactics work (Ham, 2017; McDonald & Cranor, 2010; Milne et al., 2008; Smit et al., 2014; Turow et al., 2008). For consumers, it seems insurmountable to establish which organisations or advertisers are tracking and collecting their online

behavioural information, the type of information they gather, how they use it, or what happens to the information thereafter (Boerman et al., 2017).

Consumers online activities are often tracked and collected covertly, without consumers knowing that OBT tactics are being deployed (Ham & Nelson, 2016). Consumer's perceptions of the tactic can be influenced by their knowledge of the phenomenon and the transparency about how their data is being obtained and used (overtly or covertly) (Aguirre et al., 2015; Ham & Nelson, 2016). A study by Ham and Nelson (2016) highlighted that consumers who perceive themselves as knowledgeable about OBT advertising tend to perceive the tactic's impact much greater than others who do not necessarily know about the tactic and underestimate the effect on themselves.

Consumers' perceptions of OBT advertising are conflicting, mainly depending on how they perceive the benefits versus the risks associated with the tactic. Ham and Nelson (2016) highlight that consumers can find the attractiveness of OBT advertising as ambivalent, and the complexity of how the tactic works can impede whether they perceive the tactic as beneficial or harmful. Hence, consumers' knowledge and understanding of the mechanics related to how OBT advertising works can be essential in their perceptions of the tactic's desirability, benefits, and potential harm (Ham & Nelson, 2016). Research by Ham (2017) found that the persuasion knowledge following OBT advertising was positively associated with the perceived benefits and privacy risk associated with the tactic. This study also suggests that irrespective of consumers' knowledge of how OBT advertising works, consumers can still find highly personalised ads and the tactic itself as unpleasant and annoying.

The more consumers experience various advertising approaches, practices and techniques used by organisations, and encounter varying advertising content, the more knowledge they gain about advertising tactics and how they work. This knowledge develops over time, from a simple to a more complex understanding of the phenomenon (Segijn & van Ooijen, 2021), and allows consumers to identify, decipher and develop mechanisms to deal with the persuasion attempts of the adverts (Friestad & Wright, 1994). The persuasion knowledge gained by consumers makes them less susceptible to the persuasive attempts of the advertisements,

which can influence the advert's effectiveness (Friestad & Wright, 1994). Therefore, over time, consumers develop enough knowledge and understanding to resist the persuasion attempts by not engaging or ignoring the advert altogether. They can, however, also accept it, depending on how they perceive it.

Consumers' knowledge about advertising persuasion tactics can be understood using the Persuasion Knowledge Model of Friestad and Wright (1994). This model proposes that consumers (who are the persuasion target) possess perceived knowledge (much or limited) about the persuasion tactics of marketers or advertisers (the persuasion agents), and this knowledge helps them cope with the persuasion attempts and tactics (Ham, 2017; Ham & Nelson, 2016). This persuasion knowledge model has been used in several prior studies to understand consumers' knowledge, coping strategies and behaviour when confronted with the multitude of persuasion tactics that marketers or advertisers deploy (Cowley & Barron, 2008; Wei et al., 2008; Williams et al., 2004). Consumers are likely to rely on their existing knowledge when they encounter advertising that they perceive contains hidden persuasion intent; this allows them to actively deal with the persuasion attempt and the tactic by either rejecting or accepting it (Ham, 2017; Ham & Nelson, 2016).

When confronted with OBT communication, consumers deploy coping strategies depending on their beliefs and how they perceive them. For example, when consumers assume that marketers' and advertisers' persuasion intent is manipulative or harmful, they are likely to reject the content. However, when they infer the persuasion intent as helpful or beneficial, they are likely to accept the persuasion attempt (Ham, 2017; Kirmani & Campbell, 2004). Ham and Nelson (2016) postulate that the level of consumers' perceived persuasion knowledge regarding OBT advertising and its covert nature can influence how they perceive the effects of OBT adverts on themself or others.

Persuasion knowledge contains subjective and objective persuasion knowledge. Consumers' subjective persuasion knowledge refers to their self-assessment and confidence of their perceived knowledge of the particular persuasion tactic and how it works, whilst objective persuasion knowledge implies the actual and accurate knowledge about a specific persuasion tactic and how it works (Ham & Nelson, 2016; Segijn & van Ooijen, 2021). Although consumers may have subjective persuasion

knowledge about a particular persuasion tactic, like OBT, it does not necessarily indicate that they have accurate or objective knowledge concerning the tactic (Ham & Nelson, 2016). Alba and Hutchinson (2000) have argued that these two types of persuasion knowledge are distinctly different and affect consumer assessment and behaviour differently.

The complexity of how OBT advertising works, the covert nature of the persuasive tactic, and consumers' understanding of the tactic can be an obstacle for consumers when determining whether the tactic is beneficial or harmful (Ham & Nelson, 2016). According to Ham and Nelson (2016), consumers' perceived knowledge of how OBT advertising works can be significant in their perception of the desirability of the tactic.

2.3.3. Perceived Benefits of OBT

OBT advertising offers consumers highly relevant advertisements that, in many instances, are aligned with their personal preferences and needs (Boerman et al., 2017). Consumers benefit from these OBT characteristics, and the personalised and tailored adverts often offer them the right products or services at an opportune time (Van Doorn & Hoekstra, 2013). In addition, OBT advertising makes consumers' search for information on products or services convenient, easier and makes their task of shopping online more efficient (Van Doorn & Hoekstra, 2013). Furthermore, OBT personalised ads benefit consumers by presenting an improved variety of relevant product or service offerings, presenting a shopping experience, a preference match and convenience (Aguirre et al., 2015).

Bleier and Eisenbeiss (2015) highlight that one of the main factors influencing the acceptance of the OBT advertising tactics is the perceived relevance, usefulness and benefits of OBT adverts, which broadly reflect consumers' interests, preferences or needs. Davis (1989) describes perceived usefulness as the extent to which an individual feels that adopting a specific method will improve their performance in doing a task. The researcher further highlights that the perceived usefulness and ease of use are essential contributing factors influencing user acceptance (Davis, 1989). With OBT advertising, the perceived usefulness or benefits refers to the degree to which consumers perceive the relevant OBT personalised advert will better assist them in achieving their desired outcome (Aiolfi et al., 2021).

According to Kirmani and Campbell (2004), consumers are goal-seeking individuals who do not just accept or reject the persuasion attempts of marketers and advertisers but rather interact and engage with them to achieve their goals. When goal-seeking consumers identify persuasion tactics, they consider whether these attempts are beneficial or harmful to achieving their goal (Ham, 2017). Consumers deducing or perceiving OBT adverts as relevant and more beneficial than harmful to achieve their objectives are more likely to accept the tactic, although they have identified them as persuasion tactics. The contrary is likely to occur when consumers infer or perceive that the OBT tactic will impede their goal or result in more harm than benefits to them, and then, they are more likely to reject or avoid the tactic (Ham, 2017). The effectiveness of the tactic or the prospect of consumers acquiring the advertised product or service depends on their evaluation and a comparison of the perceived benefits and costs (Aiolfi et al., 2021; Baek & Morimoto, 2012; Plangger & Montecchi, 2020); therefore, whether the perceived benefits outweigh the risks.

The concept of privacy calculus is often utilised, in literature, to explain and understand the process that consumers use to rationally analyse and assess the balance between perceived benefits versus costs or risks of revealing their personal information with tactics such as OBT (Jai et al., 2013; Mpinganjira & Maduku, 2019; Plangger & Montecchi, 2020; Schumann et al., 2014). Hereby, it is argued that consumers are rational decision-makers and use calculus to assess the benefits versus the costs of giving up their privacy and personal information (Mpinganjira & Maduku, 2019). When the benefits outweigh the costs, consumers are likely to accept marketers persuasion attempts and consider these attempts as maximising their best interests. The privacy calculus is consistent with other theories such as the social exchange theory and acquisition-transaction utility theory which also propose that individuals assess benefits and costs in exchanges or transactions (Baek & Morimoto, 2012; Mpinganjira & Maduku, 2019; Schumann et al., 2014).

The social exchange theory postulate that consumers assess social exchanges according to the benefits and costs it presents and will adjust their behaviour accordingly based on their assessment (Schumann et al., 2014). Schumann et al. (2014) highlight that consumers are likely to engage in social exchanges when the perceived benefits exceed the risks associated with the exchange. Similarly, the acquisition-transaction utility theory, often used in marketing studies to understand

ethical topics, also proposes that the possibility of consumers acquiring the advertised commodities depends on their assessment between the perceived benefits and risks or costs associated (Aiolfi et al., 2021; Baek & Morimoto, 2012; Plangger & Montecchi, 2020).

Therefore, based on these theories, and within the S-O-R framework, consumers are likely to accept OBT advertising (the stimuli: S) and positively perceive the tactic (cognitive interpretation: O) only when the perceived benefits (outcomes: R) such as convenience, usefulness, personalisation and relevance exceed the perceived costs or risks associated with the tactic, such as privacy concerns and intrusiveness (Baek & Morimoto, 2012; Schumann et al., 2014). Furthermore, these factors relating to the benefits and costs of OBT advertising can positively or negatively impact consumers' online shopping experience, depending on their perceptions (O) and evaluation when confronted with the tactic.

2.3.4. Perceived Personalisation of OBT

Personalisation is fundamental to the effectiveness of OBT as a tactic. Targeting consumers with personalised and tailored adverts enhances the efficacy of marketers' and advertisers' attempts to connect and persuade with consumers, as opposed to using non-personalised adverts and trying to entice consumers in general (Gironda & Korgaonkar, 2018). The concept of personalised advertising has drawn much consideration in marketing and advertising literature, producing several conceptual descriptions. Consistent with these descriptions or definitions of personalised advertisings is the notion of using consumers' information to derive and present them with customised and tailored specific advertising communication based on their personal preferences or needs.

For example, Peppers and Rogers (1997) describe personalisation as referring to the process of delivering a targeted solution to a consumer derived from that specific consumer's information. Imhoff et al. (2001) explain personalisation as an organisation's ability to identify and engage with its consumers individually, using targeted personal messaging, communication or offers. Roberts (2003) refers to personalisation as the process of deriving and delivering individualised messages to a particular individual based on established or inferred preferences. Like these descriptions, Baek and Morimoto (2012) define personalised advertising as

presenting each individual consumer with tailored advertising communication derived from their personal information, such as their name, address, purchase history, demographics, psychographics and lifestyle interests or preferences.

OBT, supported by technology advancements and online adoption, has extended the concept of personalisation in targeted advertising. The tactic has enabled organisations to precisely target consumers. It can deliver the right content, at the right time, to the right person, by gathering, analysing and disseminating their online behavioural data and making informed inferences about online consumers' interests, needs and preferences (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Van Doorn & Hoekstra, 2013). The results from prior research relating to OBT personalised advertising highlight that different levels of personalisation can influence consumers' behaviour, perceptions, and the effectiveness of the ad, particularly their interaction and click-through on the advertisement. The various levels of personalisation exhibited in OBT adverts can influence the ads' perceived usefulness, perceived intrusiveness, and consumers' privacy concerns and subsequent reactance towards the advertising tactic (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Van Doorn & Hoekstra, 2013).

The study by Tucker (2014) found that targeted adverts on Facebook containing content relevant to the user's personal interests or preferences have led to increased click-through rates on the adverts by users. Another study conducted by Aguirre et al. (2015) found that Facebook adverts that were moderately personalised based on the user's personal information resulted in higher click-through rates compared to adverts that were not personalised. However, the researchers also found that highly personalised adverts containing content such as their age, gender, or location, negatively influenced their click-through rates, having the adverse effect. A study by Bleier and Eisenbeiss (2015) reported that personalised, targeted advertising concerning a trusted retailer also influence consumers' click-through rates. Their study found that highly personalised and relevant adverts increased consumers' click-through rates - more so than adverts with lower levels of personalisation - although only when consumers perceived the OBT advert to be from a trusted retailer.

Personalised adverts, derived from OBT tactics, are intended to present relevant and useful advertisements to consumers. When consumers are confronted with OBT adverts and do not engage with the ad or click-through on them, they are likely to perceive the tactic as harmful rather than beneficial or useful (Boerman et al., 2017). The S-O-R framework is useful to portray consumers' behaviour in this regard, in that the framework posits that the external stimuli (OBT adverts) can influence or trigger cognitive and affective (O) responses from consumers, which can then translate into a specific type of behaviour or reactance (R) (Bleier & Eisenbeiss, 2015; Jai et al., 2013).

Overall, personalisation in OBT advertising benefits consumers by presenting them with relevant content aligned to their needs and preferences, improving their online shopping experience. However, when consumers' data is collected and used covertly, without them knowing, or when there is increased personalisation in the OBT adverts, it may have negative consequences (Boerman et al., 2017). These negative consequences may include heightened feelings of vulnerability, intrusiveness, privacy concerns, and lower click-through intentions (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Van Doorn & Hoekstra, 2013). Ham (2017) argues that when consumers encounter advertising communications that are highly personalised or too personal, they feel a loss of control and respond negatively. Therefore, organisations should consider the level of personalisation utilised in OBT advertising, as adverts that are highly personalised or perceived as too personal can produce adverse outcomes, which jeopardise the intention of the tactic (Boerman et al., 2017).

2.3.5. Perceived Privacy Concern of OBT

A major factor influencing consumers' perceptions of the benefits and risks of OBT advertising is privacy concerns, which limits them from enthusiastically adopting the tactic. More recently, OBT attracted much attention from consumers, organisations, governing bodies and policymakers (Boerman et al., 2017) due to techniques used to obtain users' information to profile and target them with personalised adverts. In essence, OBT is a technique that can often gather users' data without their consent or knowledge, posing the risk of the potential misuse or unethical use of consumers' data, which is concerning (Smit et al., 2014). Mpinganjira and Maduku (2019) explain

that privacy concern implies a sense of anxiety and worry among consumers concerning their personal information and online privacy.

Researchers and scholars have identified many factors that may influence consumers' concerns about their privacy and use of their data, subsequently impacting their online behaviour. These factors include the transparency in how their data is being obtained and used (overtly or covertly) (Aguirre et al., 2015; Ham & Nelson, 2016); control over their information, trust in the website, and source of the OBT ads (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Jai et al., 2013). Concerns about privacy and users' data are significant in how consumers react to OBT ads. Generally, less concerned individuals are more likely to embrace OBT ads (Boerman et al., 2017).

Bleier and Eisenbeiss (2015) concluded that when personalised ads come from trusted sources, consumers are more inclined to react favourably to the OBT ads, which enhances the perceived usefulness of the ad. The reverse is true for OBT ads from lesser-known or untrusted sources, which can increase consumers' privacy concerns and may cause an adverse reaction (Bleier & Eisenbeiss, 2015). Aguirre et al. (2015) highlight that OBT advertising tactics are more effective when consumers are knowingly aware that their data are being collected and used for marketing purposes. OBT adverts are more enticing than non-personalised ads when the personalisation content is relevant and applicable to their needs or preferences. It can, however, also be an unpleasant experience, especially when consumers perceive their privacy and personal data to be infringed in the process of generating the OBT personalised adverts (Tucker, 2014).

Miyazaki (2008) uses the social contract theory to explain the effects that transparency and openness of marketers and advertisers can have on consumers' trust. Hereby, when marketers or advertisers explicitly and overtly disclose that they track, collect, and use personal information to generate OBT adverts to enhance user experience, an implied social contract is formed between them (Miyazaki, 2008). Consumers then expect marketers and advertisers to collect and use their personal information responsibly under this implied social contract. However, when consumers perceive that this is not the case, that their data is collected and used covertly without being disclosed or without their consent, they may feel that

marketers and advertisers have violated the implied social contract (Miyazaki, 2008). Which can lower consumers trust in the retailer, increase their privacy concerns and lead to adverse outcomes.

OBT advertising requires personalisation to be effective, although high levels of personalisation can increase privacy concerns. Privacy statements, informed consent requests and disclosures have been put in place by advertisers to improve transparency; it informs consumers about how and why their online data is being tracked, gathered, and used (Boerman et al., 2017). In addition, these mechanisms are also in place to obtain consent from consumers to use their data (Boerman et al., 2017). Explicitly informing consumers about the use of their personal information and privacy policies can increase their trust in online shopping and OBT advertisements (Miyazaki, 2008). However, these initiatives can also be ineffective and irritate users as it requires them to read and comprehend lengthily, often complex, statements and policies. Generally, which they cannot proceed to the content without accepting these conditions.

Consumers' responses to OBT advertising tactics differ, and consumers' level of concern about their privacy can be crucial in terms of their acceptance of the tactic (Miyazaki, 2008). From the perspective of communication privacy management theory, Mpinganjira and Maduku (2019) argue that a critical issue in understanding consumers' privacy concerns is that consumers have an inherent desire to control their privacy and personal information as a personal characteristic. As various research studies have indicated, individuals with fewer privacy concerns or a lesser desire for privacy are likely to be more accepting of OBT, perceiving OBT advertising tactics positively (Baek & Morimoto, 2012; Miyazaki, 2008; Smit et al., 2014). A study by Nyheim et al. (2015) indicated that consumers with increased levels of concern about their privacy are likely to be more apprehensive and uneasy about collecting and using their personal information. Overall, consumers' privacy concerns and desire for privacy can influence how they perceive OBT advertising, their acceptance of the tactic and their online experience, all of which can subsequently impact their online behaviour and the evaluation of benefits versus costs related to the tactic.

2.3.6. Perceived Intrusiveness of OBT

In the context of OBT advertising tactics, intrusiveness refers to consumers' feelings or perceptions that their personal information and privacy may have been invaded or infringed (Mpinganjira & Maduku, 2019). While consumers may find OBT adverts appealing and beneficial, they can also make them feel uneasy and apprehensive, knowing that their personal online behavioural information is being monitored and tracked. Consumers feeling uneasy and apprehensive may cause them to react negatively to this tactic.

Researchers and scholars have found that highly personalised OBT ads can have a negative effect as it can lead to the user's perception that OBT advertising tactics are intrusive (Van Doorn & Hoekstra, 2013), hence creating an unpleasant experience. Similarly, Mpinganjira and Maduku (2019) found that consumers with high privacy concerns are more likely to perceive OBT adverts as intrusive. Also, when consumers feel vulnerable due to their experience with OBT tactics (Aguirre et al., 2015), they are likely to perceive the personalisation as highly intrusive (Van Doorn & Hoekstra, 2013). That would influence their online shopping behaviour and purchase intentions (Van Doorn & Hoekstra, 2013). Highly personalised OBT adverts with greater levels of personalisation can therefore increase consumers' feelings of intrusiveness, culminating in negative responses to the tactics. At the same time, any perceived benefits associated with OBT personalised ads are likely to be diminished when consumers experience heightened levels of intrusiveness due to the tactic (Van Doorn & Hoekstra, 2013).

However, it is unclear at what levels of personalisation consumers begin to perceive the adverting tactic as too much and intrusive (Boerman et al., 2017). To the extent that it begins to adversely affect their attitudes towards advertisers use of their data and OBT tactics, prompting negative reactions (reactance) from consumers towards the tactic and their shopping behaviour (Boerman et al., 2017). Consumers are, therefore, less likely to engage or click on OBT ads if they feel that their personal information is collected and used in an intrusive way. While highly personalised OBT adverts that accurately fit consumers' needs and preferences can lead to positive outcomes like higher click-throughs and purchase intentions, they can also lead to heightened levels of perceived intrusiveness, with the opposite effect (Van Doorn & Hoekstra, 2013). For consumers, OBT personalised tactics can therefore be a

"double-edged sword". Perceived intrusiveness can lead consumers to perceive these advertising tactics as a risk, negatively influencing their evaluation of the benefits and harm associated with OBT advertising tactics.

2.3.7. Perceived Level of Control (Informed Consent)

Personalised advertising, deployed through OBT tactics, may raise several concerns among consumers. Firstly, concerns related to their privacy may be problematic for them, including their perceived lack of control over their personal information (Aiolfi et al., 2021; Boerman et al., 2017; McDonald & Cranor, 2010; Smit et al., 2014), causing apprehension and reluctance to embrace the tactic fully. Xu et al. (2011) describe perceived privacy control as a person's beliefs in their capability to govern the access, use and dissemination of their private information. With OBT tactics, consumers often feel that they have limited or no control over their information and privacy, not knowing what personal information advertisers possess about them, how they acquire the information, and how they plan to use it (Baek & Morimoto, 2012). Highly personalised OBT communication can intensify consumers' concerns regarding their loss of freedom and ability to control the collection and use of their personal information (Baek & Morimoto, 2012), which can further increase their privacy concerns and related reactance.

Consumers' reaction/reactance refers to how and why they resist persuasion attempts or communicate to others what they perceive as undesired, harmful, or containing ulterior motives (Baek & Morimoto, 2012; Ham, 2017). The established psychological reactance theory (Brehm, 1966, 1972; Brehm & Brehm, 1981) provides an understanding of the reactance of consumers. It proposes that whenever consumers perceive that their free choice or behaviour is being threatened, restricted or taken away, they are likely to encounter psychological reactance and will then be motivated to restore their freedom by adjusting their attitudes and actions (Baek & Morimoto, 2012; Ham, 2017).

Consumers' reactance to OBT advertising can occur when they perceive a lack of control over their personal information or perceive OBT tactics as a threat to their freedom of choice, being manipulative or a risk, prompting them to react unfavourably towards the tactic and persuasion attempt (Ham, 2017). A study by White et al. (2008) indicated that highly personalised adverts, like OBT personalised adverts, can

lead to consumer reactance and avoidance of the advert. Because exposure to highly personalised communication or adverts may jeopardise consumers perceived ability to prevent being tracked and resist being targeted by advertisers (White et al., 2008), culminating in a lack of control over the use of their personal information. Consumers who perceive they have control of their data use will feel less threatened by OBT tactics and therefore be less inclined towards reactance.

Several privacy regulations, policies and frameworks have been implemented by authorities globally, requiring marketers and advertisers to be more ethical, transparent and responsible with consumers' data. The objective of these controls is to protect consumers and empower them with some control over their personal information and its use (Boerman et al., 2017). Examples include the EU General Data Protection Regulation (GDPR), the South African Protection of Personal Information Act (POPIA), and the OECD privacy framework. These efforts typically allow consumers to make more informed decisions about their personal information and its use. Advertisers often comply with the regulations and policies by publishing privacy statements, informed consent requests, disclosures and opt-out options. These inform consumers about how and why their online data is being tracked, gathered and used, and they often obtain consent from consumers to use their data (Boerman et al., 2017). Organisations that have these in place help to improve transparency. Additionally, it attempts to address consumers' concerns and better inform their decision-making, providing some level of control over their privacy and use of their personal data.

However, several studies have indicated that consumers have limited knowledge about OBT tactics and how their data is tracked, gathered or used (Ham, 2017; McDonald & Cranor, 2010; Milne et al., 2008; Smit et al., 2014; Turow et al., 2008). Additionally, attempts to improve transparency by requiring consumers to read lengthy policy statements and disclosures can be ineffective in improving consumers' knowledge about the tactic. It can be incredibly onerous for consumers to read lengthy statements for all the websites or platforms they use, and when they perceive the costs, like the time required to read these statements as excessive, they are unlikely to read them (McDonald & Cranor, 2008). Without thoroughly reading or understanding the lengthy policy statements and disclosure, consumers often accept

cookies or declarations when prompted before accessing the online information, giving organisations consent to use their data.

Consumers with limited knowledge are less likely to make a well-informed decision concerning their privacy and use of their personal information, hence feeling less in control over their data. However, consumers who have options to manage the use of their online personal information, like providing informed consent for their data use or opting out, may feel more in control of their personal information, thus reducing reactance (Ham, 2017) and making them feel less concerned or threatened by OBT tactics. A study by Tucker (2014) revealed that when users are afforded more control over their personal data, the effectiveness and credibility of personalised adverts are enhanced, improving the likelihood of clicking through on the adverts. However, a South African study by Mpinganjira and Maduku (2019) reported that respondents generally felt less in control over the tracking, gathering, and use of their personal information regarding behavioural advertising.

2.4. Online Shopping Experience

In recent years, online shopping has seen significant growth in both developed and developing countries. The internet, technological advancements, globalisation, and the rapid growth in online users are changing consumers' shopping habits for products and services. Online shopping presents numerous advantages to consumers, such as convenience, better selection over a broader range of products, and better prices, while linking consumers and businesses across the globe (Clemes et al., 2014; Lim, 2015). Consumers use the internet and online shopping for various reasons and at different stages during the purchasing process, like searching for information on products and services or alternatives before buying them online or in-store (Clemes et al., 2014). E-commerce platforms and online shopping sites play a vital role in encouraging online shopping by creating a pleasant and memorable online shopping experience (Lim, 2015). Al-Debei et al. (2015) found that consumers' attitudes toward online shopping can be influenced and determined by trust and the perceived benefits of online shopping. The key elements that a good online shopping experience should include are a positive perception of value, a good selection of products, and the assurance of online shopping sites' privacy and security features (Lim, 2015).

Consumers are motivated by and engage in online shopping because of its utilitarian and hedonic features (Childers et al., 2001; Monsuwé et al., 2004). The utilitarian aspect includes features like the perceived convenience, usefulness, and ease of use, enabling consumers to accomplish their tasks or goals efficiently and effectively, enhancing their shopping experience and outcomes (Monsuwé et al., 2004). The hedonic aspect refers to the enjoyment, entertainment, and satisfaction derived from an online shopping experience (Monsuwé et al., 2004). Monsuwé et al. (2004) further concluded that in addition to consumers' perceptions of the utilitarian and hedonic features of online shopping, exogenous factors could also influence their attitudes and intentions towards online shopping. Exogenous factors include consumer traits, situational factors, characteristics of the products or services, prior online shopping experiences, and trust in online shopping (Monsuwé et al., 2004).

Although an online shopping experience offers various benefits to consumers, their attitudes and perceptions towards online shopping may vary. Research has indicated that the perceived risks and benefits associated with online purchasing can influence consumers' attitudes towards the shopping medium, their intentions to use online shopping (Soopramanien, 2011), as well as their cost versus benefit evaluation. These conflicting perceptions can cause scepticism about online shopping, and although some individuals will enthusiastically embrace it, some may be more concerned with the associated risks (Soopramanien, 2011). Clemes et al. (2014) caution that perceived risk is the main factor that influences consumers' decision concerning choosing online shopping or not. Their study also indicated that consumers' risk perception concerning online shopping mainly pertains to the safety of their personal information and privacy security - issues that online retailers and marketers should consider as a priority (Clemes et al., 2014). Web irritation is another issue that can influence consumers' attitudes towards online shopping. Unpleasant features such as pop-up messages can cause consumers to develop unfavourable attitudes toward online shopping (Lim, 2015).

In the context of online shopping, utilitarian, hedonic and exogenous factors (like product or service information, variety, convenience, flexibility, usefulness, ease of use, navigation, enjoyment, entertainment, past experiences, satisfaction, potential risk, privacy security, personal information), all contribute to consumers' perceptions of the shopping medium, their decision to use it, and the evaluation of their shopping

experience (Burke, 2002; Clemes et al., 2014; Monsuwé et al., 2004; Tong, 2010), either encouraging or discouraging online shopping.

Prior research indicates that the more satisfied consumers are with previous online shopping experiences and the more experienced they are with it, the greater the likelihood of positive outcomes like higher-value purchases and repeat purchases (Brown et al., 2003; Park & Jun, 2003). Satisfactory experiences with online shopping can improve consumers' perceptions concerning the perceived risk and benefits associated with online shopping (Tong, 2010). If consumers find their online shopping experiences positive, there is a greater likelihood they will develop a positive attitude towards the shopping medium and use it in the future (Monsuwé et al., 2004; Tong, 2010). Online shopping has changed the retail landscape in recent years and offers several benefits to consumers. However, consumers still have many concerns, particularly in developing countries where online shopping adoption is still not yet widely adopted (Izogo & Jayawardhena, 2018). The perceived benefits and risks associated with OBT advertising can potentially influence consumers' motivation to shop online, impacting their online shopping experience, satisfaction and adoption of online shopping in the future.

2.5. Consumers' Online Shopping Satisfaction

In the online environment, consumer satisfaction refers to how their perceived shopping experience compares to their expectations about the experience (Li & Zhang, 2002). Consumers are motivated and engage with online shopping because of expected utilitarian, hedonic and exogenous factors (Monsuwé et al., 2004). These factors create expectations about the encounters, and then they evaluate their eventual experience accordingly and derive some level of satisfaction, for example, from the online shopping encounter. Kotler (1997) explains that consumers' satisfaction with a buying experience results from their experiences throughout the buying process. With online shopping, this process can include consumers' need identification, information search, evaluation of alternatives, purchase decision, payment options, logistics, customer service, and even post-purchase encounters in the online environment. This process can be rather complex.

The expectation dis/confirmation paradigm, often referred to as the confirmation/ disconfirmation theory, has been used widely in various disciplines to assess user

satisfaction (Bhattacherjee, 2001a, 2001b; Hsu & Lin, 2015; Oliver, 1980; Pham & Ahammad, 2017; Shankar et al., 2003). It originates from the work of Richard Oliver's (1977, 1980) assessment of consumer behaviour and satisfaction. The paradigm posits that consumers are either satisfied or dissatisfied, depending on whether the actual experience of the encounter confirms or disconfirms their expectations (Oliver, 1977, 1980). Consumers have expectations of a product or service and generally evaluate the eventual experience with the product or service against these expectations. The confirmation (concurrence with expectations) or disconfirmation of these expectations (exceeded expectations, or failed expectations) results in either satisfaction or dissatisfaction that will influence similar shopping encounters in the future, for example, online shopping behaviour (Li & Zhang, 2002). Research has shown that when consumers are satisfied with their experience and use of a product or service, they are more likely to continue using it in the future (Bhattacherjee, 2001b, 2001a). Therefore, consumers' overall online satisfaction resulting from previous encounters with online websites or platforms over time (Anderson & Srinivasan, 2003; Shankar et al., 2003) will influence their attitudes or perceptions, subsequently impacting their purchase intentions.

A study by Liu et al. (2008) specifies key factors relating to consumers' online shopping experiences that might influence their satisfaction, for example, the quality of information, website design, product characteristics, transaction capability, security/privacy, payment, logistics, and customer service. Scholars concur that consumers' online shopping experience can be a crucial driver for their online satisfaction, admitting that various attributes may influence their online experiences, consequently impacting their satisfaction with the shopping medium, their shopping behaviour, reactance and intent to shop online in the future (Lin & Lekhawipat, 2014). Accordingly, Pham and Ahammad (2017) indicated that consumers entire online experience needs to be considered because elements in the pre-purchase, purchase and post-purchase stages all significantly influence and contribute to consumers' online satisfaction. They mentioned influencing factors such as product information, ease of use, personalisation, ease of check-out, security assurance, order fulfilment, customer service, and ease of return. Pham and Ahammad (2017) furthermore concluded that, in addition to repurchase intention, consumers' online customer satisfaction could lead to the likelihood of them positively recommending online shopping to others. Consumers may, however, also advocate their dissatisfaction

and complaints through various mediums like social media, which can be quite damaging to retailers (Grégoire et al., 2009; Riquelme et al., 2016).

A study by Bilgihan et al. (2016) found that the antecedents for compelling and integrated online consumer experience are hedonic and utilitarian features, including other features such as the ability to quickly find the online site or applications, ease of use, perceived usefulness and personalisation. Many of the features that necessitate a compelling online experience and increased satisfaction for online shoppers are susceptible to the influence of OBT advertising. Therefore, organisations, marketers and advertisers need to strive for consumer satisfaction, particularly in an online environment where the interactions are very different from traditional retail brick and mortar environments.

Consumers often have expectations of online shopping (Li & Zhang, 2002) based on the characteristics of a unified online consumer experience (Bilgihan et al., 2016). These expectations can influence consumers' attitudes and intentions towards shopping online (Li & Zhang, 2002) and potentially OBT advertising tactics. If consumers' online shopping expectations are met, they are likely to be satisfied with their experience, positively influencing their online shopping behaviours (Li & Zhang, 2002). However, if consumers are dissatisfied with their online shopping experience, it can lead to adverse outcomes. For example, when a consumer who expects privacy when shopping online experiences an OBT personalised advert that they perceive as intrusive, it can trigger an adverse reaction, negatively disconfirming their expectation, leaving them feeling dissatisfied. However, the opposite can also happen when a consumer who expects convenience may perceive an OBT personalised advert encounter as helpful, triggering a favourable reaction, positively confirming and even exceeding their expectations, resulting in surprise and elation.

2.6. Consumers' Online Purchase Intentions

Consumers' attitude towards online advertising and tactics like OBT can impact their shopping behaviour. If they have a favourable attitude or perception towards the advertising, it generally increases their purchase intent (Wang & Sun, 2010). In digital marketing, ad clicking is an essential measure of the effectiveness of advertised content (Wang & Sun, 2010), as it signals the users' interaction with the ad and their intent to purchase. Prior research has found that OBT adverting can impact both

purchase intent and click-through, depending on consumers attitudes and perceptions of the tactic (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Summers et al., 2016; Tucker, 2014; Van Doorn & Hoekstra, 2013). Digital marketing and advertisers hence utilise OBT to engage and create relevant, personalised content for online shoppers, expecting them to interact and click on the advert and hopefully purchase the advertised content.

OBT advertising tactics use previous online activity to make inferences and predictions on relevant content users are most likely to engage with or purchase. When there is a high degree of accuracy, relevance and usefulness in the OBT ad presented and the advert is aligned to the users' perceptions of themself, it can influence their shopping behaviour and increase their purchase intentions (Summers et al., 2016). Personalised OBT ads that are a good fit for users' needs and preferences are much more effective in impacting purchase intentions and behaviour (Van Doorn & Hoekstra, 2013). However, consumers who perceive OBT adverts as too personalised, harmful and intrusive, will not likely engage with the ad or purchase the advertised product or service (Boerman et al., 2017).

Lambrecht and Tucker (2013) found that the effectiveness of OBT advertising tactics can vary, depending on consumers' buying decision-making stage. They found that when consumers were in the initial stages of their buying decision-making, with general preferences, general non-personalised adverts were more effective, increasing the probability of purchases. However, when consumers have narrowly defined preferences with a more significant focus on specific information, OBT tactics can be more effective, indicating that OBT advertising that is highly relevant and useful can be more effective (Lambrecht & Tucker, 2013).

Previous research has, therefore, shown that OBT advertising tactics can influence consumers' attitudes and perceptions, impacting their online shopping behaviour and purchase intent. Furthermore, consumers' satisfaction with their online shopping experience is likely to influence their attitudes, perceptions and subsequent online shopping behaviour and online purchase intent (Li & Zhang, 2002; Lin & Lekhawipat, 2014; Pham & Ahammad, 2017). Therefore, organisations need to ensure that OBT advertising tactics positively influence consumers' online shopping experience and satisfaction, potentially leading to favourable outcomes.

2.7. Acceptance or Avoidance

Consumers' click-through intentions are among the major effects of OBT advertising tactics and can indicate consumers acceptance or avoidance regarding the tactic (Aiolfi et al., 2021). Advertising avoidance can hinder marketers' and advertisers' ability to persuade or influence consumers (Mpinganjira & Maduku, 2019). It has been found that consumers' engagement with OBT advertisements and their intentions to click-through on them will be much greater when organisations are transparent about tracking, gathering, and using consumers' personal information to present them with targeted ads (Aguirre et al., 2015). The contrary is true when marketers and advertisers deploy OBT tactics covertly, making consumers feel vulnerable so that they rather avoid the OBT adverts (Aguirre et al., 2015). Therefore, OBT adverts are more effective in influencing consumer interaction and behaviour when the tactics are perceived to be less risky.

An earlier study by Edwards et al. (2002) showed how involuntary exposure of consumers to intrusive pop-up ads have led to their reactance and avoidance of the adverts. Therefore, when consumers perceive OBT advertising as presenting potential risks and fewer benefits, they are more likely to avoid the tactic (Ham, 2017). This reactance is because consumers' perceived privacy concerns and the ad's benefits, relevance or usefulness have been identified as key factors influencing their interaction with the OBT personalised ads and their intentions to click-through (Bleier & Eisenbeiss, 2015). Consumers consider these key factors when assessing the cost versus benefits of engaging with the OBT personalised ads and then react accordingly.

OBT advertising tactics, through personalisation, can produce and deliver content that is often highly relevant and useful. When consumers perceive this is the case, they are more likely to respond positively to the tactic, increasing their click-through intentions (Aguirre et al., 2015; Aiolfi et al., 2021; Bleier & Eisenbeiss, 2015; Boerman et al., 2017; Tucker, 2014). However, when consumers experience the ads as less relevant and offering fewer benefits, posing more privacy concerns, increased reactance to the OBT personalised adverts are more likely, with lower click-through intentions (Aiolfi et al., 2021; Ham, 2017). Consumers with OBT privacy concerns, and when they are sceptic of the tactic, can perceive personalised, targeted adverts

as an annoyance, resulting in them not engaging with the ad and avoiding it (Baek & Morimoto, 2012).

Highly personalised OBT adverts can often lead to consumer reactance and avoidance of the adverts (White et al., 2008). Consumer reactance often occurs when consumers encounter highly personalised content that they perceive as threatening to their privacy, lack of control of their privacy, implying that they can be tracked, monitored and then targeted with OBT adverts (White et al., 2008). While the personalisation of OBT adverts can be beneficial to some consumers, it can also be unpleasant to others. It raises privacy concerns and creates negative attitudes and unfavourable perceptions of OBT advertising, increasing consumers' risk perception. These attitudes and perceptions will directly impact the effectiveness and outcomes of OBT advertising, potentially influencing consumers' online shopping experiences, satisfaction with online shopping, purchase intent and click-through intentions.

2.8. Continuance of Online Shopping

Consumers are motivated and enticed to engage in online shopping because of the many utilitarian, hedonic and exogenous characteristics it offers (Childers et al., 2001; Monsuwé et al., 2004). Moreover, their intentions to continue online shopping in the future are determined by their satisfaction with their experiences and the perceived usefulness it offers (Bhattacherjee, 2001a, 2001b), particularly in addressing their expectations, needs and preferences. Research by Bhattacherjee (2001a, 2001b) concluded that satisfaction and the perceived usefulness (cognitive belief) of a product or service were predicated by the confirmation (or disconfirmation) of the users' expectations arising from the eventual experience or use of the product or service. Consumers are likely to continue subscribing to online shopping if they are satisfied with the previous experiences that met or exceeded their expectations and find online shopping useful.

Other research, based on the notions of the expectation-confirmation model and technology acceptance model, likewise initiate that consumers' satisfaction, derived from confirmation (or disconfirmation) of their expectations, primarily determined their behavioural intention towards the continuance of online services (Chong, 2013; Lee, 2010; Liao et al., 2007). Futhermore, Liao et al. (2007) also found that the

continuance of online services was also affected by their perceived usefulness and subjective norm of using the services. In addition to users satisfaction, perceived usefulness and subjective norms, research by Mouakket (2015) specify that habit and enjoyment also influence users continuance intention with social networking sites. Mouakket (2015) postulate that the more satisfied a user is, the more regularly they will consider using the service out of habit, subsequently leading to continuance intention.

Consumers satisfaction with their online experiences is a key factor influencing their continuance intention (Bhattacherjee, 2001b, 2001a; Chong, 2013; Lee, 2010; Liao et al., 2007). Consumers often have expectations of online shopping (Li & Zhang, 2002), and their eventual shopping experiences culminate as confirmation of their expectations (everything went as expected), or as positive disconfirmation (exceeded expectations), or negative disconfirmation (did not meet expectations). The confirmation or disconfirmation of their expectations leads to either satisfaction or dissatisfaction with online shopping (Li & Zhang, 2002), influencing their continuance intention. Therefore, consumers are likely to embrace online shopping and continue using it in the future when they are satisfied that their online experiences meet or exceed their expectations, and when the perceived utilitarian, hedonic and exogenous features of online enhance their ability to achieve their shopping goals. However, suppose consumers are dissatisfied with their online shopping experience, it can lead to adverse behaviours like not wanting to engage with the shopping medium in the future.

2.9. Conclusion

This chapter presented the S-O-R theoretical framework that was used to structure the research. OBT advertising and how it is applied was introduced as the stimuli (S). Depending on the relevance of these stimuli and how they are presented, online shoppers may interpret them (O) in memory as helpful and useful or annoying and threatening, particular when they are not perceived to be relevant or when they are perceived to intrude on shoppers' privacy. This experience influences online shoppers' reactance to the OBT ads (R) in the sense of a click-through to explore the product information and even purchase the product, or to reject the prompt, with possible negative consequences for the retailer, including future for online shopping intentions. Through social media and online networks, negative experiences can

create considerable harm to retailers. Consumers' expectations of online shopping and their eventual shopping experiences will culminate as confirmation of their expectations (everything went as expected), or as positive disconfirmation (exceeding expectations, which is positive), or negative disconfirmation (dissatisfaction with the experience). When caused by OBT advertising, the latter should be prevented by, for example, increasing online shoppers' understanding of how online shoppers' personal information is gathered and protected and by ensuring that OBT advertisements are relevant and useful.

The following chapter introduces the research questions and the hypotheses that guided the research.

Chapter 3: Research Questions and Hypotheses

3.1. Introduction

This chapter outlines the research questions and hypotheses deduced from literature, according to the purpose of the study. The purpose of this research study was to determine the influence of OBT on consumers' online shopping experiences, their online satisfaction, and subsequent online shopping behaviour (attending to online shoppers' purchase intentions having experienced OBT adverts, their acceptance or avoidance of OBT adverts, and their continued use of online shopping in the future). The study acknowledged factors related to the effectiveness of OBT as a phenomenon, namely consumers' knowledge of personalised ads, the perceived benefits of OBT ads, personalisation, privacy concerns and perceived intrusiveness. Consumers' attitudes, perceptions and behaviours regarding OBT advertising tactics were considered in the literature review, as presented in Chapter 2. Accordingly, the following research questions and hypotheses were derived in this study.

3.2. Research Questions and Hypotheses

Research question 1: Acknowledging factors related to OBT, namely the perceived benefits, personalisation, privacy concerns and intrusiveness, how does OBT influence consumers' online shopping experience and satisfaction?

Three related hypotheses, derived from literature, address this research question:

Hypothesis 1.1: Consumers' knowledge of personalised adverts has a significant influence on their perceptions of OBT advertising, specifically their:
H1.1a: …perception of the benefits of OBT advertising
H1.1b: …perception of the personalisation of OBT advertising
H1.1c: …privacy concerns concerning OBT advertising
H1.1d: …perception of the intrusiveness of OBT advertising

Hypothesis 1.2: Consumers' perceptions of OBT advertising has a significant influence on their online shopping experience, specifically
H1.2a: …the benefits associated with OBT advertising
H1.2b: …the personalisation of OBT advertising
H1.2c: …privacy concerns concerning OBT advertising

H1.2d: …perceived intrusiveness of OBT advertising

Hypothesis 1.3: Consumers' online shopping experience amid OBT significantly influences their online shopping satisfaction.

The objective of this research question seeks to investigate how consumers' knowledge, understanding and perceptions of OBT advertising tactics, when prompted with personalised ads, influence their online shopping experiences and satisfaction. Consumers' knowledge and understanding of the mechanics related to OBT advertising are essential to shaping their perceptions of the tactic's desirability, benefits, and potential harm (Ham, 2017; Ham & Nelson, 2016). When consumers are confronted with OBT communication and infer the persuasion intent as helpful or beneficial, they are likely to accept the persuasion attempt (Ham, 2017; Kirmani & Campbell, 2004). However, when they perceive it as manipulative or harmful, they are likely to reject the content.

OBT advertising can be advantageous because of its ability to offer consumers convenience and personalisation, presenting the right product at the right time, which helps them avoid wasting time and effort (Aguirre et al., 2015; Van Doorn & Hoekstra, 2013). However, it can also be a "double-edged sword" that can produce negative consequences depending on how consumers perceive and react to the tactic. The covertness of OBT advertising, in particular, has raised significant concerns and can have adverse outcomes (Aguirre et al., 2015).

Furthermore, consumers are motivated to shop online because of the many utilitarian, hedonic and exogenous attributes it offers, enabling them to accomplish their tasks or goals efficiently and effectively, enhancing their shopping experience and outcomes (Monsuwé et al., 2004). However, the inherent benefits and risks associated with OBT advertising can influence (positively or negatively) consumers online shopping experience and their desired expectations of shopping the medium, which can be a crucial element of their online satisfaction (Lin & Lekhawipat, 2014).

Research question 2: How does consumers' perceived level of control (informed consent) influence their perceptions of OBT advertising?

The following hypotheses, derived from literature, address this research question:

Hypothesis 2: Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of OBT advertising, more specifically:

H2.1a: …their perceptions of the benefits of OBT advertising
H2.1b: …their perceptions of the personalisation of OBT advertising
H2.1c: …their privacy concerns concerning OBT advertising
H2.1d: …their perceptions of the intrusiveness of OBT advertising

The objective of this research question seeks to investigate the moderating interaction and effect of perceived level of control on the relationship between respondents' knowledge of personalised adverts and their perceptions of OBT advertising. It aimed to determine the impact of introducing a moderating variable (perceived level of control) in terms of modifying or altering the strength or direction of the relationship between the specified variables. Consumers privacy concerns and their perceived lack of control over their personal information can be problematic for them when shopping online (Aiolfi et al., 2021; Boerman et al., 2017; McDonald & Cranor, 2010; Smit et al., 2014), causing apprehension and reluctance to OBT advertising tactics. However, when users are afforded more control over their personal data, the effectiveness and credibility of personalised adverts are enhanced, improving the likelihood of engaging with the ad (Tucker, 2014), positively influencing their attitudes and behaviours. Therefore consumers perceived a level of control over their personal information, and its use, can affect how they perceive OBT advertising tactics and cope with its persuasion attempts.

Research question 3: How does consumers' satisfaction with online shopping amid OBT, impact their subsequent shopping behaviour?

The following hypotheses, derived from literature, address this research question:

Hypothesis 3: Consumers' online shopping satisfaction amid OBT significantly influences:
H3.1: …their purchase intentions of OBT advertised commodities
H3.2: …their acceptance or avoidance of OBT advertising

H3.3: …their continuation with online shopping

The objective of this research question seeks to investigate how consumers', positive or negative, satisfaction with online shopping experiences impacts their subsequent shopping behaviour and reactance. Consumers' satisfaction with their online experiences can influence their attitudes and perceptions of the shopping medium, including their purchase intent (Li & Zhang, 2002; Lin & Lekhawipat, 2014; Pham & Ahammad, 2017). Moreover, when they are satisfied with their online experiences, it is likely to positively influence their online shopping behaviours (Li & Zhang, 2002). However, the contrary is likely to occur when they are dissatisfied with their online experience. Furthermore, when consumers are satisfied with their experience and use of a product or service, they are more likely to continue using it in the future (Bhattacherjee, 2001b, 2001a).

The theoretical conceptual model is presented next (see Figure 3.1).

3.3. Theoretical Conceptual Model

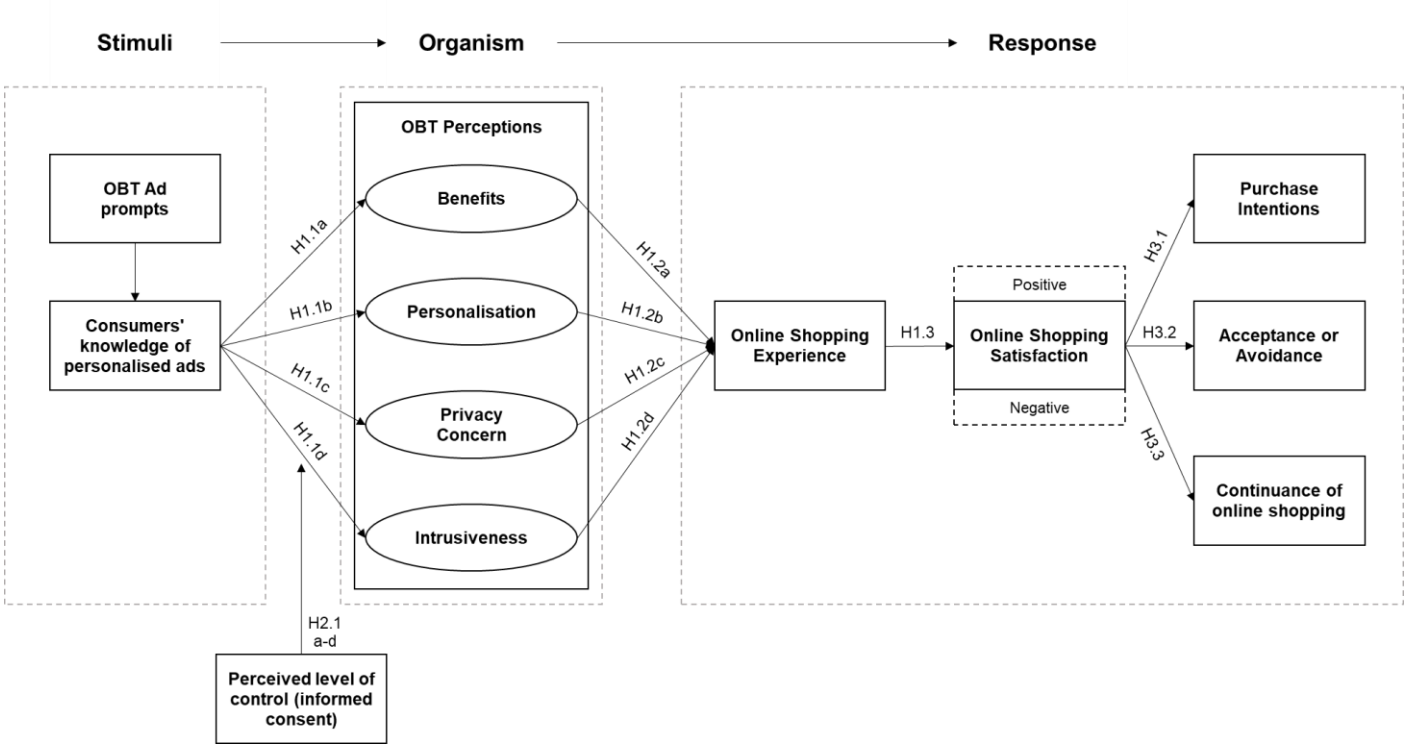

Figure 3. 1: Theoretical Conceptual Model

Source: Author's own (2021)

The theoretical conceptual model presents the relevant constructs in accordance with the S-O-R framework, presenting the exposure to OBT ads as stimuli triggering consumers knowledge of the tactic, how they are perceived (O), and subsequent reactions to the OBT ads as the outcomes (R).

The research methodology is presented in the following chapter.

Chapter 4: Research Methodology and Design

4.1. Introduction

This chapter outlines the methodology and design of the research conducted to address the research questions and empirically test the study's hypotheses. In this chapter, the methodological choices, as well as the rationale for decisions, are discussed. The chapter presents details concerning the targeted population, the unit of analysis, sampling method and -size, the measurement instrument used for this study, the data gathering process that was followed, and the data analysis approach. Quality controls and ethical considerations applied throughout the research process are attended to and outlined, including the limitations of this research study.

4.2. Choice of Methodology

4.2.1. Research Philosophy

The philosophical underpinning of this study is a positivist research paradigm. A positivist philosophy was chosen because it focuses on a highly structured approach, as was envisaged for this research, that sought to establish law-like generalisation by testing and explaining relationships in the data between observable and measurable variables (Saunders & Lewis, 2018). The research implemented highly structured data collection techniques (a survey with a structured questionnaire) and collected quantifiable data that could be statistically analysed to test hypotheses derived from existing theory (Lincoln & Guba, 2005; Saunders & Lewis, 2018). The objectives of this research study, the use of existing theory to derive the research questions and hypotheses, and the use of quantifiable data that could be statistically analysed to test the hypotheses were suitable to achieve the desired outcomes in alignment with that of the positivist philosophy. Therefore, this philosophy was selected as the underpinning of this research study.

4.2.2. The Research Approach

This study utilised a deductive research approach that verified research questions and hypotheses deduced from established literature in the context of this study. Accordingly, the research strategies in this study were specifically designed to collect and analyse data that could answer the research questions and test the hypotheses that were derived from the extant literature (Saunders & Lewis, 2018). Deductive

reasoning requires using a logical, rational and systematic process to derive a conclusion or outcome from a general principle (Zikmund et al., 2013). Saunders et al. (2016) highlight that this approach is generally associated with quantitative research, where theory is evaluated and tested, using data generated in a selected context. This research study consulted existing literature and theories on OBT, the various influencing factors, consumers' online shopping experience, satisfaction with online shopping, and subsequent behaviours to develop the conceptual model and logically deduce the research questions and hypotheses. This approach also guided the collection of data and the statistical analysis of the data.

4.2.3. Methodological Choice

This study adopted a mono method quantitative approach, thus a single data collection technique that was cross-sectional in kind, as this was suitable given the limited period in which this academic research endeavour had to be completed. Relevant quantitative analytical procedures were selected to produce the anticipated outcomes that the study anticipated to achieve. Quantitative research is often conducted in studies to determine relationships between variables using numeric data and relevant statistical techniques - as was the aim of this study (Creswell, 2014; Saunders et al., 2016).

4.2.4. Purpose of Research Design

The research design for this study was descripto-explanatory. This approach focuses on using descriptive data to evaluate the research problem, describe the variables, and explain the relationships between the variables in this study (Creswell, 2014; Saunders & Lewis, 2018; Zikmund et al., 2013). This research design was appropriate, considering that this study aimed to determine the relationship between online behavioural targeting (OBT) and its related elements on consumers' online shopping experience, satisfaction and subsequent shopping behaviour. Whilst also examining the moderating influence of consumers' perceived level of control (informed consent) of their information on their perceptions of OBT and related elements. After questioning respondents about their understanding of the phenomenon (OBT) and their online shopping experience, consumers' online satisfaction was explored through a single satisfaction measure.

4.2.5. Research Strategy

This study utilised a survey research strategy (Creswell, 2014), using an online electronic self-administered survey questionnaire designed through Survey Monkey, an online platform. This approach is similar to previous OBT studies that used a survey to examine consumers knowledge and perceptions of the tactic (Baek & Morimoto, 2012; McDonald & Cranor, 2010; Mpinganjira & Maduku, 2019). Zikmund et al. (2013) explain that a survey strategy is typical of a descriptive study and allows for the collection of quantitative data in a consistent and structured format from a large number of individuals, which can be statistically analysed. It is generally done in the form of a questionnaire (Saunders & Lewis, 2018; Zikmund et al., 2013). The data obtained from a survey strategy can assist in understanding possible relationships between variables through statistical analysis (Saunders et al., 2016). The electronic self-administered survey questionnaire allowed for structured, accurate, timeous and cost-effective data collection, with less risk of bias (Creswell, 2014; Saunders & Lewis, 2018; Zikmund et al., 2013).

4.2.6. Time Horizon

The time horizon for this study was cross-sectional. The data was collected from respondents over a single period, at a specific point in time, as the research had to be completed within a set time period for academic purposes (Saunders & Lewis, 2018; Zikmund et al., 2013). Therefore, the cross-sectional approach was a practical consideration due to time constraints as the research study needed to be completed within a very specific period of time. Due to the nature of the topic, consumers' knowledge of OBT could expand over time, and therefore this study indicates consumers' knowledge, as at the point of completing the survey questionnaire, which is cross-sectional in nature.

4.3. Population

Saunders and Lewis (2018) describe the research population as the complete set of group members with similar characteristics required for the research purpose. It is crucial to determine these characteristics and the appropriateness of the population when conducting any research project (Saunders & Lewis, 2018). This research aimed to determine how OBT, and its related elements, influence consumers' online shopping experience, satisfaction and subsequent shopping behaviour. As

previously mentioned, OBT is a form of personalised advertising whereby organisations and marketers develop customised adverts of products or services based on individual consumer's prior online activities and then target the consumer with the customised adverts (Boerman et al., 2017; Mpinganjira & Maduku, 2019). Based on the objectives of the research project and the characteristics of OBT advertising, the target population identified as appropriate for this study were all online consumers residing in South Africa who had purchased or browsed online before and experienced OBT tactics during their online shopping encounters during the preceding six months. The study targeted adult consumers over the age of eighteen years. The criteria and characteristics used to identify and select the population ensured the population had the relevant online shopping experience and exposure to OBT.

OBT tracks consumers' online behaviour, activities, and web browsing regardless of their stage in the buying process. Therefore, the target population included consumers who had browsed online for information on products or services such as option variety, alternatives, comparisons, price, specifications, customer reviews, and availability. In this study, the target population included consumers irrespective of the mode, means or type of online activities. It incorporated consumers who had engaged in online shopping through smartphones, laptops, tablets, computers or any other connected smart device, the reason being OBT tracks consumers' online behaviour across multiple platforms and devices. It covered all product or service categories available for consumers to purchase or view online, using any electronic device. These considerations and criteria aimed to generate an appropriate and diverse population, from which a sample was obtained for analysis and the inferential statistics required in answering the research questions.

4.4. Unit of Analysis

In a research study, the unit of analysis refers to the entity that provides the data and the level of aggregation required for analysis of the particular study (Zikmund et al., 2013). It refers to the level at which the data is gathered, aggregated, quantified and analysed in a particular research study. In this research study, the unit of analysis was each individual online adult consumer residing in South Africa who had experienced OBT advertising. This level of analysis was required to determine how individuals perceive and experience the phenomena that influence their online

experience, satisfaction and subsequent shopping behaviour, which was the focus of the study.

4.5. Sampling Method and Size

A sample is a sub-group drawn from the entire target population for a particular research study and should accurately represent the population targeted to enable rational generalisations about the study population (Creswell, 2012). Köhler et al. (2017) explain that, in order to obtain the most accurate and appropriate data required for the research endeavour, careful consideration should be given to the study's sample composition that will be used for data analysis. Sampling is generally done in a research study because it is difficult and mostly impractical to obtain reliable data for analysis from the entire target population (Saunders & Lewis, 2018). Often due to certain constraints such as limited resources, limited time, cost implications, accessibility issues to reach the entire population, and limited knowledge concerning the size and location of the entire target population, making it impossible to involve the entire population that the study is interested in. Therefore, it is essential to ensure that an appropriate and representative sample is drawn from the target population to address the research purpose and research questions appropriately, this will allow for more accurate statistical inferences and generalisability about the target population.

Due to the unknown and increasingly large number of online consumers in South Africa, it was highly impractical, complicated and unfeasible to access the entire target population for analysis in this research study given the time and financial constraints of the researcher. In addition, no available sample frame or complete list of the target population existed from which a sample could be selected at random for probability sampling (Saunders & Lewis, 2018). Therefore, this study utilised a non-probability sampling method, namely convenient sampling, and adopted a purposive sampling technique (based on OBT exposure and online activity), supplemented by snowball sampling to generate a sizeable data set for analysis (Saunders & Lewis, 2018).

An online electronic survey questionnaire was distributed to potential respondents through emails and electronic messages using social media platforms the researcher had access to, namely WhatsApp, Telegram, LinkedIn and Facebook online

applications. It enabled reaching a variety of people that could be interested in the topic but who were not friends or acquaintances of the researcher. The invitation for participation in the study explained the purpose of the research. It included screening questions to ensure that respondents were appropriate for inclusion in the study and that the willing respondents met the specific qualifying criteria for selection. The screening questions were in place to ensure that respondents who completed the survey questionnaire, resided in South Africa, were over eighteen years of age, and had shopped online or had searched for products or services online during the preceding six months (thus purposive recruitment). An additional screening question requested consumers to confirm if they had experienced OBT advertising; this question included an example describing a typical OBT advertising experience.

In this study, to obtain an appropriate and diverse sample, two approaches were utilised to recruit respondents to participate in the survey. The researcher recruited potential participants by circulating the online electronic survey questionnaire to professional networks, online community networks and social networks. In addition to this approach, the researcher requested participants to forward and distribute the survey questionnaire to potentially suitable respondents (thus snowballing) to improve the diversity and size of the sample. Although these approaches are open to sampling bias and skewness, the screening questions with specific qualifying criteria for selection assisted in mitigating these concerns, ensuring the appropriateness of the sample.

Greener (2008) recommends that the larger the sample size, the more likely it will represent the target population, and the more closely it will represent a normal distribution, allowing for reliable inferential statistical analysis. A large and representative sample can reduce sampling error, improving the reliability and accuracy of the data analysis (Zikmund et al., 2013). The researcher kept in mind that a relatively small sample size could skew the outcome of the statistical tests and produce unreliable results, impacting the generalisability of the results (Pallant, 2010). Various methods can be used to establish the appropriate sample size that would be representative of the target population in a particular study, such as statistical methods to calculate the ideal sample size, which generally requires an accurate indication of the total target population size. However, in this study, a

reasonably accurate approximation of the total target population was not available to calculate the appropriate sample size for this study.

Cody and Smith (2006) suggest that at least ten times the number of survey respondents is required for every variable in the data analysed. While Hair et al. (2010) recommend a minimum sample size of 200 respondents when utilising the Structural Equation Modelling (SEM) statistical technique. However, Tabachnick and Fidell (2007) provide a formula to calculate the minimum sample size for multiple regression analysis based on the number of independent variables studied. The formula suggested is $N > 50 + 8m$ (where N equals the sample size, and m equals the total number of independent variables studied). Tabachnick and Fidell (2007) further indicate that, with factor analysis, a minimum sample of 150 respondents should be adequate, provided that there are several marker variables with high factor loadings. In acknowledging these methods to determine the minimum sample size, this study adopted the guidelines suggested by Tabachnick and Fidell (2007) due to its applicability with multiple regression analysis, which this study utilised for inferential statistical testing of hypotheses. Therefore, the researcher envisaged a minimum sample of 150 respondents to allow for a good model fit and significantly reliable results that would generalise well with other target population samples. The study succeeded in attracting 261 responses in total, of which 229 responses were complete and qualified to be analysed and included in the study.

4.6. Measurement Instrument - Survey Questionnaire

A survey, particularly a self-administered questionnaire, allows for structured, accurate, timeous and cost-effective data collection (Saunders & Lewis, 2018; Zikmund et al., 2013). A questionnaire is an extensively used data collection method that presents the same set of questions in the same order and allows for collecting data from respondents in a structured and systematic way (Saunders & Lewis, 2018). The data collected from questionnaires can be analysed and used to statistically test theories or hypotheses (as was envisaged in this study) (Creswell, 2014). The use of a survey questionnaire is also consistent with previous OBT studies that used a survey questionnaire to examine consumers knowledge, attitudes and perceptions of the tactic (Baek & Morimoto, 2012; McDonald & Cranor, 2010; Mpinganjira & Maduku, 2019).

This study used a structured self-administered electronic survey questionnaire as a measuring instrument to determine the influence of OBT on consumers' online shopping experience, satisfaction and subsequent shopping behaviour. All participants were informed of the nature and purpose of the study, that their participation was voluntary, and that they would remain anonymous and could withdraw from participating at any given time, should they feel the need to do so. The survey questionnaire in this study incorporated existing reliable measurement scales, tested and used in previous research studies. The survey questionnaire contained Likert-type scales to measure respondents behaviour, attitudes and perceptions, the extent to which they agree or disagree with the given statement. Despite certain limitations, Likert-type scales are commonly used in quantitative research studies (Zikmund et al., 2013).

The scales were slightly adapted to suit the research objectives of the study. The phrasings of the questions were slightly adapted to specifically refer to OBT, making it easier to read and understand. In addition, the measurement scales were adapted from a 7-point Likert-type scale to a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Doing so made it easier for participants to read, navigate and complete the survey, particularly when completing the survey questionnaire via mobile devices such as smartphones and tablets. Also, all measurement scales were then adapted to present five increments, rather than vary from one section to the next in the questionnaire.

Statistical analyses were conducted to ensure the reliability and validity of the measurement scales; these included Cronbach's alpha and exploratory factor analysis. The measurement instrument consisted of nine sections, including an introduction to the research study and screening questions (see Appendix B for the survey questionnaire). The data collected from sections B to F were analysed to statistically test the research hypotheses and relationships between variables in addressing the research questions and achieving the study's objectives.

The different sections are described below:

Introduction Section: This section detailed the nature and purpose of the research study, explained the phenomena of OBT advertising, assured participants anonymity and voluntary participation.

Screening Section: This section consisted of three category type screening questions (Saunders & Lewis, 2018) to determine whether the respondent met the minimum criteria to participate in this study and is appropriate for inclusion in the sample. As aforementioned, the minimum criteria required consumers to reside in South Africa, be over eighteen years of age, and have experienced OBT advertising tactics during the past six months when shopping online or searching for products and services online.

Section A was mandatory and pertained to the respondent's online shopping and OBT habits, which consisted of rating-type questions (Saunders & Lewis, 2018), using a 5-point Likert-type frequency scale ranging from 1 (never) to 5 (always). The information from this section provided descriptive statistics and insights into participants online shopping habits and the characteristics of the study's sample.

Section B was mandatory and consisted of rating-type questions (Saunders & Lewis, 2018) that measured consumers' knowledge of personalised adverts (Bearden et al., 2001), using a 5-point Likert-type agreement scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Section C was mandatory and consisted of rating-type questions (Saunders & Lewis, 2018) that measured the constructs relating to consumers' perceptions of OBT advertising, using a 5-point Likert-type agreement scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scales included:

- perceived benefits of OBT (Bleier & Eisenbeiss, 2015);
- perceived personalisation of OBT (Srinivasan et al., 2002);
- perceived privacy concerns of OBT (Smith et al., 1996) and
- perceived intrusiveness of OBT (Edwards et al., 2002).

Section D was mandatory and consisted of rating-type questions (Saunders & Lewis, 2018) that measured consumers' perceived level of control over their personal

information (Xu et al., 2009), using a 5-point Likert-type agreement scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Section E was mandatory and consisted of rating-type questions (Saunders & Lewis, 2018) that measured consumers' online shopping experience and satisfaction (Bhattacherjee, 2001a, 2001b), using a 5-point Likert-type agreement scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Section F was mandatory and consisted of rating-type questions (Saunders & Lewis, 2018) that measured the constructs relating to consumers' subsequent shopping behaviour, using a 5-point Likert-type agreement scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scales included:

- OBT purchase intentions (Grewal et al., 1998);
- OBT acceptance (T. T. Gao et al., 2013);
- OBT avoidance (Baek & Morimoto, 2012) and
- continuance intention of online shopping (Bhattacherjee, 2001a, 2001b).

Section G contained nominal and category type questions (Saunders & Lewis, 2018) that obtained demographic data from respondents regarding their age, gender and gross monthly household income. This information was analysed to provide descriptive statistics and insights into the study's sample.

4.7. Data Gathering Process

4.7.1 Ethical Clearance

The researcher obtained ethical clearance from the Gordon Institute of Business School (GIBS) ethical committee before distributing and inviting participants to complete the survey questionnaire and gathering data for analysis (see Appendix A for the Ethics approval letter). Once ethical clearance was obtained, the survey questionnaire was prepared for the pre-test. This self-administered questionnaire was a convenient, cost-effective data collection method and eliminated any interviewer biases (Saunders et al., 2016). However, online self-administered questionnaires have limitations as respondents cannot clarify any misinterpretation of questions with the researcher or individual conducting the survey (Saunders et al., 2016).

4.7.2 Pre-test

The pre-test aimed to clarify possible issues as respondents were asked to make comments. These questionnaires did not form part of the final data set. In addition, it is most likely that there is only one chance of collecting valid data from that specific respondent. Therefore, to improve the valid responses received, it is essential to plan and design the questionnaire carefully, be clear about the required data, ensure the format of the question is clear and logical, and conduct a pilot test (Saunders et al., 2016; Zikmund et al., 2013). It is prudent to conduct a pilot test and correct any shortcomings before conducting the actual survey questionnaire and data collection. It is much easier to make these modifications at the pilot stage than later requesting respondents to redo the questionnaire once the actual data collection has commenced (Saunders & Lewis, 2018).

The pre-test was distributed to twenty individuals who met the criteria for inclusion in the research, namely having experience browsing or searching for products/services online. Names of possible candidates were received from acquaintances who forwarded their contact details. The pilot test advised respondents of the purpose of the pre-test the questionnaire and requested them to provide feedback on whether the format, length, structure and content of the questionnaire were appropriate, including whether the questions were easily understood and they knew what was asked of them (Zikmund et al., 2013). The pilot test also helped establish whether the survey questionnaire administered via the online platform worked well from a technical aspect.

The pre-test produced a total of thirteen responses within the time limitation posed, all of whom had experienced OBT advertising, ranging between eighteen and forty-nine years of age. Overall, the feedback received was positive. Respondents indicated that the questionnaire took them between eight to twelve minutes to complete, within the anticipated time of between ten to fifteen minutes. The feedback identified some ambiguity regarding the description of OBT and the example provided, which was addressed by slightly modifying and rephrasing the description and the given example. Additionally, a summarised description of OBT was included at the beginning of each section that pertained to OBT. From the responses received through the pilot test, basic screening tests were done to check for any missing data, anomalies and outliers (Tabachnick & Fidell, 2007).

4.7.3 Final Data Collection

The actual survey questionnaire for the study was created, distributed and administered using Survey Monkey, an online tool. This method was selected as it often can deliver a higher response rate due to its accessibility (Chidlow et al., 2015) and can potentially reach respondents across geographical regions. An electronic link to the survey questionnaire was created and distributed to potential respondents. The primary data collection campaign entailed that the researcher distributes the electronic survey questionnaire link to professional networks, online community networks and social networks. The electronic link, inviting individuals to participate in this study, was circulated via email and electronic messages through online applications (WhatsApp, Telegram, LinkedIn and Facebook). The data collection period ran over three weeks, and the researcher sent follow-up reminders each week after the initial invite.

The survey informed potential respondents about the research, its purpose, their voluntary participation and that all data gathered would be analysed and reported anonymously, ensuring their anonymity. Respondents who answered no to any of the screening questions were excluded from the study and analysis. Only participants that answered yes to all the screening questions were included in the study. Respondents were allowed to complete the survey questionnaire at their leisure with their responses captured and retrieved via the same online tool. This process helped facilitate the data collection in a structured and systematic method for analysis. The researcher followed netiquette guidelines (Saunders & Lewis, 2018) when distributing the survey questionnaire and throughout the data collection process to ensure that participants would not feel offended or that their rights would be infringed in the process.

4.8. Data Analysis Approach

The responses gathered from the survey questionnaire were extracted in a data table format from the online survey platform and exported into Microsoft Excel to begin the data analysis. In Microsoft Excel, the data was checked for completeness, ensuring no missing responses or anomalies and that all responses have answered yes to all the screen questions.

A total of 261 responses were collected, of which 229 responses qualified to participate in the study and for analysis. A total of 32 incomplete or invalid responses were excluded from the dataset. The researcher then numerically coded (see Appendix B) the responses into a data matrix format which was then statistically analysed and tested (Pallant, 2010), using IBM SPSS and SPSS Amos statistical software.

The data was analysed using descriptive statistics that summarised the characteristics and variables of the sample population into a concise and easy to interpret format (Zikmund et al., 2013). The descriptive analysis provided insights into the sample population and the different variables analysed in this study. The descriptive statistics included measures of frequency, central tendency and dispersion (Saunders & Lewis, 2018; Zikmund et al., 2013). It consisted of nominal, categorical and numerical data. The descriptive analysis was illustrated graphically, as well as in the form of tables and write-ups.

The next step entailed testing the validity and reliability of the responses and measurements scales. Factor analysis is done in this study to determine the measurement scales' validity and determine how well items load on a construct and whether the number of items in the scale can be condensed and grouped into smaller dimensions for statistical tests and analysis (Pallant, 2010). The factor analysis can be conducted through two main methods being Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) (Pallant, 2010). The EFA approach is generally utilised to explore and identify the interrelationship of a set of variables and its underlying factor structure, while CFA is used as a statistical technique to verify (confirm) the factor structure of extent and previously tested measurement scales (Pallant, 2010; Suhr, 2006). Although the study used existing and previously tested measurement scales, the scales were adapted from a 7-point Likert-type to a 5-point Likert-type scale, and the questions were slightly rephrased to be relevant to OBT; therefore, the EFA approach was selected to explore the data and determine how well the measurement scale items loaded and grouped together. For the EFA, the extraction method used was the principal axis factoring, and for the rotation method, it was the varimax rotation (Pallant, 2010).

The reliability and internal consistency were determined using Cronbach's alpha. A widely used measure to determine the reliability of measurement scales in research studies, especially when the scales contain multiple Likert-type questions. It determines how well the set of questions comprising the measurement scale group together and measure the same underlying construct (Pallant, 2010). The Cronbach's alpha was calculated for each scale to ensure its reliability and measured above the recommended 0.7 (Pallant, 2010). In cases where items in a particular scale have very low item-total correlations, it is recommended that the item may be omitted to improve the Cronbach alpha and reliability (Pallant, 2010).

The next step entailed the regression analysis, which included assessing the Pearson correlation between the independent and dependent variables, as the variables tested were continuous interval variables (Pallant, 2010). The correlation analysis determined the significance, strength and direction of the linear relationship between the variables (Pallant, 2010). The dataset was also analysed for any outliers that may skew the results of the test. This study used linear regression analysis to understand how much of the variation in the dependant variable could be attributed to the influence of the independent variables. The regression analysis was key in this study as it was utilised to test the hypotheses. In ascertaining how much consumers' knowledge of the phenomena influences their perceptions of OBT advertising, how their perceptions of OBT advertising influences their online shopping experience and satisfaction, and how their online shopping satisfaction amid OBT influences their subsequent shopping behaviour.

All underlying assumptions were tested for each statistical procedure when conducting the analysis, and all statistical tests were done at a 95% confidence level. The assumptions included checking that there was a linear relationship between the independent and dependent variables, no significant outliers, and no multicollinearity in the data. It also included checking that the regression standardised residuals resembled a normal distribution, which was accomplished by analysing the histogram charts, of the dependent variable, for each regression analysis done.

For this study, to ensure the accuracy of the statistical tests and given the time constraints of the study, the researcher obtained the services of a qualified professional statistician merely to oversee the statistical analysis. The services of the

statistician included and were limited to administering the statistical tests whilst the researcher conducted all analysis, interpretation, write-up and reporting of the results and findings in this study.

4.9. Quality Controls – Including Validity/Trustworthiness Criteria

The quality and credibility of a research study depend on how thoroughly and accurately the study was conducted and encompasses the entire research process. Validity and reliability are two crucial elements that provide quality and credibility in a research study. Validity refers to whether the research study appropriately and accurately measures what it intended to measure, ensuring the information gathered correctly addresses the research objectives and purpose, whilst reliability refers to the consistency and replication of the research methodology and its findings (Saunders et al., 2016; Walliman, 2011).

In this study, the researcher ensured all possible measures were taken throughout the research process to ensure its validity. The researcher conducted a thorough, however not exhaustive, review of the extant literature to ensure theoretical validity. Doing so allowed the researcher to correctly identify relevant key concepts and constructs regarding the study's objectives, understand the background of these concepts and constructs and work done in the field, including the evolution of the phenomena (Mouton & Marais, 1996; Welman et al., 2009). It also enabled the researcher to derive the conceptual framework in this study.

Construct validity refers to whether the measurement scale or construct appropriately and accurately measures what it intends to be measuring. In this study, to ensure construct validity, all the constructs used were obtained and verified through an extensive literature review, ensuring that they were relevant and accurately addressed the research objectives. All measurement scales used have been previously validated in the relevant field of OBT advertising, online consumer experience, satisfaction and shopping behaviour. Additionally, the results and findings of this research study were compared and analysed against the outcomes of previous research studies in the literature (Creswell, 2014). The items included in the measurement instrument were carefully considered and are linked to specific research outcomes and objectives, ensuring all concepts essential to answer the research questions and hypotheses are accurately measured (Kumar, 2014). Doing

so ensured that the data obtained from the survey questionnaire accurately measured the relationship and influence between the variables in this study. The researcher's supervisor examined the face and content validity of the survey questionnaire used in this study before it was distributed for data collection.

The measurement instrument used comprised of previously tested and reliable scales, with Cronbach's alpha equal to or above the recommended 0.7 (Pallant, 2010), ensuring the reliability and internal consistency of the research study's constructs measurement scales. Furthermore, statistical procedures such as Cronbach's alpha and exploratory factor analysis were also conducted on the responses and measurement scales to ensure their reliability and validity in the context of this study.

The researcher could not control for external factors that could have impacted how participants responded to the survey questionnaire; these include factors such as the participant's emotions, mood or attitude at the time of completing the survey and the context of their surroundings, environment or situation. Careful consideration was made to ensure the questionnaire was concise, specific and straightforward. As a result, the time required to complete the questionnaire correctly was kept as short as possible, approximately 10-15 minutes. Keeping the time short helped prevent fatigue when participants completed the questionnaire and helped ensure they answered accurately. The time required to complete the questionnaire was communicated upfront on the survey's cover letter. However, respondents could spend more time completing the questions if they wanted to as no time restriction was posed.

4.10. Ethics

In undertaking any research project, ethical considerations and conduct are essential components of the process. The researcher made certain that various measures and procedures were in place to ensure the integrity of this study and that ethical considerations and conduct were applied throughout the research process. As part of the process, ethical clearance was obtained from the Gordon Institute of Business School (GIBS) ethical committee (see Appendix A for the Ethics approval letter). The ethical application included the research design and methodology of the study and the survey questionnaire used for data collection. This process was to maintain

academic integrity, protect the rights of respondents, and ensure that no harm was done in the research process, particularly when engaging, obtaining, and using respondents' data. Throughout the research report to ensure academic integrity, the researcher refrained from any kinds of plagiarism. All ideas, concepts and thoughts presented in this study, including authors from the literature, were acknowledged using the appropriate and recommended referencing techniques (De Vos et al., 2011; Kumar, 2014; Walliman, 2011).

Another key component for ethical consideration and the integrity of a research project is the theoretical perspective of the study. The theoretical perspective is essential, as it establishes an understanding of the perspective and lens through which the research is analysed, including how the information was interpreted and evaluated (Walliman, 2011). The theoretical perspective underpinning this research study was the S-O-R framework, initially developed by Mehrabian and Russel in 1974, and had been widely used to study and explain consumer behaviour, including retail and online shopping research studies.

When conducting a research project, it is considered ethically appropriate to inform respondents that their participation is voluntary and request informed consent before participating in the study (De Vos et al., 2011; Kumar, 2014; Salkind, 2013). In this study, potential respondents were provided with an electronic link to the survey questionnaire; upon accessing this link, they were taken to a landing page with a cover letter. It informed them that their participation is voluntary, requesting their consent before accessing the questionnaire and notifying them that they have the option to opt-out and withdraw from the survey at any time.

In addition, the cover letter provided information on the nature of the study and contact details of the researcher and supervisor should participants require further information about the study or wish to verify its authenticity (De Vos et al., 2011; Kumar, 2014; Salkind, 2013). All participants were given assurance that their responses and details would remain anonymous, and no names of individuals would be requested. Only willing respondents were included in this study, and the data obtained was reported at an aggregated level only and stored without any identifiers. In conducting this research, no data or results were fabricated or reported unethically in any such way whatsoever. The information obtained was safely stored using data

storage devices and cloud storage applications, and it was also submitted to the academic institution.

All the details and information communicated on the cover letter of the survey questionnaire was accurate and truthful. All through the process, participants in this study were not misled in any way. All questions on the survey questionnaire were not ambiguous or deceiving in any way (De Vos et al., 2011; Walliman, 2011). The questions were adapted and formulated to ensure they were relevant, straightforward to understand, and easy to complete on various mobile devices. Furthermore, careful consideration was given to ensure that the questionnaire did not offend or upset any respondents and that it refrained from any sensitive topics, views or contexts (Kumar, 2014; Walliman, 2011).

Throughout this research study, the researcher's conduct was respectful and professional with all participants, ensuring integrity in all decision-making and behaviours. This research project was conducted at a Master's level. It is also important to note that the researcher is a novice and scholar to the research process. Therefore, to ensure the quality and validity of the research, including it being conducted ethically, the researcher's supervisor was consulted throughout and reviewed the process all the way through, providing guidance and support (De Vos et al., 2011). In addition, the assistance of a qualified professional statistician was utilised in the research process to ensure the accuracy and validity of the statistical tests conducted, given the time constraints of this study.

4.11. Limitations

The non-probability and purposive sampling techniques were a limitation to this study as participants may not represent the entire target population. The cross-sectional time horizon was another limitation, as the findings of this research study indicate participants' responses as at a point in time or "snapshot", and these responses can change over time. In addition, this quantitative study collected data from respondents using a survey questionnaire consisting of closed-ended questions, with a limited number of options, from which respondents could choose a response closest to their views or perceptions. These closed-ended questions can often lack the ability to reflect respondents views or perceptions adequately and accurately, as compared to open-ended questions, which enable respondents to express their views or

perceptions fully. Furthermore, this research study focused on online consumers in South Africa and may limit its applicability in other markets as their online shopping behaviour and perceptions may differ.

The researcher is not an experienced researcher, and therefore hesitance may have jeopardised the confidence of the execution of the research. Nevertheless, the topic was of interest and therefore, the researcher remained curious about the outcome and remained enthusiastic about the topic. Also, the researcher had spent enough time to ensure that the literature review was thorough, that the best scales were considered for inclusion in the questionnaire, and regular contact with the supervisor kept the research process going according to plan.

Chapter 5: Results

5.1. Introduction

This chapter presents and explains the results from the investigation of this study and the research methodology outlined in the previous chapter. As discussed in Chapter 3, this research study aimed to determine the influence of OBT on consumers' online shopping experiences, their online satisfaction, and subsequent online shopping behaviour (attending to online shoppers' purchase intentions having experienced OBT adverts, their acceptance or avoidance of OBT adverts, and their continued use of online shopping in the future). The study acknowledged factors related to the effectiveness of OBT as a phenomenon, namely consumers' knowledge of personalised ads, the perceived benefits of OBT ads, personalisation, privacy concerns and perceived intrusiveness. This chapter presents the results following the statistical analysis conducted on the data gathered from the respondents who completed the online survey questionnaire, which was constructed to address the study's objectives, the research questions, and test the hypotheses.

The profile of the respondents is introduced first by detailing the responses received, also describing the sample's characteristics that were important in this research. The validity and reliability testing of the measurements scales used in the study are presented, followed by the tests required to test the study's hypotheses and statistical results to answer the research questions. All tests and analyses conducted in this study were performed at a 95% confidence level, which is a widely adopted confidence level used in many quantitative research studies.

5.2. Descriptive Statistics: Profile of the Respondents

The online survey questionnaire data collection produced a total of 261 responses, which were extracted from Survey Monkey in a data table format and exported into Microsoft Excel for analysis. It was examined for completeness, checking for any missing data or anomalies, and that all respondents have answered yes to all the screening questions, therefore being eligible for inclusion in the sample. Of the 261 responses received, seven participants answered no to one of the screening questions, which presented the minimum criteria for inclusion in the study and were, therefore, excluded from the dataset and analysis.

As part of the data integrity check and the completeness of each response received, the researcher analysed each column (question) of the dataset to identify any missing information. This resulted in a further 25 respondents being removed from the dataset as they failed to complete certain mandatory questions, hence resulting in missing data. Mostly, these respondents began the questionnaire and, without answering any questions, stopped, or completed as much as two-thirds and then stopped. Because respondents were comforted that they could withdraw anytime without penalty, this was accepted. An analysis of the initial 261 responses resulted in a total of 32 respondents (12.3%) being disqualified from inclusion in the sample, resulting in a final sample size of 229 (87.7%) respondents that could be analysed, which met the minimum required sample size of N =200, for this study.

5.2.1. The Gender Profile of Respondents

From the sample of 229 respondents, 116 (50.7%) were female, 107 (46.7%) were male, and six respondents (2.6%) chose not to disclose their gender, which indicated a fair gender representation within the sample.

5.2.2. Age of Respondents

Table 5.1 presents a breakdown of the age category selected by respondents. The majority of the participants, n = 203 (88.6%), were aged from 18 to 49 years old, and the remaining were 50 years and older, with two respondents choosing not to disclose their age. The largest age category was the 30 - 39 year category, namely n = 107 (46.7%). The skewness in the number of respondents in this category may be attributable to the convenience and snowball sampling methods utilised in this study, as the researcher falls within the same age category and the convenience and snowball sampling procedures started with the researcher's acquaintances. However, the skewness was not regarded as a concern, as there was a reasonable number of responses across the different age categories that would typically shop or browse online.

Table 5. 1: Age category of respondents

Age Category	Number of respondents	% of total	Cumulative % of total
18 - 29 years	40	17.5%	17.5%
30 - 39 years	107	46.7%	64.2%
40 - 49 years	56	24.5%	88.6%
50 - 59 years	19	8.3%	96.9%
60 years or older	5	2.2%	99.1%
Prefer not to say	2	0.9%	100.0%
Total	229	100.0%	

Source: Author's own based on the outputs from SPSS (2021)

5.2.3. Household Income Level of Respondents

Table 5.2 presents the frequency breakdown of the gross monthly household income selected by the respondents. Of the sample, 25 (10.9%) respondents' monthly household income was less than R20 000. The largest monthly household income category represented in this sample, was the R40 000 - R69 999 category (n = 54/ 23.6%), followed by the R20 000 - R39 999 category (n = 44/ 19.2%), and the R70 000 - R99 999 category (n = 40/ 17.5%). Therefore, a total of 163 (71.2%) respondents' gross monthly household income was below R100 000 per month, and the majority of the respondents fell in the middle to upper-income groups. Four respondents preferred not to disclose their monthly household income.

Table 5. 2: Gross monthly household income category of respondents

Monthly Household Income Category	Number of respondents	% of total	Cumulative % of total
R0 - R19 999	25	10.9%	10.9%
R20 000 - R39 999	44	19.2%	30.1%
R40 000 - R69 999	54	23.6%	53.7%
R70 000 - R99 999	40	17.5%	71.2%
R100 000 - R149 999	26	11.4%	82.5%
R150 000 or more	36	15.7%	98.3%
Prefer not to say	4	1.7%	100.0%
Total	229	100.0%	

Source: Author's own based on the outputs from SPSS (2021)

5.2.4. Respondents Online Shopping

Figure 5.1 visually illustrates how often the respondents shop online in a month. The majority of the respondents, n = 191 (83.4%), indicated that they sometimes, often or always shop online (in a month). The minority, n = 34 (14.8%), admitted that they rarely shop online in a month, while a total of four (1.7%) individuals disclosed that they never shop online in a month. The latter was not considered a concern and were retained in the sample, as all the respondents had indicated that they browse (do searches) for products or services online, monthly (see Figure 5.2).

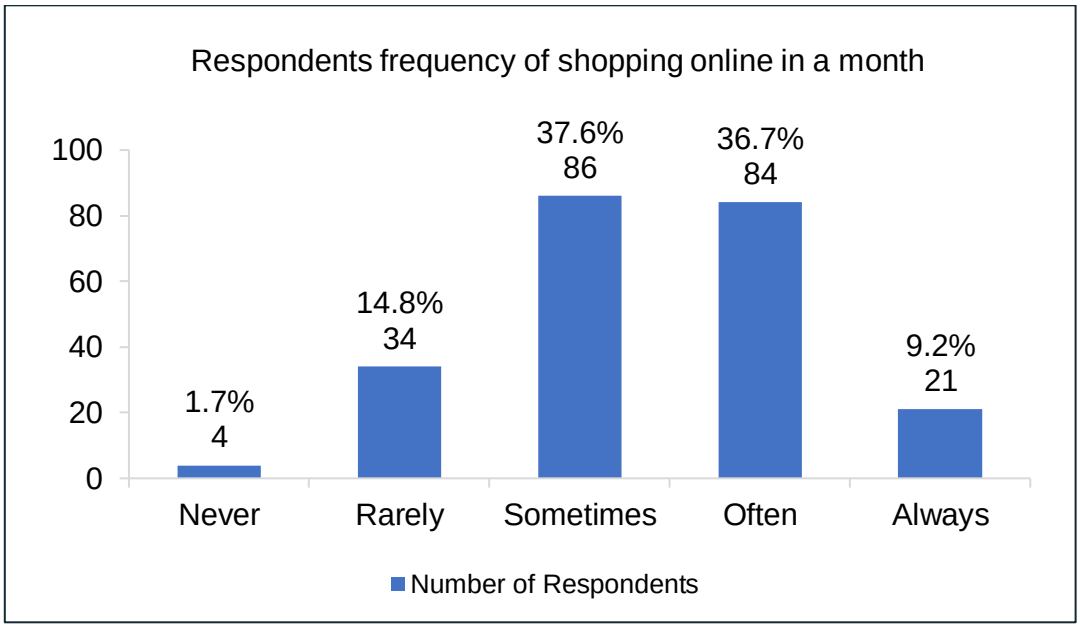

Figure 5. 1: Respondents frequency of shopping online in a month

Source: Author's own based on the outputs from SPSS (2021)

5.2.5. Frequency of Browsing Online for Products or Services

Respondents also had to indicate how frequently they browse (do searches) for products or services online in a month to determine their familiarity and experience with online shopping, including the potential to have been exposed to OBT advertising tactics before. The results are displayed in Figure 5.2: the majority of the respondents, n = 178 (77.7%), indicated that they often or always browsed (do searches) online in a month (50.6% and 27.1% of the sample, respectively); n = 43 (18.8%) of the respondents revealed they sometimes browsed (do searches) online, while only n = 8 (3.5%) rarely browsed (do searches) online in a month. It was concluded that respondents in the sample were largely familiar with online shopping

and/or online browsing for products or services, and would have been exposed to OBT advertising tactics.

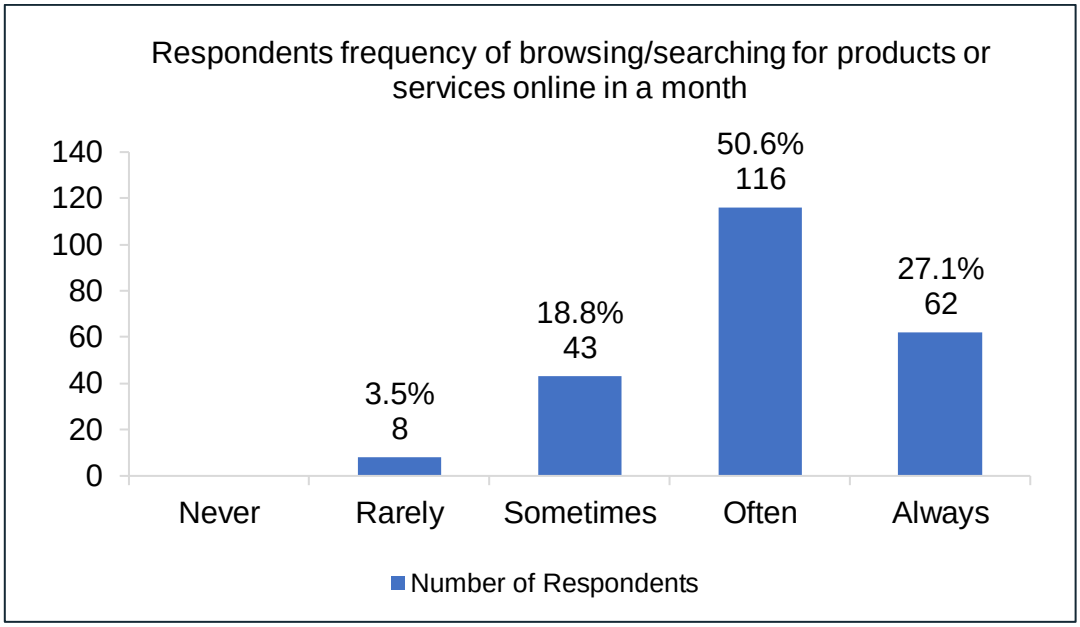

Figure 5. 2: Respondents frequency of browsing/searching for products or services online in a month

Source: Author's own based on the outputs from SPSS (2021)

5.2.6. Frequency of Accepting Cookies when Prompted

The sample's respondents provided information regarding how frequent they accepted cookies before gaining access to online information when prompted to do so. The information analysed assisted in understanding respondents' online browsing behaviour in consenting organisations to track and use their data. The results are displayed in Figure 5.3, showing that most of the respondents, n = 204/ 89.1% (29.3%, 38.4% and 21.4% respectively), always, often or sometimes accepted cookies when prompted. The minority (n = 17/ 7.4%) rarely accepted cookies, while n = 8/ 3.5% of the respondents never accepted cookies when prompted. Therefore, most of the respondents in this sample accepted cookies before gaining access to online information when prompted to do so, hence giving consent to organisations to track and use their data.

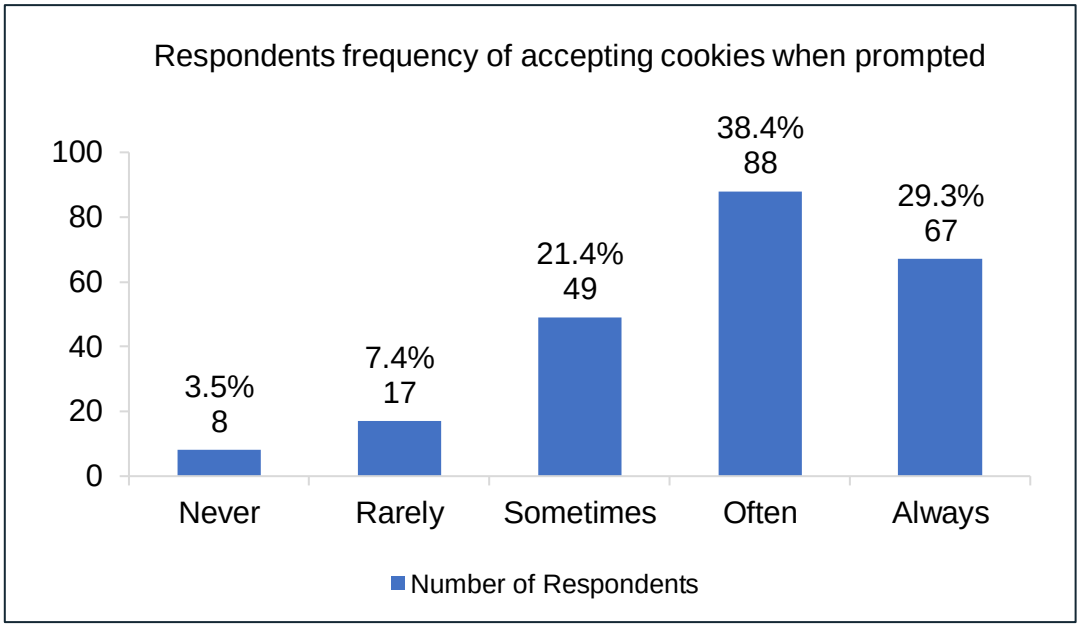

Figure 5. 3: Respondents frequency of accepting cookies when prompted

Source: Author's own based on the outputs from SPSS (2021)

5.2.7. Approval of Data Policy/Protection Statements

The respondents further provided insights regarding how often they read and approve data policy or protection statements when browsing online. The information obtained assisted in further understanding respondents' online browsing behaviour, giving informed consent to organisations to use their data, and how frequently they read through these statements. Figure 5.4 visually illustrates that a total of 119 (52.0%) of the respondents either never (2.6.2%) or rarely (25.8%) read and approve data policy or protection statements when browsing online. A further 43 (18.8%) respondents admitted that they sometimes read and approve data policy or protection statements when browsing online, while 48 (20.9%) respondents indicated they often do. Of the overall sample, n = 19 (8.3%) always read and approved data policy or protection statements when browsing online. Therefore, more or less an equal percentage of respondents do, and do not, read and approve companies' policy and protection statements, consenting to tracking their online activity and personal information.

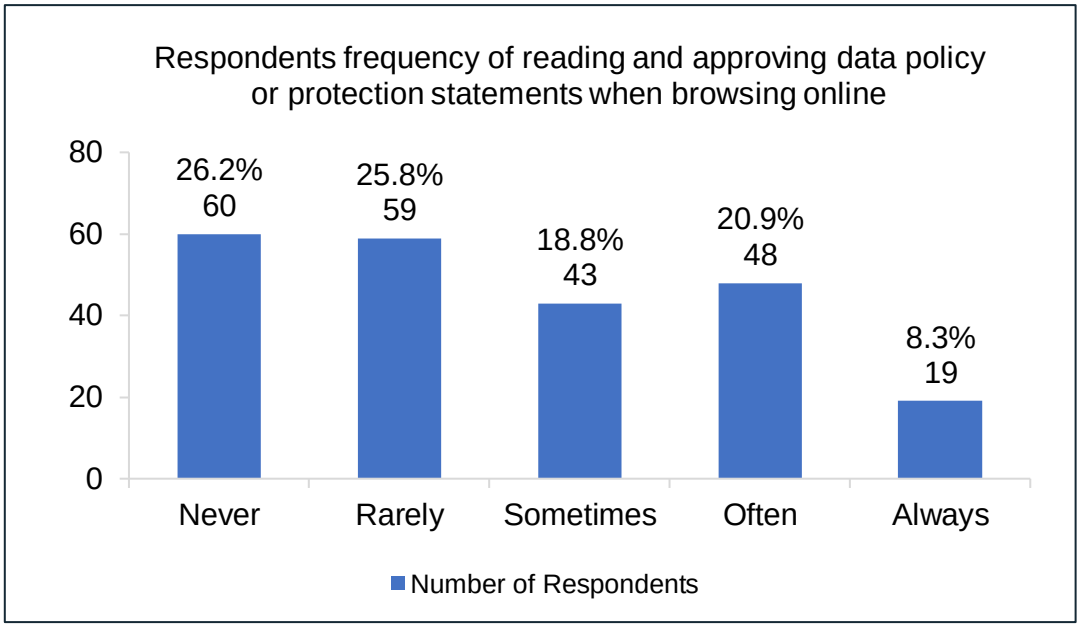

Figure 5. 4: Respondents frequency of reading and approving data policy or protection statements when browsing online

Source: Author's own based on the outputs from SPSS (2021)

5.3. Factor Analysis - Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is often conducted in research to explore the data, test the constructs' validity and determine whether the number of items in the data can be grouped into smaller meaningful subsets to produce different measurable factors (Pallant, 2010). The EFA allowed the researcher to identify items that were poor indicators, not measuring the construct. These items could then be excluded from any further analysis. The EFA extraction method used was the Principal Axis Factoring (PAF), and the rotation method used was varimax rotation (Pallant, 2010). PAF was selected as it does not make any distributional assumptions. The sample size of N = 229 was suitable to conduct EFA, being above the suggested minimum of 150 responses (Pallant, 2010; Tabachnick & Fidell, 2007). However, before commencing with EFA, each section was assessed and tested separately to assess suitability for factor analysis.

The correlation matrix was examined to ensure that correlations coefficients are equal to or above the recommended 0.3 (Hair et al., 2010; Pallant, 2010) to ensure reasonable factorability. Next, the KMO and Bartlett's Test was analysed to ensure the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was above the recommended 0.6 and Bartlett's Test of Sphericity was statistically significant (sig. <

0.05) (Pallant, 2010; Tabachnick & Fidell, 2007); indicating the factorability of the correlation matrix and its suitability for factor analysis. The anti-image matrix was also analysed to ensure that the diagonals, the measures of sampling adequacy (MSA), are above 0.5, which is generally acceptable. In addition, the communalities were evaluated to ensure they were above the recommended 0.3; items lower than the recommended did not fit well with the other items and were excluded to improve the scale (Pallant, 2010). Thereafter, the total variance explained was examined to determine the number of factors based on the Eigenvalue rule, specifying a value greater than 1. The results from the EFA for the different sections are discussed below:

5.3.1. Section B: Consumers' Knowledge of Personalised Adverts

Section B initially consisted of six items measuring consumers' knowledge of personalised adverts. One item (question B6) was omitted from the analysis because it was a weak item and did not fit well with the other items (the communality extraction measured 0.16, which was less than the recommended 0.3) (Pallant, 2010). The remaining items were then analysed, and the correlation matrix highlighted that all items measured above the recommended 0.3. The KMO measure of sampling adequacy was 0.9, exceeding the recommended 0.6, and Bartlett's test of sphericity was statistically significant at $p < 0.000$ (where $p \leq 0.05$), thus, supporting the factorability of the correlation matrix.

All the MSA diagonal values of the anti-image correlation matrix were above 0.86, and the communalities at extraction ranged between 0.60 and 0.82, exceeding the recommended 0.3. Given the overall results of these indicators, the factor analysis was considered appropriate for this section, producing one factor with an initial Eigenvalue above 1, that loaded all five items on this factor, explaining 77.4% of the variance in the data. The item loadings for this factor ranged between 0.77 and 0.90, and because only one factor was extracted, the solution could not be rotated. See Appendix C.1 for details regarding the EFA for section B: consumers' perceptions of OBT advertising.

5.3.2. Section C: Consumers' Perceptions of OBT Advertising

Section C comprised of 20 items measuring consumers' perceptions of OBT advertising, based on four measurement scales, namely perceived benefits (four items); perceived personalisation (five items); perceived privacy concerns (five items); and perceived intrusiveness (six items). For the EFA, items from perceived privacy concerns and intrusiveness were reverse-scored so that consumers' perceptions were all measured in a positive direction. The correlation matrix indicated that the correlations coefficients for all the items were above 0.3. The KMO measure of sampling adequacy was 0.93, and Bartlett's test of sphericity was statistically significant at $p < 0.000$ (where $p \leq 0.05$), indicating that the correlation matrix was suitable for factor analysis. All the MSA diagonal values of the anti-image correlation matrix were above 0.91, and the communalities at extraction ranged between 0.40 and 0.89. Factor analysis was therefore considered appropriate for this section.

Factor analysis revealed three factors, with initial Eigenvalues above 1, cumulatively explaining 78.2% of the variance in the data before rotation and 74.6% after rotation. All items from the measurement scales "perceived benefits" and "personalisation" loaded on factor one, all five items regarding "perceived privacy concerns" loaded on factor two, and the last factor included all six items of "perceived intrusiveness". The rotated factor matrix revealed that all item loadings within these factors were above 0.56.

This study initially anticipated four factors for this section as per the measurement scales used. However, participants did not discriminate when responding to the questions relating to the perceived benefits and personalisation of OBT advertising. Therefore, considering the results from the factor analysis and the reliability analysis in section 5.4, three empirical factors were subsequently used for hypotheses testing rather than the theoretical factors. Factor one, which integrated two theoretical factors, was labelled: perceived benefits and personalisation. See Appendix C.2 for details regarding the EFA for section C, consumers' knowledge of personalised adverts.

5.3.3. Section D: Consumers' Perceived Level of Control

Section D comprised of four items measuring consumers' perceived level of control over their personal information. The correlation matrix highlighted that all items measured above 0.3, suggesting reasonable factorability. The KMO measure of sampling adequacy was 0.85, and Bartlett's test of sphericity was statistically significant at $p < 0.000$ (hence $p \leq 0.05$), indicating that the correlation matrix was appropriate for factor analyses.

All the MSA diagonal values of the anti-image correlation matrix were above 0.81, and the communalities at extraction ranged between 0.60 and 0.90. Given the overall results of these indicators, the factor analysis was considered appropriate for this section. The factor analysis revealed one factor with an initial Eigenvalue above 1, with all five items loading on this factor, explaining 84.2% of the variance in the data. The item loadings for this factor ranged between 0.78 and 0.98, and only one factor was extracted, and therefore the factor solution could not be rotated. See Appendix C.3 for details regarding the EFA for section D, consumers' perceived level of control.

5.3.4. Section E: Consumers' Online Shopping Experience and Satisfaction

Section E comprised of six items measuring consumers' online shopping experience and satisfaction incorporating two measurement scales: online shopping experience (three items) and online shopping satisfaction (three items). The correlation matrix highlighted that all items measured above 0.3, suggesting reasonable factorability. The KMO measure of sampling adequacy was 0.88, and Bartlett's test of sphericity was statistically significant at $p < 0.000$ (hence $p \leq 0.05$), indicating that the correlation matrix was appropriate for factor analyses.

All the MSA diagonal values of the anti-image correlation matrix were above 0.84, and the communalities at extraction ranged between 0.42 and 0.83. Given the overall results of these indicators, the factor analysis was considered appropriate for this section. One factor was extracted with an initial Eigenvalue above 1, incorporating all six items on this factor, explaining 74.6% of the variance in the data. The item loadings for this factor ranged between 0.65 and 0.91. As only one factor was extracted, it could not be rotated.

This study initially anticipated two factors for this section as per the measurement scales used. However, respondents did not discriminate when responding to the questions relating to their online shopping experience and related satisfaction. Although the factor analysis produced only one empirical factor, this study proceeded with the two theoretical factors arguing that each scale measured different aspects, namely attitudes and perceptions of consumers' online shopping, as well as their satisfaction with online shopping (an emotion). Furthermore, it was necessary to measure and analyse these two constructs separately to address the research objectives, questions, and hypotheses. In deciding to proceed with the two theoretical factors separately, their reliabilities were tested and analysed using the Cronbach's alpha measure (see section 5.4). See Appendix C.4 for details regarding the EFA for section E, consumers' online shopping experience and satisfaction.

5.3.5. Section F: Consumers' Subsequent Shopping Behaviour

Section F comprised of 15 items measuring consumers' subsequent shopping behaviour, integrating four measurement scales, namely OBT purchase intentions (three items); OBT acceptance (four items); OBT avoidance (five items); and continuance intention of online shopping (three items). For the EFA, items from OBT avoidance were reverse-scored so that consumers' subsequent shopping behaviour were all measured in a positive direction, hence avoiding confusion. The correlation matrix indicated that all the items' correlations coefficients were above 0.3, suggesting reasonable factorability. The KMO measure of sampling adequacy was 0.89, and Bartlett's test of sphericity was statistically significant at $p < 0.000$ (hence $p \leq 0.05$), indicating that the correlation matrix was suitable for factor analyses.

All the MSA diagonal values of the anti-image correlation matrix were above 0.73, and the communalities at extraction ranged between 0.46 and 0.91. Given the overall results of these indicators, the factor analysis was considered appropriate for this section. The factor analysis produced three factors with initial Eigenvalues above 1, cumulatively explaining 78.9% of the variance in the data before rotation, and 74.2% after rotation. All items from the measurement scales "OBT purchase intentions" and "OBT acceptance" assimilated on factor one; all five items regarding "OBT avoidance" loaded on factor two, and the last factor included all three items regarding "continuance intention" of online shopping. The rotated factor matrix revealed that all item loadings on these factors were above 0.61.

This study initially anticipated four factors for this section as per the measurement scales used. However, respondents did not discriminate when responding to the questions relating to "OBT purchase intentions" and "OBT acceptance". Therefore, considering the results from the factor analysis and the reliability analysis presented in section 5.4, the three empirical factors were instead used in all further analyses and hypotheses testing, with factor one labelled "OBT ad purchase intentions and acceptance". See Appendix C.5 for details regarding the EFA for section F, consumers' subsequent shopping behaviour.

5.4. Reliabilities (Cronbach's Alpha Measurements)

The reliability of each measurement scale in the study was determined using the Cronbach's alpha test, which ascertained the internal consistency between the items measured in each scale. The Cronbach's alpha for all theoretical measurement scales and the empirical factors that emerged through the EFA was computed and assessed. For any scale or factor to be considered reliable, the Cronbach's alpha derived should have exceeded the recommended 0.7 (Pallant, 2010).

Table 5.3 summarises the Cronbach's alpha test results for all the theoretical measurement scales in this study. In addition, table 5.4 summarises the test results for all the relevant empirical factors that emerged through the EFA. The Cronbach's alpha test results for all theoretical measurement scales and the empirical factors were above the recommended 0.7 and were, therefore, considered reliable and acceptable in this study.

Table 5. 3: Summary of the Cronbach's alpha (α) tests results for all theoretical measurement scales

Section	Scale	Number of items	Cronbach's alpha (α)
Section B	Consumers' knowledge of personalised adverts	6	0.88
Section C	Perceived benefits of OBT	4	0.94
Section C	Perceived personalisation of OBT	5	0.91
Section C	Perceived privacy concerns of OBT	5	0.94
Section C	Perceived intrusiveness of OBT	6	0.95
Section D	Consumers' perceived level of control	4	0.94
Section E	Consumers' online shopping experience	3	0.84
Section E	Consumers' online shopping satisfaction	3	0.93
Section F	OBT purchase intentions	3	0.95
Section F	OBT acceptance	4	0.95
Section F	OBT avoidance	5	0.92
Section F	Continuance intention of online shopping	3	0.93

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 4: Summary of the Cronbach's alpha (α) tests results for the emerged empirical factors

Section	Scale	Number of items	Cronbach's alpha (α)
Section B	Consumers' knowledge of personalised adverts*	5	0.93
Section C	Perceived benefits and personalisation	9	0.95
Section F	OBT purchase intentions and acceptance	7	0.94
*Consumers' knowledge of personalised adverts after removing question B6 (a weak item)			

Source: Author's own based on the outputs from SPSS (2021)

5.5. Research Hypotheses and Conceptual Model Revised

In considering the results from the EFA and reliability analysis, the research study's hypotheses and theoretical conceptual model were slightly revised and updated, respecting literature. Figure 5.6 illustrates the revised model. This study initially hypothesised four constructs relating to consumers perceptions of OBT advertising. However, this was revised post the EFA and reliability analysis as three empirical factors emerged. These empirical factors were then used in all further analyses and hypotheses testing. The two separate theoretical constructs relating to the perceived benefits and the perceived personalisation were grouped into one factor, named

"perceived benefits and personalisation". Likewise, the constructs relating to consumers' subsequent shopping behaviour were revised and updated based on the outcome of the EFA and reliability analysis. The theoretical constructs relating to OBT purchase intentions and OBT acceptance were grouped into one factor, named "OBT purchase intentions and acceptance", the construct concerning "OBT avoidance" was analysed separately on its own. The study's revised hypotheses and theoretical conceptual model are presented next.

5.5.1. Research Questions and Hypotheses - Revised

Research question 1: How do consumers' knowledge of personalised adverts influence their perceptions of different dimensions of OBT advertising, their online shopping experiences, and online shopping satisfaction?

Hypothesis 1.1: Consumers' knowledge of personalised adverts has a significant influence on their perceptions of OBT advertising, specifically their:
H1.1a: …perception of the benefits and personalisation of OBT advertising
H1.1b: …privacy concerns concerning OBT advertising
H1.1c: …perception of the intrusiveness of OBT advertising

Hypothesis 1.2: Consumers' perceptions of OBT advertising has a significant influence on their online shopping experience, specifically:
H1.2a: …the benefits and personalisation associated with OBT advertising
H1.2b: …privacy concerns concerning OBT advertising
H1.2c: …perceived intrusiveness of OBT advertising

Hypothesis 1.3: Consumers' online shopping experience amid OBT significantly influences their online shopping satisfaction

Research question 2: How does consumers' perceived level of control (informed consent) influence their perceptions of OBT advertising?

Hypothesis 2: Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of OBT advertising, more specifically:
H2.1a: …their perceptions of the benefits and personalisation of OBT advertising

H2.1b: …their privacy concerns concerning OBT advertising
H2.1c: …their perceptions of the intrusiveness of OBT advertising

Research question 3: How does consumers' satisfaction with online shopping amid OBT impact their subsequent shopping behaviour?

Hypothesis 3: Consumers' online shopping satisfaction amid OBT significantly influences:
H3.1: …their purchase intentions of OBT advertised commodities and acceptance of OBT advertising
H3.2: …their avoidance of OBT advertising
H3.3: …their continuation with online shopping

The revised theoretical conceptual model is presented next (see Figure 5.5).

5.5.2. Theoretical Conceptual Model - Revised

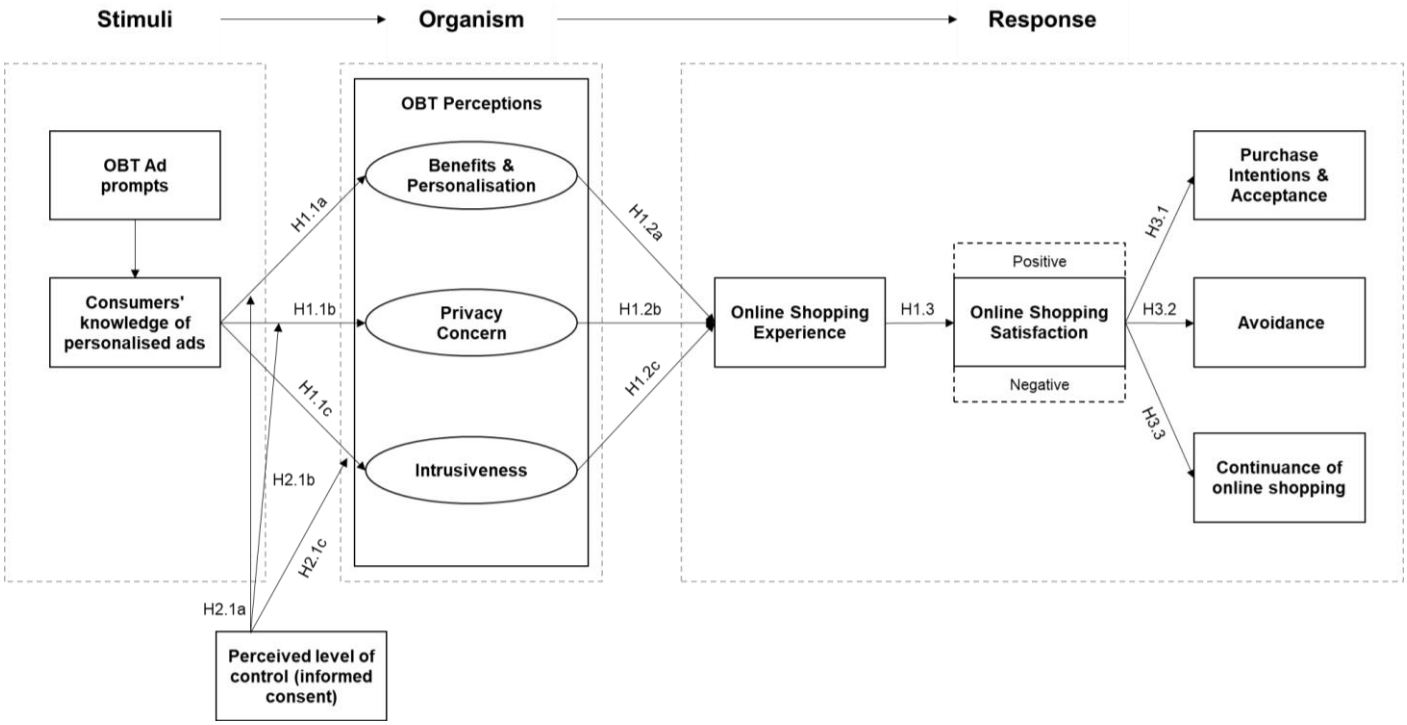

Figure 5. 5: Theoretical Conceptual Model Revised
Source: Author's own (2021)

5.6. Results: Hypotheses Testing

Table 5.5 summarises the mean and standard deviation for all measurement scales that were relevant for the hypotheses testing. The sample comprised of 229 respondents.

Table 5. 5: Summary of the mean and standard deviation for all measurement scales tested

Scale	Mean	Std. Deviation
Knowledge of Personalised Adverts (Knowledge)	4.28	0.60
Perceived Ad Benefits and Personalisation (Benef.Pers)	3.09	0.88
Privacy Concern (PrivConcern)	4.00	0.98
Perceived Intrusiveness (Intrusive)	3.61	1.06
Perceived Level of Control (Control)	2.61	1.15
Online Experience (OnlineExp)	3.74	0.72
Online Satisfaction (OnlineSat)	3.91	0.69
OBT Ad Purchase Intentions and Acceptance (Intent.Accept)	2.74	0.95
OBT Advertising Avoidance (Avoidance)	3.33	1.03
Continuance of Online Shopping (Continuance)	3.92	0.82

Source: Author's own based on the outputs from SPSS (2021)

5.6.1. Results: Hypothesis 1.1

Hypothesis 1.1 pertained to respondents' knowledge of personalised adverts and its influence on their perceptions of OBT advertising, specifically, consumers' perceived benefits and personalisation associated with OBT advertising (H1.1a), privacy concerns concerning OBT advertising (H1.1b) and perceived intrusiveness of OBT advertising (H1.1c). This hypothesis is also linked to hypothesis 2.1 (see section 5.6.4) in the study, which tested the moderating effect of perceived level of control (informed consent) on this relationship.

A moderated regression analysis was conducted for each dependent (outcome) variable to evaluate and test both of these hypotheses. The independent variable was knowledge of personalised adverts, while the dependent (outcome) variables were perceived benefits and personalisation, privacy concerns and perceived intrusiveness. In this study, the data was mean centred to test the hypothesis. The regression standardised residuals histogram chart was examined to identify possible outliers in the data, and it resembled a normal distribution. The collinearity statistics

for each variable was analysed to ensure there was no multicollinearity in the data. See Appendix C.6 for details regarding the regression analysis.

The analysis and results for each sub hypothesis are presented next. The results presented explain hypothesis 1.1, the main effect without the interaction of the moderating variable. Hypothesis 2.1 (see section 5.6.4) presents the results explaining the effect of the moderating variable interaction (perceived level of control) on the relationship between consumers' knowledge of personalised adverts and their perceptions of OBT advertising.

H1.1a: *Consumers' knowledge of personalised adverts has a significant influence on their perception of the benefits and personalisation of OBT advertising.*

Table 5.6, the model summary, indicates that the main effect (model 1) explained 0.5% (R Square) and -0.4% (Adjusted R Square) of the variance, and Table 5.7, the ANOVA output, indicates that the model was not significant, with the p-value above 0.050 (p = 0.564). Furthermore, in Table 5.8, the coefficients output in the regression analysis indicated that respondents' knowledge of personalised adverts was not a significant predictor of the perceived benefits and personalisation of OBT advertising (p-value = 0.285, hence above 0.05, therefore not statistically significant). The results from the regression analysis indicated that respondents' knowledge of personalised adverts does not significantly influence their perception of the benefits and personalisation of OBT advertising.

In conclusion, H1.1a is not supported. See Appendix C.6 for details regarding the regression analysis.

Table 5. 6: Model summary from the regression analysis for research hypothesis 1.1a

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	.071[a]	0.005	-0.004	0.884	0.005	0.574	2	226	0.564
2	.189[b]	0.036	0.023	0.872	0.031	7.201	1	225	0.008

a. Predictors: (Constant), MC_Control, MC_Knowledge
b. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction
c. Dependent Variable: Benef.Pers

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 7: ANOVA output from the regression analysis for research hypothesis 1.1a

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.897	2	0.449	0.574	.564[b]
	Residual	176.546	226	0.781		
	Total	177.444	228			
2	Regression	6.372	3	2.124	2.794	.041[c]
	Residual	171.072	225	0.760		
	Total	177.444	228			

a. Dependent Variable: Benef.Pers
b. Predictors: (Constant), MC_Control, MC_Knowledge
c. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 8: Coefficients output from the regression analysis for research hypothesis 1.1a

Coefficients[a]												
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.090	0.058		52.910	0.000	2.975	3.205					
	MC_Knowledge	0.106	0.099	0.072	1.071	0.285	-0.089	0.301	0.070	0.071	0.071	0.970	1.031
	MC_Control	0.008	0.052	0.010	0.149	0.882	-0.094	0.110	-0.003	0.010	0.010	0.970	1.031
2	(Constant)	3.119	0.059		53.202	0.000	3.004	3.235					
	MC_Knowledge	0.147	0.099	0.100	1.487	0.139	-0.048	0.342	0.070	0.099	0.097	0.947	1.056
	MC_Control	0.016	0.051	0.021	0.309	0.757	-0.085	0.117	-0.003	0.021	0.020	0.966	1.035
	Interaction	0.244	0.091	0.178	2.683	0.008	0.065	0.423	0.163	0.176	0.176	0.975	1.025

a. Dependent Variable: Benef.Pers

Source: Author's own based on the outputs from SPSS (2021)

H1.1b: *Consumers' knowledge of personalised adverts has a significant influence on their privacy concerns concerning OBT advertising.*

Table 5.9, the model summary, indicates that the main effect (model 1) explained 9.3% (R Square) and 8.5% (Adjusted R Square) of the variance. Table 5.10, the ANOVA output, indicates that the model was significant, with a p-value less than 0.050 (p = 0.000). However, in Table 5.11, the coefficients output in the regression analysis indicated that respondents' knowledge of personalised adverts was not a significant predictor of privacy concerns concerning OBT advertising, with the p-value = 0.576, above 0.050, therefore not significant. The regression analysis, therefore, indicated that respondents' knowledge of personalised adverts does not significantly influence their privacy concerns concerning OBT advertising.

In conclusion, H1.1b is not supported. See Appendix C.6 for details regarding the regression analysis.

Table 5. 9: Model summary from the regression analysis for research hypothesis 1.1b

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	.304[a]	0.093	0.085	0.937	0.093	11.527	2	226	0.000
2	.318[b]	0.101	0.089	0.934	0.009	2.204	1	225	0.139

a. Predictors: (Constant), MC_Control, MC_Knowledge
b. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction
c. Dependent Variable: PrivConcern

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 10: ANOVA output from the regression analysis for research hypothesis 1.1b

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.220	2	10.110	11.527	.000[b]
	Residual	198.220	226	0.877		
	Total	218.440	228			
2	Regression	22.143	3	7.381	8.460	.000[c]
	Residual	196.297	225	0.872		
	Total	218.440	228			

a. Dependent Variable: PrivConcern
b. Predictors: (Constant), MC_Control, MC_Knowledge
c. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 11: Coefficients output from the regression analysis for research hypothesis 1.1b

Coefficients[a]													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.001	0.062		64.648	0.000	3.879	4.123					
	MC_Knowledge	0.059	0.105	0.036	0.560	0.576	-0.148	0.266	0.087	0.037	0.035	0.970	1.031
	MC_Control	-0.252	0.055	-0.296	-4.599	0.000	-0.360	-0.144	-0.302	-0.293	-0.291	0.970	1.031
2	(Constant)	3.984	0.063		63.427	0.000	3.860	4.107					
	MC_Knowledge	0.034	0.106	0.021	0.325	0.745	-0.174	0.243	0.087	0.022	0.021	0.947	1.056
	MC_Control	-0.257	0.055	-0.302	-4.691	0.000	-0.365	-0.149	-0.302	-0.298	-0.296	0.966	1.035
	Interaction	-0.145	0.097	-0.095	-1.484	0.139	-0.337	0.047	-0.088	-0.098	-0.094	0.975	1.025

a. Dependent Variable: PrivConcern

Source: Author's own based on the outputs from SPSS (2021)

H1.1c: *Consumers' knowledge of personalised adverts has a significant influence on their perception of the intrusiveness of OBT advertising.*

Table 5.12, the model summary, indicates that the main effect (model 1) explained 6.0% (R Square) and 5.1% (Adjusted R Square) of the variance and Table 5.13, the

ANOVA output, highlights that the model was significant, with the p-value less than 0.050 (p = 0.001). However, in Table 5.14, the coefficients output in the regression analysis indicated that respondents' knowledge of personalised adverts was not a significant predictor of privacy concerns concerning OBT advertising, with the p-value = 0.918, above 0.050, therefore not statistically significant. The results from the regression analysis indicated that respondents' knowledge of personalised adverts does not significantly influence their perception of the intrusiveness of OBT advertising.

Therefore, H1.1c is not supported. See Appendix C.6 for details regarding the regression analysis.

Table 5. 12: Model summary from the regression analysis for research hypothesis 1.1c

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	.244[a]	0.060	0.051	1.032	0.060	7.162	2	226	0.001
2	.279[b]	0.078	0.066	1.024	0.018	4.479	1	225	0.035

a. Predictors: (Constant), MC_Control, MC_Knowledge
b. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction
c. Dependent Variable: Intrusive

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 13: ANOVA output from the regression analysis for research hypothesis 1.1c

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.262	2	7.631	7.162	.001[b]
	Residual	240.786	226	1.065		
	Total	256.048	228			
2	Regression	19.962	3	6.654	6.342	.000[c]
	Residual	236.086	225	1.049		
	Total	256.048	228			

a. Dependent Variable: Intrusive
b. Predictors: (Constant), MC_Control, MC_Knowledge
c. Predictors: (Constant), MC_Control, MC_Knowledge, Interaction

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 14: Coefficients output from the regression analysis for research hypothesis 1.1c

Coefficients[a]													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.614	0.068		52.977	0.000	3.479	3.748					
	MC_Knowledge	0.012	0.116	0.007	0.103	0.918	-0.216	0.240	0.049	0.007	0.007	0.970	1.031
	MC_Control	-0.224	0.060	-0.243	-3.708	0.000	-0.343	-0.105	-0.244	-0.239	-0.239	0.970	1.031
2	(Constant)	3.587	0.069		52.071	0.000	3.451	3.722					
	MC_Knowledge	-0.026	0.116	-0.015	-0.224	0.823	-0.255	0.203	0.049	-0.015	-0.014	0.947	1.056
	MC_Control	-0.232	0.060	-0.251	-3.855	0.000	-0.350	-0.113	-0.244	-0.249	-0.247	0.966	1.035
	Interaction	-0.226	0.107	-0.137	-2.116	0.035	-0.437	-0.016	-0.127	-0.140	-0.135	0.975	1.025

a. Dependent Variable: Intrusive

Source: Author's own based on the outputs from SPSS (2021)

5.6.2. Results: Hypothesis 1.2

Hypothesis 1.2 pertained to consumers' perceptions of OBT advertising and its influence on their online shopping experience, specifically, consumers' perceived benefits and personalisation associated with OBT advertising (H1.2a), privacy concerns concerning OBT advertising (H1.2b) and perceived intrusiveness of OBT advertising (H1.2c).

A multiple regression analysis was conducted in this study to test this hypothesis, as it had multiple independent variables and one dependent variable. The independent variables were perceived benefits and personalisation, privacy concerns and perceived intrusiveness, while the dependent (outcome) variable was the online shopping experience.

The dependent variable, online shopping experience, had a mean and standard deviation of M = 3.74 and SD = 0.72, respectively. All of the independent variables had a linear relationship with the dependent variable, online shopping experience. The regression standardised residuals histogram chart was examined to ensure there were no outliers in the data, and it resembled a normal distribution. Furthermore, the collinearity statistics for each variable was analysed to ensure that no multicollinearity existed in the data. Table 5.15 indicates that in the overall model summary, all independent variables jointly explained 15.1% (R Square) of the variance in respondents' online shopping experience, and 14.0% (Adjusted R Square) when corrected for any positively-biased estimation in the sample. Table 5.16 presents the ANOVA output from the regression analysis, indicating that the

model was significant, with p = 0.000, which is less than 0.050 (F(3, 225) = 13.322). The analysis and results for each sub hypothesis are presented next.

Table 5. 15: Model summary from the regression analysis for research hypothesis 1.2

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388[a]	0.151	0.140	0.669

a. Predictors: (Constant), Intrusive, Benef.Pers, PrivConcern
b. Dependent Variable: OnlineExp

Source: Author's own based on the outputs from SPSS (2021)

Table 5. 16: ANOVA output from the regression analysis for research hypothesis 1.2

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.864	3	5.955	13.322	.000[b]
	Residual	100.573	225	0.447		
	Total	118.438	228			

a. Dependent Variable: OnlineExp
b. Predictors: (Constant), Intrusive, Benef.Pers, PrivConcern

Source: Author's own based on the outputs from SPSS (2021)

H1.2a: *Consumers' perceptions of the benefits and personalisation associated with OBT advertising has a significant influence on their online shopping experience.*

The mean and standard deviation for respondents' perceptions of the benefits and personalisation of OBT advertising was M = 3.09 and SD = 0.88, respectively. The Pearson's correlation coefficient revealed a moderate positive and significant linear relationship (r = 0.353, p = 0.000) between respondents' perceptions of the benefits and personalisation of OBT advertising, and their online shopping experience. The collinearity statistics shown in Table 5.17 indicated that the VIF value of 1.268 was below the recommended cut-off of ten, and the tolerance value of 0.789 was above the recommended 0.1 (Pallant, 2010). Therefore, indicating there was no multicollinearity in the data.

Table 5.17 indicates that the perceived benefits and personalisation of OBT advertising (independent variable) is a significant predictor of respondents' online shopping experience (dependent variable), with the unstandardised coefficient beta

equal to 0.220 and the p-value = 0.000, which is less than 0.050, therefore statistically significant. The results from the regression analysis indicated that respondents perceived benefits and personalisation associated with OBT advertising positively and that it significantly influences their online shopping experience.

In conclusion, H1.2a is supported. See Appendix C.7 for details regarding the regression analysis.

Table 5. 17: Coefficients output from the regression analysis for research hypothesis 1.2

Coefficients[a]													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.402	0.307		11.071	0.000	2.797	4.008					
	Benef.Pers	0.220	0.057	0.270	3.899	0.000	0.109	0.332	0.353	0.252	0.240	0.789	1.268
	PrivConcern	0.057	0.070	0.078	0.823	0.412	-0.080	0.194	-0.180	0.055	0.051	0.423	2.362
	Intrusive	-0.159	0.069	-0.234	-2.313	0.022	-0.295	-0.024	-0.298	-0.152	-0.142	0.369	2.713

a. Dependent Variable: OnlineExp

Source: Author's own based on the outputs from SPSS (2021)

H1.2b: *Consumers' privacy concerns concerning OBT advertising has a significant influence on their online shopping experience.*

The mean and standard deviation for respondents privacy concerns was M = 4.00 and SD = 0.98, respectively. The Pearson's correlation coefficient revealed a weak negative and significant linear relationship (r = -0.180, p = 0.003) between respondents' privacy concerns concerning OBT advertising and their online shopping experience. The collinearity statistics in Table 5.17 showed that the VIF value of 2.362 was below the recommended cut-off of ten and the tolerance value of 0.423 was above the recommended 0.1 (Pallant, 2010), indicating there was no multicollinearity in the data.

Table 5.17 indicates that although privacy concerns (independent variable) correlate with online shopping experience (dependent variable), it is not a significant predictor. The unstandardised coefficient beta equals 0.057, and the p-value = 0.412, hence above 0.050, and not statistically significant. The results from the regression analysis indicated that respondents' privacy concerns concerning OBT advertising do not significantly influence their online shopping experience.

In conclusion, H1.2b is not supported. See Appendix C.7 for details regarding the regression analysis

H1.2c: *Consumers' perceived intrusiveness of OBT advertising has a significant influence on their online shopping experience.*

The mean and standard deviation for respondents perceived intrusiveness was M =3.61 and SD = 1.06, respectively. The Pearson's correlation coefficient revealed a weak negative and significant linear relationship (r = -0.298, p = 0.000) between respondents' perceived intrusiveness of OBT advertising and their online shopping experience. The collinearity statistics in Table 5.17 showed that the VIF value of 2.713 was below the recommended cut-off of ten and the tolerance value of 0.369 was above the recommended 0.1 (Pallant, 2010). Therefore, indicating there was no multicollinearity in the data.

Table 5.17 indicates that respondents' perceived intrusiveness of OBT advertising (independent variable) is a significant predictor of their online shopping experience (dependent variable), with the unstandardised coefficient beta equal to -0.159 and the p-value = 0.022, that is less than 0.050, therefore statistically significant. The results from the regression analysis indicated that respondents' perceived intrusiveness of OBT advertising negatively and that it significantly influences their online shopping experience.

In conclusion, H1.2c is supported. See Appendix C.7 for details regarding the regression analysis.

5.6.3. Results: Hypothesis 1.3

Hypothesis 1.3 pertained to consumers' online shopping experience amid OBT and the influence on their online shopping satisfaction, involving a regression analysis. The independent variable was online shopping experience, and the dependent (outcome) variable was online shopping satisfaction. The mean and standard deviation for respondents online shopping experience was M =3.74 and SD = 0.72, respectively, whilst the figures for online shopping satisfaction, was M = 3.91 and SD = 0.69, respectively. The Pearson's correlation coefficient revealed a strong positive

and significant linear relationship (r = 0.809, p = 0.000) between respondents' online shopping experience and satisfaction. The regression standardised residuals histogram chart was examined to detect possible outliers in the data, and it resembled a normal distribution.

The regression analysis results indicated that in the model, respondents' online shopping experience explained 65.5% (R Square) of the variance in their online shopping satisfaction, and 65.4% (Adjusted R Square) when corrected for any positively-biased estimation in the sample. The ANOVA output in the regression analysis revealed that the model was significant, with the p-value = p = 0.000, which is less than 0.050 (F(1, 227) = 431.175). Furthermore, the coefficients output in the regression analysis indicated that the online shopping experience (independent variable) is a significant predictor of online shopping satisfaction (dependent variable), with the unstandardised coefficients beta equal to 0.770 and the p-value = 0.000, which is less than 0.050, and therefore, statistically significant. The results from the regression analysis indicated that respondents' online shopping experience positively and significantly influences their online shopping satisfaction.

In conclusion, H1.3 is supported. See Appendix C.8 for details regarding the regression analysis.

5.6.4. Results: Hypothesis 2.1

Hypothesis 2.1 pertained to consumers' perceived level of control (informed consent) and its moderating influence on the relationship between consumers' knowledge of personalised adverts and their perceptions of OBT advertising, more specifically, the perceived benefits and personalisation associated with OBT advertising (H2.1a); privacy concerns concerning OBT advertising (H2.1b); and perceived intrusiveness of OBT advertising (H2.1c). This hypothesis builds on hypothesis 1.1 (see section 5.6.1) in the study. Moderated regression analysis was used to test this hypothesis.

A moderator refers to a variable that modifies the relationships between the independent and dependant variables when present or introduced; the presence of a moderating variable can alter the strength or direction of the relationship between these variables. The interaction of a moderating variable attempts to explain the

variation in the relationship due to the presence of the moderator variable. In this study, perceived level of control was the moderating variable that was tested to modify the relationship between respondents' knowledge of personalised adverts and their perceptions of OBT advertising. See Appendix C.6 and C.9 for details regarding the moderated regression analysis. The analysis and results for each sub hypothesis explaining the effect of the moderating variable interaction are presented next.

H2.1a: *Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of the benefits and personalisation of OBT advertising.*

In the moderated regression analysis, the dependent (outcome) variable was perceived benefits and personalisation, and the independent variable was knowledge of personalised adverts. The moderating variable was the perceived level of control.

Table 5.6 (see section 5.6.1, research hypothesis 1.1), the model summary, indicates that with the interaction effect, model 2 explained 3.6% (R Square), and 2.3% (Adjusted R Square) of the variance, with a 3.1% change in R Square that was significant with the p-value less than 0.050 ($p = 0.008$). In Table 5.7, the ANOVA output indicates that model 2 was significant, with a p-value less than 0.050 ($p = 0.041$). Furthermore, in Table 5.8, the coefficients output in the regression analysis for model 2 indicated that the interaction was significant, with the p-value = 0.008, hence less than 0.05, and therefore statistically significant. However, the mean centred independent variable (knowledge of personalised adverts) and the moderating variable (perceived level of control) by themselves were not significant, as the p-value was greater than 0.05.

The results from the analysis indicated that perceived level of control significantly moderated the relationship between respondents' knowledge of personalised adverts and the perceived benefits and personalisation of OBT advertising.

Therefore, H2.1a is supported.

Figure 5.6 illustrates the interaction between knowledge of personalised adverts and the perceived level of control on perceived ad benefits and personalisation

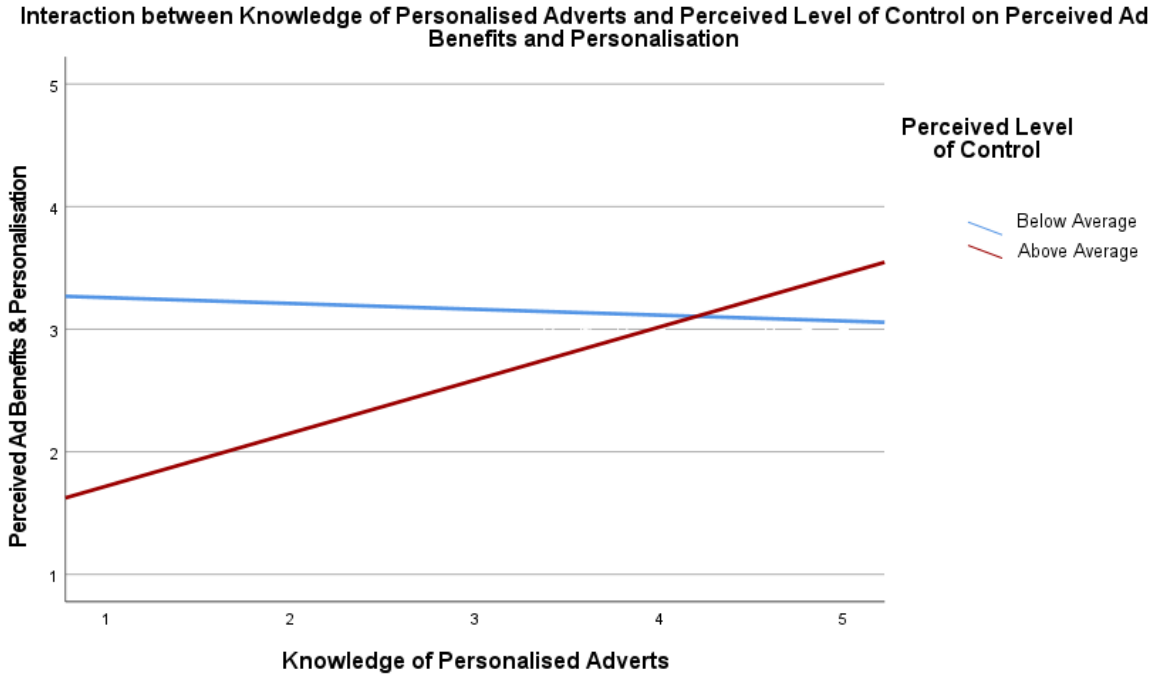

Figure 5. 6: The interaction between knowledge of personalised adverts and perceived level of control on perceived ad benefits and personalisation (Research hypothesis 2.1a)

Source: Author's own (2021)

H2.1b: *Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their privacy concerns concerning OBT advertising.*

In the moderated regression analysis conducted to test this hypothesis, the dependent (outcome) variable was privacy concerns, and the independent variable was knowledge of personalised adverts. The moderating variable was the perceived level of control.

Table 5.9 (see section 5.6.1 research hypothesis 1.1), the model summary, indicates that with the interaction effect, model 2 explained 10.1% (R Square) and 8.9% (Adjusted R Square) of the variance, with a 0.9% change in R Square that was not significant with the p-value above 0.050 (p = 0.139). In Table 5.10, the ANOVA output indicates that model 2 was significant, with a p-value less than 0.050 (p = 0.000). Furthermore, in Table 5.11, the coefficients output in the regression analysis for

model 2 indicated that the interaction was not statistically significant, with the p-value = 0.139, hence above 0.050, and therefore not significant. The mean centred independent variable (knowledge of personalised adverts) was also not significant; however, the moderating variable (perceived level of control) was significant as the p-value was less than 0.05.

The results indicated that perceived level of control did not significantly moderate the relationship between respondents' knowledge of personalised adverts and their privacy concerns concerning OBT advertising.

Therefore, H2.1b is not supported.

H2.1c: *Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of the intrusiveness of OBT advertising.*

In the moderated regression analysis testing this hypothesis, the dependent (outcome) variable was the perceived intrusiveness, and the independent variable was knowledge of personalised adverts. The moderating variable was the perceived level of control.

Table 5.12 (see section 5.6.1 research hypothesis 1.1), the model summary, indicates that with the interaction effect, model 2 explained 7.8% (R Square), and 6.6% (Adjusted R Square) of the variance, with a 1.8% change in R Square that was significant with the p-value less than 0.050 (p = 0.035). In Table 5.13, the ANOVA output highlights that model 2 was significant, with a p-value less than 0.050 (p = 0.000). Furthermore, in Table 5.14, the coefficients output in the regression analysis for model 2 indicates that the interaction was significant, with the p-value= 0.035, which is less than 0.050, and therefore statistically significant. The mean centred independent variable (knowledge of personalised adverts) was not significant. However, the moderating variable (perceived level of control) was significant as the p-value was less than 0.05.

The results indicated that perceived level of control significantly moderated the relationship between respondents' knowledge of personalised adverts and their perceived intrusiveness of OBT advertising.

Therefore, H2.1c is supported.

Figure 5.7 illustrates the interaction between knowledge of personalised adverts and the perceived level of control on the perceived intrusiveness of OBT advertising.

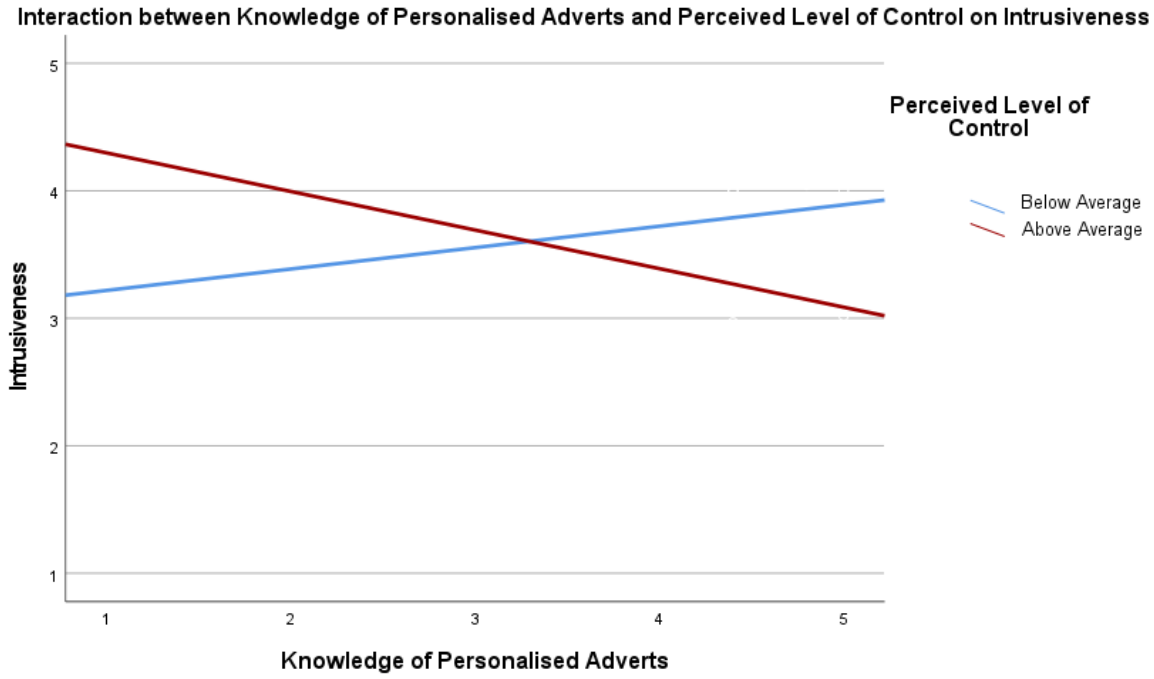

Figure 5. 7: The interaction between knowledge of personalised adverts and perceived level of control on perceived intrusiveness (Research hypothesis 2.1c)

Source: Author's own (2021)

5.6.5. Results: Hypothesis 3.1

Hypothesis 3.1 pertained to respondents' online shopping satisfaction amid OBT and their purchase intentions of OBT advertised commodities and acceptance of OBT advertising. A regression analysis was conducted to test this hypothesis. The independent variable was online shopping satisfaction, and the dependent (outcome) variable was OBT adverts purchase intentions and acceptance. The mean and standard deviation for respondents online shopping satisfaction was M = 3.91 and SD = 0.69, respectively, whilst the figures for their OBT ad purchase intentions and

acceptance was M = 2.74 and SD = 0.95, respectively. The regression standardised residuals histogram chart was examined to detect possible outliers in the data, and it resembled a normal distribution.

The regression analysis results indicated that in the model, respondents' online shopping satisfaction explained 12.8% (R Square) of the variance in OBT advert purchase intentions and acceptance, and 12.4% (Adjusted R Square) when corrected for any positively-biased estimation in the sample. The ANOVA output in the regression analysis revealed that the model was statistically significant, with the p-value being less than 0.05 ($F(1, 227) = 33.301$, $p = 0.000$). Furthermore, the coefficients output in the regression analysis indicated that online shopping satisfaction (independent variable) is a significant predictor of OBT ad purchase intentions and acceptance (dependent variable), with the unstandardised coefficient beta equal to 0.495 and the p-value = 0.000, that is less than 0.050, and therefore, statistically significant. The results from the regression analysis indicated that respondents' online shopping satisfaction positively and significantly influences their OBT ad purchase intentions and acceptance.

Therefore, H3.1 is supported. See Appendix C.10 for details regarding the regression analysis.

5.6.6. Results: Hypothesis 3.2

Hypothesis 3.2 pertained to respondents' online shopping satisfaction amid OBT and possible related avoidance of OBT advertising. A regression analysis was conducted to investigate this hypothesis. The independent variable was online shopping satisfaction, and the dependent (outcome) variable was OBT advertising avoidance. The mean and standard deviation for respondents' online shopping satisfaction was M = 3.91 and SD = 0.69, respectively, whilst the relevant figures for OBT advertising avoidance was M = 3.33 and SD = 1.03, respectively. The Pearson's correlation coefficient revealed a weak negative and significant linear relationship ($r = -0.287$, $p = 0.000$) between respondents' online shopping satisfaction and their OBT advertising avoidance. The regression standardised residuals histogram chart was examined to detect possible outliers in the data, and it resembled a normal distribution.

The regression analysis results indicated that in the model, respondents' online shopping satisfaction explained 8.2% (R Square) of the variance in OBT advertising avoidance, and 7.8% (Adjusted R Square) when corrected for any positively-biased estimation in the sample. The ANOVA output in the regression analysis revealed that the model was significant, with the p-value being less than 0.050 ($F(1, 227) = 20.403$, $p = 0.000$). The coefficients output in the regression analysis indicated that online shopping satisfaction (independent variable) is a significant predictor of OBT advertising avoidance (dependent variable), with the unstandardised coefficient beta equal to -0.432 and the p-value = 0.000, hence less than 0.05, therefore statistically significant. The results from the regression analysis hence indicated that respondents' online shopping satisfaction negatively and significantly influences their OBT advertising avoidance.

Therefore, H3.2 is supported. See Appendix C.11 for details regarding the regression analysis.

5.6.7. Results: Hypothesis 3.3

Hypothesis 3.3 pertained to respondents' online shopping satisfaction amid OBT and its influence on their continuation with online shopping. A regression analysis was conducted to investigate this hypothesis. The independent variable was online shopping satisfaction, and the dependent (outcome) variable was the continuance of online shopping. The mean and standard deviation for respondents' online shopping satisfaction was $M = 3.91$ and $SD = 0.69$, respectively, whilst the respective figures for online shopping were $M = 3.92$ and $SD = 0.82$, respectively. The Pearson's correlation coefficient revealed a strong positive and significant linear relationship ($r = 0.652$, $p = 0.000$) between respondents' online shopping satisfaction and their continuance of online shopping. The regression standardised residuals histogram chart was examined to detect possible outliers in the data, and it resembled a normal distribution.

The regression analysis results indicated that in the model, respondents' online shopping satisfaction explained 42.5% (R Square) of the variance in continuance of online shopping, and 42.3% (Adjusted R Square) when corrected for any positively-biased estimation in the sample. The ANOVA output in the regression analysis indicated that the model was significant, with the p-value being less than 0.05 (F(1,

227) = 167.831, p = 0.000). Furthermore, the coefficients output in the regression analysis indicated that online shopping satisfaction (independent variable) is a significant predictor of the continuance of online shopping (dependent variable), with the unstandardised coefficient beta equal to 0.776, and the p-value = 0.000, that is less than 0.05, and therefore statistically significant. The results from the regression analysis indicated that respondents' online shopping satisfaction positively and significantly influences their continuance of online shopping.

Therefore, H3.3 is supported. See Appendix C.12 for details regarding the regression analysis.

5.7. Conclusion

This chapter presented the results following the statistical analysis of the data that was collected from respondents who completed an online, structured questionnaire. It first presented the descriptive statistics and the sample's profile, which comprised 229 respondents and an almost equal representation of males and females. The chapter then presented the outcomes of the tests for the statistical validity and reliability of the measurements scales that were used in the study concluding with the statistical results for the testing of the research hypotheses. Table 5.18 presents a summary of the outcomes related to the testing of the hypotheses.

Table 5. 18: Summary of the research questions, hypotheses and outcomes tested in the study

Research Question	Hypothesis	Outcome
RQ1: Acknowledging factors related to OBT, namely the perceived benefits, personalisation, privacy concerns and intrusiveness, how does OBT influence consumers' online shopping experience and satisfaction?	**H1.1a:** Consumers' knowledge of personalised adverts have a significant influence on their perception of the benefits and personalisation of OBT advertising.	Not supported
	H1.1b: Consumers' knowledge of personalised adverts have a significant influence on their privacy concerns concerning OBT advertising.	Not supported
	H1.1c: Consumers' knowledge of personalised adverts have a significant influence on their perception of the intrusiveness of OBT advertising.	Not supported
	H1.2a: Consumers' perceptions of the benefits and personalisation associated with OBT advertising have a significant influence on their online shopping experience.	Supported
	H1.2b: Consumers' privacy concerns concerning OBT advertising have a significant influence on their online shopping experience.	Not supported
	H1.2c: Consumers' perceived intrusiveness of OBT advertising have a significant influence on their online shopping experience.	Supported
	H1.3: Consumers' online shopping experience amid OBT significantly influences their online shopping satisfaction.	Supported
RQ2: How does consumers' perceived level of control (informed consent) influence their perceptions of OBT advertising?	**H2.1a:** Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of the benefits and personalisation of OBT advertising	Supported
	H2.1b: Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their privacy concerns concerning OBT advertising	Not supported
	H2.1c: Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of the intrusiveness of OBT advertising	Supported
RQ3: How does consumers' satisfaction with online shopping amid OBT impact their subsequent shopping behaviour?	**H3.1:** Consumers' online shopping satisfaction amid OBT significantly influences their purchase intentions of OBT advertised commodities and acceptance of OBT advertising	Supported
	H3.2: Consumers' online shopping satisfaction amid OBT significantly influences their avoidance of OBT advertising	Supported
	H3.3: Consumers' online shopping satisfaction amid OBT significantly influences their continuation with online shopping	Supported

Source: Author's own (2021)

Chapter 6: Discussion of Results

6.1. Introduction

This chapter discusses the results of the study that are presented in the previous chapter acknowledging the purpose of the research, the research questions and hypotheses, and the literature that directed the study, as presented in Chapter 2. This chapter presents and discusses the sample of the study's profile, including their online shopping and browsing habits, followed by discussions of the results related to each of the hypotheses that were tested to answer the research questions. Furthermore, the chapter concludes with a summary of the findings and presents the final theoretical conceptual model with the tested hypotheses outcomes.

6.2. Sample Profile and their Online Shopping/Browsing Habits

The sample included data generated from 229 respondents, with a gender profile comprising 50.7% female and 46.7% male, with 2.6% choosing not to disclose their gender, hence a fair gender representation within the sample. The sample's age composition reflected 17.5% aged between 18-29 years; 46.7% aged between 30-39 years; 24.5% aged between 40-49 years; and the remaining being 50 years or older, with two respondents who did not disclose their age. The sample's age composition was somewhat skewed towards the 30-39 age category as it constituted almost half of the respondents (46.7%). However, the skewness was not regarded as a concern as there was a reasonable number of responses across the different age categories that would typically shop or browse online.

The majority of the sample's (71.2%) gross monthly household income was less than R100 000, hence representing the middle-income group, while the remaining participants earned R100 000 and more, with four respondents not disclosing their income information. The participant representation in the age and income level categories was somewhat skewed due to the non-probability sampling techniques used, which was unfortunately beyond the researcher's control because the study had to be completed with limited resources within a short period of time, before a specific deadline. Therefore, additional effort to recruit more respondents was not possible.

The majority of the respondents were knowledgeable about online shopping, with 83.4% of the sample indicating that they sometimes, often or always shop online in a month (37.6%, 36.7% and 9.2% of the sample, respectively). All the respondents indicated that they browse or search for products/services online in a month: responses ranged from rarely (3.5%) to sometimes, often and always (96.5%). Respondents in the sample were therefore familiar with and had experience with online shopping, including OBT advertising tactics (based on the qualifying questions to participate in the survey questionnaire). Respondents' adequate exposure to OBT personalised adverts and their frequency of shopping, browsing or searching for products/services online ensured that the sample met the criteria for inclusion in the study and would be able to contribute towards the research purpose, providing relevant and reliable data.

In order to understand respondents' online shopping behaviour and habits, they also provided information regarding how frequent they accepted cookies before gaining access to online information when prompted to do so. Accepting cookies when prompted gives consent for their online activity and data to be tracked, gathered and used. Most of the respondents (n = 204/ 89.1%) indicated that they accepted cookies when prompted, either sometimes, often or always (21.4%, 38.4% and 29.3% of the sample, respectively). The majority of the sample, therefore, accepted cookies when browsing online, giving consent to organisations to track and use their data. Additionally, 52% of the sample indicated that they either never or rarely read and approve data policy or protection statements when browsing online (26.2% and 25.8% of the sample, respectively). Therefore, most respondents in this study allow for their online activity and data to be tracked, gathered and used, while not necessarily being well informed about the data policy or protection statements, as they seldom or never read these statements when online.

6.3. Discussion of Research Question 1

RQ1: *Acknowledging factors related to OBT, namely the perceived benefits, personalisation, privacy concerns and intrusiveness, how does OBT influence consumers' online shopping experience and satisfaction?*

The study quantitatively tested three hypotheses to address this research question; a discussion of the data analysis results for each hypothesis is presented next.

6.3.1. Research Hypothesis 1.1

H1.1: *Consumers' knowledge of personalised adverts has a significant influence on their perceptions of OBT advertising, specifically their perception of the benefits and personalisation of OBT advertising (H1.1a), privacy concerns concerning OBT advertising (H1.1b) and perception of the intrusiveness of OBT advertising (H1.1c).*

The results from the regression analysis for each sub-hypothesis and outcome variable indicated that respondents' knowledge of personalised adverts did not significantly influence these outcome variables. Therefore, respondents' knowledge of personalised adverts did not significantly influence their perception of the benefits and personalisation of OBT advertising (H1.1a), their privacy concerns concerning OBT advertising (H1.1b) and their perception of the intrusiveness of OBT advertising (H1.1c), with knowledge of personalised adverts not being a significant predictor of these outcome variables.

Respondents' self-perceptions concerning their knowledge, awareness and understanding of the OBT advertising tactic were measured by means of "Agreement" scales that probed them regarding their awareness of being prompted with personalised information whilst online and that their online behaviour was being tracked to present personalised ads. It also probed whether they know that OBT has strings attached, requiring their online activity information in order to expose them to personalised ads. In addition, it surveyed respondents on whether they understood that personalisation technology is used to encourage them to buy the online advertised products/services and whether they can identify the persuasion tactics of OBT ads that are harmful (see Appendix B for the survey questionnaire). Respondents in this study, on average, agreed that they were knowledgeable about OBT personalised adverts and understood how the tactic worked and operated ($M = 4.28$/ $M_{Max} = 5$, $SD = \pm 0.60$). The details of the outcome variables are discussed in the following hypothesis (H1.2).

The hypothesis for this study, following the regression analysis, was not supported, concluding that respondents' knowledge and understanding of the OBT tactics, when exposed to OBT adverts (the stimuli), do not influence their perception of the advertising tactics. Although respondents indicated that they possess substantial

knowledge about OBT advertising and how it works, it does not significantly influence their perceptions of the tactic. These findings do not support previous research, hence do not confirm the view of Ham and Nelson (2016). The researchers indicate that consumers' knowledge and understanding of the mechanics related to OBT advertising are essential to shaping their perceptions of the tactic's desirability, benefits, and potential harm. The literature proposes that consumers possess knowledge (much or limited) about online persuasion tactics of marketers or advertisers, which helps them to adequately cope with the persuasion attempts and tactics (Ham, 2017; Ham & Nelson, 2016). Neither does it support the findings of Ham (2017) that found persuasion knowledge following OBT advertising was related to perceived benefits and risks associated with the tactic.

A possible reason why the hypothesis was not supported could be the contrast between respondents' subjective and objective persuasion knowledge. Their subjective persuasion knowledge refers to their self-assessment and confidence of their knowledge of the particular persuasion tactic and how it works, whilst objective persuasion knowledge implies the actual and accurate knowledge about a specific persuasion tactic and how it works (Ham & Nelson, 2016; Segijn & van Ooijen, 2021). Furthermore, the items probing respondents' knowledge of personalised adverts may have been technical for the respondents, as it did not only probe their general knowledge of OBT advertising, and may have contributed to the contrast of what they think they know versus what they actually know about OBT tactics and how it works.

6.3.2. Research Hypothesis 1.2

H1.2: *Consumers' perceptions of OBT advertising has a significant influence on their online shopping experience, specifically the perceived benefits and personalisation associated with OBT advertising (H1.2a), privacy concerns concerning OBT advertising (H1.2b) and perceived intrusiveness of OBT advertising (H1.2c).*

Hypothesis 1.2 was distinguished in terms of three sub-hypotheses, which all aimed to determine the influence and impact of respondents' perceptions of OBT advertising on their online shopping experience.

The results from the multiple regression analysis indicated that the model was statistically significant, and all three variables jointly influenced respondents' online

shopping experience. However, it explained only a small part of the variance in the data (Adjusted R Square = 14.0%) concerning respondents' online shopping experience. The multiple regression analysis revealed that respondents' privacy concerns concerning OBT advertising was not a significant predictor of their online shopping experience, whether meeting their expectations or not, and therefore, did not support hypothesis 1.2b. The perceived benefits and personalisation associated with OBT advertising (H1.2a) and perceived intrusiveness of OBT advertising (H1.2c) were significant predictors of respondents' online shopping experience, and therefore supported the respective hypotheses. A discussion of the results for each sub hypothesis is presented next.

H1.2a: *Consumers' perceived benefits and personalisation associated with OBT advertising has a significant influence on their online shopping experience.*

The regression analysis revealed that respondents perceived the benefits and personalisation associated with OBT advertising positively, and that it significantly influences their online shopping experience, with perceived benefits and personalisation being a significant predictor of this outcome variable. In analysing this hypothesis, the results of the EFA for the section regarding respondents' perceptions of OBT revealed that the initial two separate theoretical measurements scales (perceived OBT ad benefits and perceived OBT ad personalisation), obtained from extant literature and previous research studies, assimilated as a single empirical factor. This finding suggested that respondents did not discriminate when responding to the statements or questions relating to perceived OBT ad benefits and perceived OBT ad personalisation. Therefore, these scales were combined and analysed as a single construct that measured respondents' perceptions by asking the extent to which they agreed (or not) with a given statement concerning the benefits and personalisation associated with OBT advertising.

It probed respondents whether OBT personalised ads enhanced their information searches, making it faster and easier to search for products/services of interest, including whether it increased the effectiveness of their online information searches. In addition, it questioned respondents on whether OBT personalised ads recommendations matched their needs, are tailored to their situation and make them feel like a unique consumer (see Appendix B for the survey questionnaire). Overall,

on average, respondents in this study, the mean score calculated was slightly above average concerning the benefits and personalisation associated with the OBT advert presented (M = 3.09/ M_{Max} = 5, SD = ± 0.88). They were, therefore, only slightly positive concerning whether OBT personalised ads enhanced their information searches, making the process more effective and efficient or whether the ads are generally customised to their needs, making them feel like a unique consumer.

Regression analysis revealed that respondents' perceptions of the benefits and personalisation associated with OBT advertising positively and significantly influence and predict their online shopping experience. The more positive respondents perceived the benefits and personalisation of OBT advertising, the greater the likelihood of the online shopping experience meeting or exceeding their expectations and being more satisfied with their experience. Notably, the inverse is likely to occur when consumers' perception of the benefits and personalisation of OBT advertising are less useful or relevant, reducing the likelihood of the online shopping experience meeting or exceeding their expectations, being less satisfied with their experience. Therefore, marketers and advertisers need to ensure that consumers perceive OBT ads as beneficial and relevant, tailored to their needs and making their online shopping experience effective and convenient, likely exceeding their expectations of online shopping

The findings related to this hypothesis support the literature in that the benefits and personalisation associated with OBT advertising influence and assist in meeting consumers expectations of online shopping. Additionally, it supports the view of Aiolfi et al. (2021), who highlight that the perceived usefulness or benefits of OBT advertising refer to the degree to which consumers perceive the relevant OBT personalised advert will better assist them in achieving their desired outcome. In this case of this study, their desired expectations of online shopping. Consumers are motivated by and engage in online shopping because of utilitarian features like the perceived convenience, usefulness, and ease of use, enabling consumers to accomplish their tasks or goals efficiently and effectively, enhancing their shopping experience and outcomes (Monsuwé et al., 2004). Consumers, therefore, have expectations of these utilitarian features when shopping online. The benefits and personalisation associated with OBT advertising potentially address these utilitarian expectations of consumers as OBT personalised ads often offer them the right

products or services at an opportune time (Van Doorn & Hoekstra, 2013). In addition, it makes consumers' search for information on products or services convenient, easier and makes their task of shopping online more efficient (Van Doorn & Hoekstra, 2013). Furthermore, it presents an improved variety of relevant product or service offerings, a preference match and convenience (Aguirre et al., 2015).

H1.2b: *Consumers' privacy concerns concerning OBT advertising has a significant influence on their online shopping experience.*

The regression analysis revealed that respondents' privacy concerns concerning OBT advertising do not significantly influence their online shopping experience. The privacy concerns scale measured respondents' perceptions of OBT tactics by means of a five increment "Agreement" scale (M_{Max} = 5). It probed participants on whether they were bothered that their online activities and personal information were tracked and collected by websites/ applications; whether they were concerned that unauthorised access might be gained to their personal information and infringe their privacy (see Appendix B for the survey questionnaire). Overall, on average, respondents agreed that they were concerned about their online privacy (M = 4.00/ M_{Max} = 5, SD = ± 0.98), concerned that their online activities and personal information might be tracked and collected by unauthorised websites/applications. They were also concerned about the unauthorised access and use of their personal information and privacy.

Regression analysis revealed that respondents' privacy concerns concerning OBT advertising by itself did not significantly influence and predict their online shopping experience, therefore not supporting hypothesis 1.2b. Interestingly, although respondents were concerned about their privacy, it did not influence their online shopping experiences. This finding does not support existing literature that suggests that assurance of online shopping sites' privacy and security features are crucial. Additionally, consumers' attitudes and perceptions of online shopping are influenced and determined by trust (Al-Debei et al., 2015), which their privacy concerns are likely to impact. Previous research has indicated that the perceived risks (including privacy concerns) and benefits associated with online purchasing can influence consumers' attitudes towards online shopping and their intentions to use it (Soopramanien, 2011).

A possible reason why respondents' privacy concerns did not significantly influence their online shopping experience could be due to the risk versus benefit evaluation associated with online shopping. Especially considering the impact of the lockdowns brought about by the recent COVID-19 pandemic when consumers encountered strict rules and regulations concerning access to physical stores, and when online shopping provided an ideal solution to the challenges. Within a short period of time, many consumers started shopping online as it presented an enormous variety, much appreciated convenience, and an ideal alternative. In the course of this period, given the restricted options that consumers had to obtain essential commodities, their online shopping experiences most likely met and even exceeded their expectations regardless of any privacy concerns. The likelihood, therefore, is that their expectations may have been adjusted, considering the circumstances.

H1.2c: *The perceived intrusiveness of OBT advertising has a significant influence on consumers' online shopping experience.*

The regression analysis revealed that respondents perceived the possible intrusiveness of OBT advertising negatively, and that it significantly influences their online shopping experience; hence that perceived intrusiveness of OBT advertising is a significant predictor of their online shopping. Five increment "Agreement" scale statements probed respondents on whether they thought OBT advertising tactics were invasive (trespassing), intrusive (meddling in my affairs), interfering, disturbing, distracting and forced (see Appendix B for the survey questionnaire). Overall, on average, respondents in this study were inclined to agree that OBT advertising tactics are intrusive ($M = 3.61$/ $M_{Max} = 5$, $SD = \pm 1.06$).

Regression analysis revealed that respondents' perceived intrusiveness of OBT advertising negatively and significantly influences and predicts their online shopping experience. The more intrusive respondents perceived OBT ads, the less likely that their online shopping experience would meet or exceed their expectations. Notably, the inverse is likely to occur when consumers perceive OBT ads as less intrusive. Therefore, marketers and advertisers need to ensure that consumers do not experience OBT tactics as intrusive, so that their online shopping experiences would

meet or exceed their expectations, leaving them satisfied with online shopping so that they continue to shop online in the future.

The findings of this hypothesis support the views of previous research in that highly personalised OBT ads that consumers perceive as intrusive can have adverse outcomes (Van Doorn & Hoekstra, 2013), creating an unpleasant online shopping experience. Furthermore, it supports extant literature in that consumers' online shopping behaviour, and attitudes can be influenced when they feel vulnerable due to their experience with OBT tactics (Aguirre et al., 2015) or perceive the ads as highly intrusive (Van Doorn & Hoekstra, 2013). Highly personalised OBT adverts with greater levels of personalisation can increase consumers' feelings of intrusiveness, culminating in negative responses to the tactics. At the same time, any perceived benefits associated with OBT personalised ads are likely to be diminished when consumers experience heightened levels of intrusiveness due to the tactic (Van Doorn & Hoekstra, 2013). Overall, while highly personalised OBT adverts that accurately fit consumers' needs and preferences can lead to positive outcomes, they can also lead to heightened levels of perceived intrusiveness, with the opposite effect (Van Doorn & Hoekstra, 2013), as indicated in hypothesis 1.2 results.

Although the statistical analysis revealed that both the perceived benefits and personalisation associated with OBT advertising (H1.2a) and the perceived intrusiveness of OBT advertising (H1.2c) significantly influence and predict consumers' online shopping experience, the findings also suggest that it explains only a relatively small part of the variance. This finding indicates that, apart from these variables, other elements also come into play and contribute considerably in influencing consumers' online shopping experiences.

These other elements are likely to include utilitarian, hedonic and exogenous factors that motivate consumers to engage in online shopping (Childers et al., 2001; Monsuwé et al., 2004) and create their expectations of the online experience. In the context of online shopping, these factors all contribute to consumers' perceptions of the shopping medium, their decision to use it, and the evaluation of their shopping experience (Burke, 2002; Clemes et al., 2014; Monsuwé et al., 2004; Tong, 2010), either encouraging or discouraging online shopping. Pham and Ahammad (2017) highlighted that factors such as product information, ease of use, customisation,

ease of check-out, security assurance, order fulfilment, customer service responsiveness, and ease of return could significantly influence consumers' online shopping experience and overall satisfaction.

The results also indicate that while respondents revealed that they are concerned about OBT advertising tactics, particularly having privacy concerns and perceiving the ads as intrusive, their online shopping behaviours indicated that they do little to address these concerns. Results from this section of the survey questionnaire indicated that 89.1% of the respondents sometimes, often or always accepted cookies when prompted. In doing so, they provide consent for their information to be gathered, tracked and used. Furthermore, approximately half of the sample (52%) indicated that they either never or rarely read and approve data policy or protection statements when browsing online, indicating a form of negligence.

6.3.3. Research Hypothesis 1.3

H1.3: *Consumers' online shopping experience amid OBT significantly influences their online shopping satisfaction.*

This hypothesis pertained to the influence and impact that respondents' online shopping experiences can have on their overall online shopping satisfaction (positive or negative) to indicate whether positive confirmation of respondents' online shopping expectations influences their satisfaction with the shopping medium. The regression analysis outcomes indicated that respondents' online shopping experience positively and significantly influences their online shopping satisfaction, and that a user's online shopping experience is a significant predictor of their satisfaction.

The online shopping experience and satisfaction scales utilised five increment "Agreement" scales to measure respondents' satisfaction with their online shopping experience. It probed respondents to indicate whether their experiences were better than they had expected, met their expectations and whether their decision to shop online was a wise one (see Appendix B for the survey questionnaire).

Respondents in this study, on average, agreed that their online shopping experience met and even exceeded their expectations ($M = 3.74$/ $M_{Max} = 5$, $SD = 0.72$), that they

were satisfied and pleased with their experience (M = 3.91/ M_{Max} = 5, SD = ± 0.69), hence it was wise to shop online. Although respondents expressed concern about OBT advertising tactics, particularly having privacy concerns and being concerned about the perceived intrusiveness surrounding OBT adverts, their online shopping experiences still met their expectations, and they were satisfied with their experiences. This finding suggests that other influencing factors were relevant when respondents indicated whether their online shopping experience met their expectations, resulting in satisfaction with the experience

The regression analysis revealed that respondents' positive online shopping experience significantly influences their online satisfaction. The more online shopping meets and exceeds respondents' expectations, the more satisfied (positive confirmation) they are. Notably, the inverse is likely to occur when online shopping does not meet respondents' expectations, leaving them dissatisfied (negative satisfaction) with the shopping medium and likely reducing their continuance of online shopping. Therefore organisations should ensure that consumers' online shopping experiences meet and even exceed their expectations so that they are left satisfied with online shopping.

The statistical analysis revealed that online shopping experience significantly influences and predicts consumers' online satisfaction, and indicated that it explains a large amount of the variance in the data (Adjusted R Square = 65.4%) concerning OBT ad avoidance. This indicates that consumers' online shopping experience is essential in determining their satisfaction with online shopping, which stresses the importance of having a seamless and pleasant online shopping encounter. Therefore, the online shopping experience should address consumers' utilitarian requirements like convenience, usefulness, and ease of use, to enable them to accomplish their tasks or goals efficiently and effectively (Monsuwé et al., 2004). Addressing online shoppers' hedonic needs can further enhance their shopping experience and increase their overall online satisfaction (Monsuwé et al., 2004).

The findings furthermore support the views of Lin and Lekhawipat (2014), who highlight that consumers' online shopping experience can be a crucial driver of their online satisfaction, also admitting that various attributes may influence their online experiences and satisfaction with online shopping. Pham and Ahammad (2017)

caution that the entire online experience needs to be considered because elements in the pre-purchase, purchase, and post-purchase stages all significantly influence and contribute to consumers' online satisfaction. If consumers find their online shopping experiences positive, they will be more likely to be satisfied, develop a positive attitude towards online shopping and use it in the future (Monsuwé et al., 2004; Tong, 2010).

The findings also align with the expectation dis/confirmation paradigm (confirmation/ disconfirmation theory), which is widely used in various disciplines to assess user satisfaction (Bhattacherjee, 2001a, 2001b; Hsu & Lin, 2015; Oliver, 1980; Pham & Ahammad, 2017; Shankar et al., 2003). Whereby, consumers are either satisfied or dissatisfied, depending on whether the actual experience of the encounter confirms or disconfirms (positively or negatively) their expectations (Oliver, 1977, 1980). Consumers generally have expectations of a product or service, and then evaluate (compare) the eventual experience with the product or service against their expectations.

6.4. Discussion of Research Question 2

RQ2: *How does consumers' perceived level of control (informed consent) influence their perceptions of OBT advertising?*

One hypothesis is related to this research question. A discussion of the results pertaining to the testing of the hypothesis is presented next.

6.4.1. Research Hypothesis 2.1

H2.1: *Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of OBT advertising, specifically their perceptions of the benefits and personalisation of OBT advertising (H2.1a), their privacy concerns concerning OBT advertising (H2.1b) and their perceptions of the intrusiveness of OBT advertising (H2.1c).*

Hypothesis 2.1 was divided into three sub-hypotheses to test the moderating interaction and effect of perceived level of control on the relationship between

respondents' knowledge of personalised adverts and their perceptions of OBT advertising. This hypothesis tested the introduction of a moderating variable (perceived level of control) in terms of modifying or altering the strength or direction of the relationship between the specified variables.

The results indicated that respondents' perceived level of control significantly moderated the relationship between their knowledge of personalised adverts and the perceived benefits and personalisation of OBT advertising (H2.1a), as well as their perceived intrusiveness of OBT advertising (H2.1c). However, the moderating influence of perceived level of control was not significant in the relationship between respondents' knowledge of personalised adverts and their privacy concerns (H2.1b).

The perceived level of control scale implemented a five increment "Agreement" scale questioning respondents about their perceived level of control over their personal information when shopping online. It asked whether respondents believed they have control over who can track their online activities and which personal information is accessible to online websites and applications. It also probed whether respondents perceived they have control over how their personal information, obtained from their online activities, would be used, as well as whether they could use privacy controls to limit the personal information that is obtained (see Appendix B for the survey questionnaire).

Respondents in this study were relatively neutral concerning their control over the tracking of their online activities and information, what information could be obtained and how it would be used ($M = 2.61$/ $M_{Max} = 5$, $SD = 1.15$). Generally, participants seemed to feel that they had limited control of the dissemination of their online personal information and possessed limited capability to govern the access, use and dissemination of their personal information. This finding confirms the conclusions reached by Mpinganjira and Maduku (2019) that was also conducted in South Africa.

Through the regression analysis, it was revealed that respondents' perceived level of control was a significant moderator as proposed in H2.1a and H2.1c. Interestingly, the main effect, knowledge of personalised ads by itself, did not have a significant influence on these outcome variables (as indicated in section 6.3.1, when discussing hypothesis 1). However, with the introduction and presence of the moderating

variable (perceived level of control), the interaction is significant, specifically for the two outcome variables (perceived benefits and personalisation of OBT advertising (H2.1a), and perceived intrusiveness of OBT advertising (H2.1c). The analysis further revealed that perceived level of control had a significant relationship with privacy concerns and perceived intrusiveness, highlighting its importance and potential impact on the privacy concerns and perceived intrusiveness associated with OBT advertising.

The findings suggest that respondents highly regard having control over their personal information, its use and dissemination when thinking about OBT tactics, that it is likely more important to respondents than simply having knowledge about OBT adverts and how it works. Perceived level of control can, therefore, significantly impact how individuals perceive OBT advertising and embrace the tactics. Tucker (2014) indicates that when users are afforded more control over their personal data, the effectiveness and credibility of personalised adverts are enhanced, improving the likelihood of engaging with the ad. Consumers' concerns about the perceived lack of control over their personal information are problematic for them (Aiolfi et al., 2021; Boerman et al., 2017; McDonald & Cranor, 2010; Smit et al., 2014), causing apprehension about how they perceive the OBT tactics. Consumers' reactance to OBT advertising can occur when they perceive having a lack of control over their personal information or perceive OBT tactics as threatening their freedom of choice, being manipulative, or a risk. This may cause unfavourable reactions towards the tactic and persuasion attempts (Ham, 2017).

6.5. Discussion of Research Question 3

RQ3: *How does consumers' satisfaction with online shopping amid OBT impact their subsequent shopping behaviour?*

This research question aimed to understand whether respondents' satisfaction (positive or negative disconfirmation of expectations), derived from their online shopping experience, influences and impacts their subsequent shopping behaviour. It sought to determine whether respondents' online satisfaction influences their reactance to OBT ads and online shopping. Specifically, respondents' purchase intentions of OBT advertised commodities and acceptance of the advertising tactic, avoidance of OBT advertising, and the likelihood of continued online shopping in the

future. Three hypotheses were formulated based on literature to address this research question. A discussion of the data analysis results for each of the hypotheses is presented next.

6.5.1. Research Hypothesis 3.1

H3.1: *Consumers' online shopping satisfaction amid OBT significantly influences their purchase intentions of OBT advertised commodities and acceptance of OBT advertising.*

The regression analysis revealed that respondents' online shopping satisfaction positively, and significantly influences their OBT ad purchase intentions and acceptance of the advertising tactic. It also revealed that online shopping satisfaction was a significant predictor of OBT ad purchase intentions and the acceptance of the advertising tactic.

The results of the EFA for the section regarding respondents' subsequent shopping behaviour revealed that the initial two separate theoretical scales (OBT ad purchase intentions and OBT ad acceptance), derived from extant literature and previous research studies, merged to form one empirical factor. This finding indicated that respondents did not discriminate when responding to the statements or questions relating to OBT purchase intentions and OBT acceptance. Therefore, these scales were combined and analysed as a single construct implementing a five increment "Agreement" scale that probed respondents about the probability of purchasing or considering to purchase personalised advertised products/services, including their impressions of OBT personalised adverts (see Appendix B for the survey questionnaire).

Respondents in this study, on average, were relatively neutral concerning the likelihood of purchasing or considering to purchase personalised advertised products/services, and their acceptance of the advertising tactic ($M = 2.74/ M_{Max} = 5$, $SD = \pm 0.95$). The regression analysis revealed that respondents' positive online satisfaction significantly influences their online shopping behaviour, increasing OBT purchase intentions and acceptance of OBT personalised ads. The more positive consumers' online shopping satisfaction, the greater the likelihood of their purchase intentions and acceptance of OBT personalised ads, leading to more favourable

attitudes towards these adverts. Notably, the inverse is likely to occur when consumers are negative or less satisfied, decreasing their purchase intentions of OBT advertised commodities and reducing their acceptance of the tactic.

Although the statistical analysis revealed that online shopping satisfaction significantly influences and predicts OBT purchase intentions and acceptance, the findings also indicate that the outcomes only explains a small part of the variance in the data (Adjusted R Square = 12.4%) concerning OBT ad purchase intentions and acceptance. Therefore, apart from their satisfaction with online shopping experiences, other elements also come into play and influence consumers' purchase intentions and acceptance of OBT advertising, such as consumers' attitudes and perceptions toward OBT advertising tactics, including the degree of accuracy, relevance and usefulness presented in the OBT ads (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Summers et al., 2016; Tucker, 2014; Van Doorn & Hoekstra, 2013). The stage of consumer' buying decision could also influence these outcomes and the effectiveness of OBT advertising tactics (Lambrecht & Tucker, 2013). OBT adverts that are a good fit in terms of consumers' needs and preferences are likely to influence their purchase intentions of OBT advertised commodities and acceptance of the tactic.

Overall, the findings related to this hypothesis support prior research, which postulate that consumers' satisfaction with their online shopping experience is likely to influence their attitudes, perceptions and online purchase intent (Li & Zhang, 2002; Lin & Lekhawipat, 2014; Pham & Ahammad, 2017). Moreover, when consumers are satisfied with their online experiences, it is likely to positively influence their online shopping behaviours (Li & Zhang, 2002).

6.5.2. Research Hypothesis 3.2

H3.2: *Consumers' online shopping satisfaction amid OBT significantly influences their avoidance of OBT advertising.*

The results from the regression analysis revealed that respondents' online shopping satisfaction negatively and significantly influences their avoidance of OBT advertising, with online shopping satisfaction being a significant predictor of the avoidance of OBT advertising.

The OBT advertising avoidance scale measured respondents' avoidance of the tactic by means of a five increment "Agreement" scale that probed respondents about their response to online personalised ads (intentionally ignoring, discarding them without viewing, or opt-out from receiving them), as well their like or dislike of personalised online advertising (see Appendix B for the survey questionnaire).

Respondents in this study, on average, were agreed that they were inclined to avoid OBT advertising tactics and adverts ($M = 3.33/ M_{Max} = 5$, $SD = 1.03$). It was revealed that respondents' online dissatisfaction significantly influences their response to OBT personalised ads, leading to increased avoidance of online adverts. The more dissatisfied online shoppers are with their online shopping experiences, the greater the likelihood of them avoiding OBT personalised ads when online. Notably, the inverse is likely to occur when consumers are more satisfied with their online shopping experiences. The findings indicate that respondents are likely to deliberately ignore OBT personalised ads when online, discard them without viewing, or even opting-out from receiving them in the future when they are dissatisfied with their online shopping experiences. They will, therefore, likely dislike the tactic and prefer not to encounter these adverts when they are online. The results from this hypothesis also support the outcome from hypothesis 3.1, in that consumers who are satisfied with their online shopping experiences are likely to have a favourable attitude toward OBT tactics, which will lead to positive outcomes, whilst the contrary is likely to occur with dissatisfied consumers.

Although results indicated that online shopping satisfaction significantly influences and predicts OBT ad avoidance, the findings also explain only a relatively small part of the variance in the data (Adjusted R Square = 7.8%) concerning OBT ad avoidance. This finding indicates that other elements also influence consumers' avoidance of OBT advertising tactics, apart from just their satisfaction with online shopping experiences. Consumers' avoidance of OBT adverts is likely to be influenced considerably by other factors that imply potential risks and benefits (Ham, 2017), which they consider when assessing the cost versus benefit of the presented OBT ads. Key factors that influence their interaction with the OBT personalised ads, and their intentions to click-through, are probably their privacy concerns, including the advertisements'' benefits, relevance or usefulness (Bleier & Eisenbeiss, 2015).

Overall, the findings related to this hypothesis, as is the case with hypothesis 3.1, support the outcomes of previous research, which concluded that consumers' satisfaction with their online shopping experience is likely to influence their attitudes, perceptions and behaviours (Li & Zhang, 2002; Lin & Lekhawipat, 2014; Pham & Ahammad, 2017), in that in this study, respondents' online shopping satisfaction negatively and significantly influenced their avoidance of OBT advertising. Moreover, when consumers are satisfied with their online experiences, it is likely to positively influence their online shopping behaviours (Li & Zhang, 2002). The contrary is likely to occur when they are dissatisfied with their online experience, as was found in this study.

6.5.3. Research Hypothesis 3.3

H3.3: *Consumers' online shopping satisfaction amid OBT significantly influences their continuation with online shopping.*

The regression analysis revealed that respondents' online shopping satisfaction positively and significantly influences their continuation with online shopping. It also revealed that online shopping satisfaction was a significant predictor of respondents continuation with shopping online in the future.

The continuance intention of online shopping scale implemented a five increment "Agreement" scale. It probed respondents regarding their intent to use online shopping in the future and their intentions to recommend online shopping to others (see Appendix B for the survey questionnaire). Respondents in this study, on average, agreed that they would continue shopping online in the future ($M = 3.92$/ $M_{Max} = 5$, $SD = 0.82$). The regression analysis revealed that respondents' positive online satisfaction significantly influences their intention to continue using online shopping. The more satisfied consumers are following their online shopping experiences, the greater their intentions to continue using online shopping in the future and to recommend it to others. Notably, the inverse is likely to occur when respondents are dissatisfied.

The results revealed that online shopping satisfaction significantly influences and predicts the continued use of shopping online. The findings explained a substantial

amount of the variance in the data (Adjusted R Square = 42.3%) concerning the continued use of shopping online. This finding indicates that a substantial aspect in determining whether consumers will continue to shop online in the future can be attributed to their level of satisfaction with their online shopping experiences. The findings concur with previous research, which have reported that when consumers are satisfied with their experience and use of a product or service, they are more likely to continue using it in the future (Bhattacherjee, 2001b, 2001a). The confirmation or disconfirmation of consumers online shopping expectations culminates as either satisfaction (positive disconfirmation of expectations) or dissatisfaction (negative disconfirmation of expectations) with the shopping medium that will influence similar shopping encounters in the future (Li & Zhang, 2002).

Although respondents indicated that they are concerned about OBT advertising tactics, particularly having privacy concerns and concerns about the intrusiveness surrounding the tactic, they have also indicated that they are nevertheless likely to continue using online shopping in the future. It suggests and affirms the notion of previous research that consumers often assess the risk versus benefits when confronted with OBT advertising tactics online and respond accordingly, based on this assessment (Ham & Nelson, 2016; Jai et al., 2013; Mpinganjira & Maduku, 2019; Plangger & Montecchi, 2020; Schumann et al., 2014).

6.6. Conclusion

This study aimed to understand the influence of OBT advertising tactics on consumers' online shopping experience, satisfaction and subsequent shopping behaviour. From extant literature, several hypotheses were formulated, which were then statistically tested and analysed to address the research objective. The findings reveal that respondents' perceptions of OBT advertising tactics significantly influence and predict their online shopping experience, specifically the perceived benefits and personalisation associated with OBT advertising and the perceived intrusiveness of OBT advertising. However, their privacy concerns did not significantly influence whether their online shopping experiences met or exceeded their expectations. Additionally, when prompted by OBT tactics, respondents' knowledge of personalised adverts did not significantly influence their perceptions of the tactic. Respondents' perceived level of control was found to be a significant moderator in the relationship between their knowledge of personalised adverts and perceptions of

OBT tactics, particularly the perceived benefits and personalisation associated with OBT advertising, and the perceived intrusiveness of OBT advertising.

The findings also reveal that respondents' online shopping experiences significantly influence and predict their online satisfaction. When their online shopping experiences meet or exceed their expectations, they are satisfied with the shopping medium. Three hypotheses were tested and statistically assessed to determine the influence of online shopping satisfaction on respondents' subsequent shopping behaviour. The results revealed that online shopping satisfaction significantly influences and predicts OBT ad purchase intentions and acceptance, OBT ad avoidance, and continuation with online shopping. Importantly, online shopping satisfaction exerted a significant influence on respondents' continuation with online shopping, emphasising how important it is to ensure that consumers are satisfied with their online shopping experiences to enhance online shopping.

Overall, the study revealed that respondents' perception of OBT advertising significantly influences their online shopping experiences. Respondents' satisfaction (positive or negative) with their online shopping experiences influences their subsequent shopping behaviour accordingly, leading to either favourable or unfavourable outcomes. Therefore, it is imperative for organisations, marketers, and advertisers that utilise OBT advertising to ensure that the tactics enhance consumers' online shopping experiences, leaving them satisfied and subsequently leading to favourable shopping experiences.

The final theoretical conceptual model that presents the outcomes of the hypotheses is presented next (see Figure 6.1), in accordance with the S-O-R framework, hence presenting the exposure to OBT ads as stimuli triggering consumers' knowledge of the tactic, how they are perceived (O), and subsequent reactions to the OBT ads as the outcomes (R).

6.6.1. Theoretical Conceptual Model: Hypotheses Outcomes

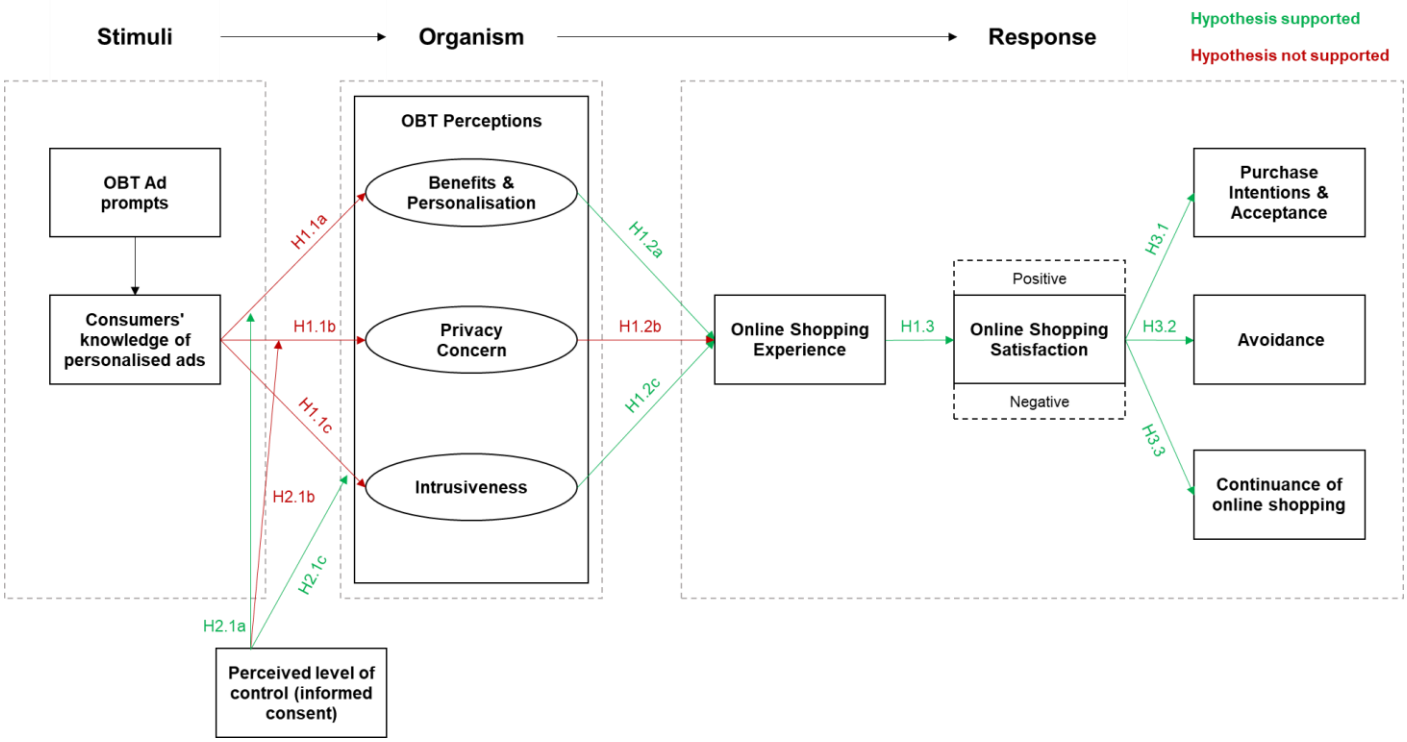

Figure 6. 1: Final theoretical conceptual model with its tested hypotheses outcomes

Source: Author's own (2021)

Chapter 7: Conclusions and Recommendations

7.1. Introduction

This chapter presents a review of the study's main objectives, including a synthesis of the research study findings in addressing these objectives. The chapter outlines the principal findings, the study's contribution to OBT and online shopping literature and its practical Implications for relevant stakeholders. It discusses the study's limitations and proposes suggestions for future research to enhance the knowledge and understanding of OBT advertising, consumers shopping behaviour and online shopping.

7.2. Principal Findings and Implications

The study's main objective was to investigate and understand how OBT advertising tactics and associated characteristics influence consumers' online shopping experience, satisfaction, and subsequent shopping behaviour. In addressing these objectives, the study utilised the S-O-R theoretical framework to structure the research. In the context of this study, the stimuli (S) represented consumers' exposure to OBT advertising and their knowledge/awareness of how it is applied. Depending on how consumers experience these stimuli and the relevance of the ads, online shoppers may interpret them (O) in memory as helpful and useful or annoying and threatening, particularly when they are not perceived to be relevant or when they are perceived to intrude on shoppers' privacy. These experiences influence online consumers' satisfaction and reactance to the OBT ads (R) in the sense of a click-through to explore the product information that pops up, and even purchase the product, or to reject the prompt, with possible negative consequences for the retailer, including shopping intentions at the point, or in the future.

The research findings empirically revealed that, in the context of this study, respondents' knowledge and understanding of OBT personalised adverts and how it works does not significantly influence how they perceive the advertising tactics used by marketers and advertisers in the online shopping environment. The study's findings showed that when respondents perceive OBT ads as highly beneficial and relevant to their personal needs and preferences, it can enhance and positively impact their online shopping experience, meeting or exceeding their expectations.

However, when they perceive OBT ads as highly intrusive, it can negatively impact their online shopping experience, likely not meeting their expectations.

Notably, the inverse outcomes are likely to occur when online consumers perceive OBT ads as less beneficial or relevant or less intrusive. Overall, while highly personalised OBT adverts that accurately fit consumers' needs and preferences can lead to positive outcomes, they can also lead to heightened levels of perceived intrusiveness, with the opposite effect as indicated in the study of Van Doorn and Hoekstra (2013). Although concerned about OBT personalised advertising, respondents also recognise the usefulness of the tactic and are likely to assess the benefits versus the implied risks when encountering OBT ads. These findings reveal how OBT personalised tactics can therefore be a "double-edged sword" that organisations, marketers and advertisers need to be cognisant of when utilising these tactics. Additionally, the study showed that respondents' privacy concerns regarding OBT advertising did not significantly influence their online shopping experiences in meeting or exceeding their expectations. However, the respondents indicated that they were overall concerned about their privacy online and the collection and use of their personal information.

This study's empirical results showed that respondents' online shopping experiences, whether meeting or exceeding their expectations, significantly and positively influence their satisfaction with online shopping. These findings emphasise the significance of having a seamless and pleasant experience when shopping online, as it positively enhances shoppers' satisfaction levels. Therefore, organisations, marketers and advertisers should utilise OBT tactics to address consumers' utilitarian requirements like convenience, usefulness, and ease of use, enabling them to accomplish their tasks or goals efficiently and effectively, enhancing their shopping experience and outcomes (Monsuwé et al., 2004). Subsequently, leaving them overall satisfied with online shopping.

Consumers' expectations of online shopping and their eventual shopping experiences culminate as confirmation of their expectations (everything went as expected), or as positive disconfirmation (exceeding expectations, which is positive), or negative disconfirmation (did not meet expectations). These experiences positively or negatively influence their satisfaction with online shopping depending

on whether it meets or exceeds their expectations. When implementing OBT advertising, organisations, marketers, and advertisers should ensure that consumers' online experiences are positive (meets or exceeds their expectations), leaving them highly satisfied. For example, they could achieve this by increasing online shoppers' understanding of how their personal information is gathered, protected, and ensuring that OBT advertisements are relevant and useful in addressing their needs and personal preferences.

Furthermore, the research findings empirically revealed that respondents' online shopping satisfaction significantly influenced their shopping behaviours. The results revealed that positive online satisfaction significantly influences online shopping behaviour, increasing the likelihood of OBT ad purchase intentions and acceptance, including future intentions to continue shopping online. The inverse outcomes are likely to occur when consumers are dissatisfied with their online shopping encounters. Additionally, the results revealed that negative disconfirmation of expectations that culminate as online dissatisfaction significantly influences their response to OBT personalised ads, resulting in increased avoidance of online adverts. The inverse outcome is likely to occur when consumers are satisfied with online shopping.

These results reveal that consumers who are satisfied with their online shopping experiences are likely to develop a favourable attitude and reactance towards OBT tactics, with positive outcomes for all. It emphasises the significance of consumers' online satisfaction with their shopping experiences concerning OBT advertising tactics, as their satisfaction directly influences OBT effectiveness and outcomes. Therefore, organisations, marketers, and advertisers should ensure that consumers are satisfied with online shopping experiences.

Consumers' online satisfaction and subsequent shopping behaviour are largely dependent on their online shopping experiences. Negative online shopping experiences can leave consumers dissatisfied with online shopping, avoiding OBT advertising and result in them being less likely to use it in the future. Online shopping experiences that meet or exceed consumers expectations can, o the contrary, leave them feeling satisfied with the online shopping experience, with a high likelihood of accepting OBT advertising and continued use of online shopping in the future. When

using OBT advertising, organisations, marketers, and advertisers should ensure that the tactic used enhances consumers' shopping experiences and is not perceived negatively, irrelevant or intrusive. They can do this by being more transparent about the tactic and providing consumers more control over the use of their personal information and how it is gathered and used.

In addition, the study's findings revealed that although respondents highlighted that they are concerned about OBT advertising tactics, particularly having privacy concerns and having doubt about the intrusiveness surrounding the tactic, their online shopping and browsing behaviours indicated that they do little to address these concerns. The majority of the respondents indicated that when shopping or browsing online, they simply accepted cookies when prompted, providing consent for their information to be gathered, tracked and used. Furthermore, a little more than half of the respondents indicated that they either never or rarely read and approved data policy or protection statements when browsing online. Additionally, participants felt they had limited control of their online personal information when shopping online, including the limited capability to govern the access, tracking, gathering, use and dissemination of their personal information.

Overall, this study provides meaningful insights and implications for organisations, marketers, and advertisers using OBT tactics in the online shopping environment. The study empirically showed that perceptions concerning OBT advertising significantly influence respondents' online shopping experiences. Online shoppers' satisfaction (positive or negative) with online shopping influences their subsequent shopping behaviour, accordingly, hence leading to favourable or unfavourable outcomes, particularly regarding the effectiveness of OBT advertising tactics and the continual use of online shopping in the future. These findings underscore the significance for organisations that use OBT advertising to ensure that the tactic contributes favourably to consumers' online shopping experiences, meeting or exceeding their expectations, so that they are satisfied with online shopping.

7.3. Contributions of the Study

This study and its findings contribute to the growing body of literature on OBT advertising, particularly from the context of understanding South African online consumers. Much of extant OBT studies that have been reviewed to conduct this

study emerged from research that was conducted in America and Europe (Aguirre et al., 2015; Baek & Morimoto, 2012; Bleier & Eisenbeiss, 2015; T. T. Gao et al., 2013; Ham, 2017; Ham & Nelson, 2016; Schumann et al., 2014; Summers et al., 2016; Van Doorn & Hoekstra, 2013). Only a few studies were conducted in an African context where online shopping is not yet as established as elsewhere in the world, and therefore, consumers' online shopping behaviours may differ. One study in the South African context was conducted by Mpinganjira and Maduku (2019), who involved South African consumers, investigating OBT and ethical brand value.

Furthermore, much of previous research looked at how OBT perceptions directly impact outcomes such as click-throughs, purchase intentions, ad avoidance, ad acceptance, and brand value (Aguirre et al., 2015; Baek & Morimoto, 2012; Bleier & Eisenbeiss, 2015; Ham, 2017; Lambrecht & Tucker, 2013; Mpinganjira & Maduku, 2019; Schumann et al., 2014; Smit et al., 2014; Summers et al., 2016; Tucker, 2014; Van Doorn & Hoekstra, 2013). This research study builds to the existing body of knowledge and understanding of OBT advertising by incorporating the existing theories and findings in assessing how consumers' perceptions and reactance to the tactic directly enhance or impede their online shopping experiences in meeting or exceeding their expectations, and consequently their online satisfaction. In addition, the study contributes by providing an understanding of how respondents' satisfaction with previous online shopping experiences can influence how they embrace OBT advertising tactics or not.

From a theoretical perspective, the study revealed that respondents did not discriminate between purchase intentions and OBT ad acceptance, illustrating that, in the context of this research, these constructs merged as "OBT purchase intentions and acceptance". This outcome was also true for the theoretical measurement scales concerning perceived OBT ad benefits and perceived OBT ad personalisation. Furthermore, in the study's context, the research highlights that consumers' knowledge of personalised ads does not influence how they perceive the advertising tactic. This finding is contrary to the views of previous research that indicate consumers' knowledge and understanding of the mechanics related to OBT advertising are essential to shaping their perceptions of the tactic's desirability, benefits, and potential harm (Ham, 2017; Ham & Nelson, 2016).

7.4. Limitations of the Research Study

The non-probability and purposive sampling techniques were a limitation to this study as participants may not represent the entire target population. Additionally, the response skewness in the 30 - 39 year category (46.7%) and the majority of respondents in the middle to upper-income groups may be attributable to the convenience and snowball sampling methods utilised in this study. This research study focused on online consumers in South Africa and may limit its applicability in other markets as their online shopping behaviour and perceptions may differ.

The cross-sectional time horizon was another limitation, as the findings of this research study indicate participants' responses as at a point in time or "snapshot", and these responses can change over time. In addition, external factors, which the researcher could not control, could have influenced participants' responses when completing the survey questionnaire. These include factors such as the participant's emotions, mood or attitude at the time of completing the survey and the context of their surroundings, environment or situation, particularly considering the impact of the COVID-19 global pandemic. Furthermore, consumers online shopping behaviours and attitudes, including OBT perceptions, may have been influenced by the enforced lockdown periods experienced, when rules and regulations restricted access to physical stores, resulting in many consumers adopting online shopping as an alternative during this period.

7.5. Suggestions for Future Research

This study focused on consumers perceptions of OBT advertising tactics and how they influence their online shopping experiences. It is proposed that future research explore antecedent factors that potentially impact how consumers perceive OBT advertising tactics when encountering these personalised ads, such as demographic factors. Future studies should also consider exploring how consumers' perceived level of control over their personal information and their desire for privacy could directly influence their perceptions of OBT advertising and whether they embrace or reject the tactics. Particularly its impact on their privacy concerns and perceived intrusiveness concerning the tactic.

In addition, future research studies concerning OBT advertising should investigate and understand at what levels of personalisation are consumers reactance triggered (positively or negatively). It is also recommended that future studies explore characteristics and factors influencing why, although consumers are concerned about their privacy and the intrusive of tactics such as OBT, they do little to address these concerns even when within their control. The only issue mentioned in the literature is the time required to read the policy statements. Finally, future studies should also consider investigating consumers' attitudes and perceptions concerning OBT advertising tactics in other markets across Africa where cultural differences may be influential.

7.6. Concluding Remarks

The study's main objective was to investigate and understand how OBT advertising tactics and associated characteristics influence consumers' online shopping experience, satisfaction, and subsequent shopping behaviour. In addressing these objectives, the study empirically revealed that, in the context of this study, consumers' perceptions of OBT advertising tactics significantly influences their online shopping experiences, specifically the perceived benefits and personalisation and the perceived intrusiveness associated with OBT advertising. These online shopping experiences impact whether consumers are satisfied or dissatisfied with the shopping medium. Online consumers' satisfaction (positive or negative) with their online shopping experiences significantly influences their subsequent shopping behaviour, leading to either favourable or unfavourable outcomes. In particular, influencing the outcomes of their purchase intentions and acceptance of OBT adverts, avoidance of OBT adverts, and their continued use of online shopping in the future.

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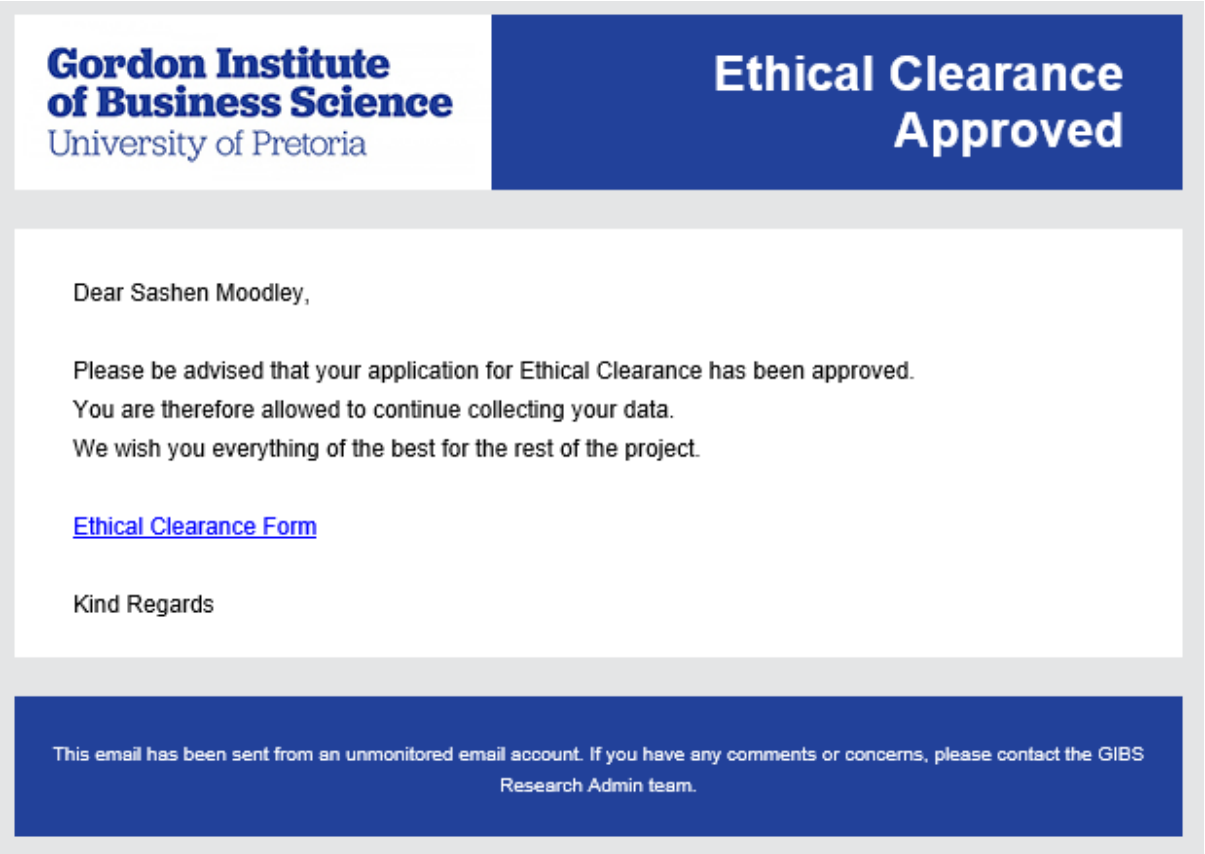
Appendices

Appendix A: Ethical Clearance



Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear Sashen Moodley,

Please be advised that your application for Ethical Clearance has been approved.
You are therefore allowed to continue collecting your data.
We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

Appendix B: Questionnaire

The Influence of Online Behavioural Targeting on Consumers' Online Shopping Satisfaction and Subsequent Shopping Behaviour

I am Sashen Moodley, currently a final year student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research in the area of online behavioural targeting (OBT), a method of personalised advertising whereby retailers or advertisers develop customised advertisements of products or services based on the consumer's prior activities online. This survey is designed to obtain feedback and insights that will help better understand the perceptions of OBT and the influence it has on consumers' online shopping satisfaction and subsequent shopping behaviour. The survey should take no more than 10-15 minutes of your time.

Your participation is voluntary, and you can withdraw at any time without penalty, however your valuable input is highly appreciated. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns or questions, please contact me or my supervisor using the details provided below.

Thank you for your valued cooperation and assistance.

Researcher Name: Sashen Moodley
Email: 20807814@mygibs.co.za

Research Supervisor: Prof Alet Erasmus
Email: ErasmusA@gibs.co.za

If you agree to participate, please click on the link labelled "Next"

Screening Section

Question	Yes	No
Do you live in South Africa and are over 18 years of age?	1	2
Have you shopped or searched online for products/ services during the past six months?	1	2

Do you know what ONLINE BEHAVIOURAL TARGETING (OBT) means?		
Online behavioural targeting (OBT) is a process of personalised advertising. Retailers or advertisers develop customised advertisements of a product or service based on a person's previous online activities and product searches. For example: You search online for information about a product, such as the price of a lawnmower. The next day, when you browse online, or use social media, advertisements of the same or similar lawnmowers that you have previously searched for, pop up or are advertised on the page you are browsing. You could also be targeted with these advertisements through emails, SMS or telephonically.		
Based on the description above, have you experienced Online Behavioural Targeting (OBT) advertising whilst shopping or conducting online searches?	**Yes**	**No**
	1	2

Section A - Online Shopping and OBT Habits

This section consists of 4 descriptive statements and aims to assess consumers online shopping and browsing habits. Please rate your level of frequency with the following statements. Respond to every statement please.

How frequently do you SHOP online in a month?	Never	Rarely	Sometimes	Often	Always
	1	2	3	4	5

How frequently do you BROWSE (DO PRODUCT SEARCHES) online in a month?	Never	Rarely	Sometimes	Often	Always
	1	2	3	4	5

When browsing online, have you accepted "cookies" before, when prompted to do so before gaining access to online information?	Never	Rarely	Sometimes	Often	Always
	1	2	3	4	5

When browsing online, have you read and approved data policy or protection statements?	Never	Rarely	Sometimes	Often	Always
	1	2	3	4	5

Section B - Knowledge of OBT personalised adverts

This section consists of 6 descriptive statements and aims to assess consumers knowledge of OBT personalised adverts when shopping or browsing online. Please rate your level of agreement or disagreement with the following statements. Respond to every statement please.

"*Online behavioural targeting (OBT) is a process of personalised advertising. Retailers or advertisers develop customised advertisements of a product or service based on a person's previous online activities and product searches."*

Knowledge of personalised adverts	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I know that OBT is used to present personalised ads to me	1	2	3	4	5
I know that OBT has strings attached and requires information on my online activity	1	2	3	4	5
I understand that my online behaviour is tracked to show personalised ads to me	1	2	3	4	5
I know that I am prompted with personalised information while shopping online	1	2	3	4	5
I realise that personalisation technology is used to encourage me to buy advertised products/ services that are shown when I browse online	1	2	3	4	5
I can identify persuasion tactics of OBT ads that are harmful	1	2	3	4	5

Section C - Online Behavioural Targeting (OBT)

This section consists of 20 descriptive statements and aims to assess consumers perceptions of OBT personalised adverts. Please rate your level of agreement or disagreement with the following statements. Respond to every statement please.

"*Online behavioural targeting (OBT) is a process of personalised advertising. Retailers or advertisers develop customised advertisements of a product or service based on a person's previous online activities and product searches."*

Perceived Ad Benefits	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
OBT personalised adverts improve my information searches as they are targeted at my interests	1	2	3	4	5
OBT personalised adverts enable me to search for information faster	1	2	3	4	5

OBT personalised adverts make it easier for me to search for products/ services that I am interested in	1	2	3	4	5
OBT personalised adverts increase the effectiveness of my information searches on products and services	1	2	3	4	5
Perceived Ad Personalisation/ Relevance	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
OBT personalised adverts make recommendations that match my needs	1	2	3	4	5
OBT personalised adverts enables me to order products/ services that match my needs	1	2	3	4	5
Overall, OBT personalised adverts are tailored to my situation	1	2	3	4	5
OBT personalised adverts make me feel that I am a unique customer	1	2	3	4	5
I believe that OBT personalised adverts are customised to my needs.	1	2	3	4	5
Privacy Concern	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
It bothers me that my online activities are tracked	1	2	3	4	5
I am concerned that the websites/ applications I access are collecting personal information about me	1	2	3	4	5
I am concerned that unauthorised access may be gained to my personal information when I use websites/ applications online	1	2	3	4	5
I am concerned that my personal information that is obtained by websites/ applications through OBT may contain errors	1	2	3	4	5
I am concerned about my personal privacy when websites/ applications track my online activities	1	2	3	4	5
Perceived Intrusiveness	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I think adverts that are based on my previous online activities are invasive (trespassing)	1	2	3	4	5
I think adverts that are based on my previous online activities are intrusive (meddling in my affairs)	1	2	3	4	5
I think adverts that are based on my previous online activities are interfering	1	2	3	4	5
I think adverts that are based on my previous online activities are disturbing	1	2	3	4	5
I think adverts that are based on my previous online activities are distracting	1	2	3	4	5
I think adverts that are based on my previous online activities are forced	1	2	3	4	5

Section D - Perceived Level of Control

This section consists of 4 descriptive statements and aims to assess consumers perceived level of control over their information when shopping or browsing online. Please rate your level of agreement or disagreement with the following statements. Respond to every statement please.

Perceived Level of Control	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I believe that I have control over who can track my online activities on my devices	1	2	3	4	5
I believe I have control over which of my personal information is accessible to the websites/ applications I use	1	2	3	4	5
I think I have control over how my personal information is used by websites/ applications that obtain information from my online activities	1	2	3	4	5
I believe I can use privacy controls to limit the personal information that websites/ applications obtain from my online activities	1	2	3	4	5

Section E - Online Satisfaction

This section consists of 6 descriptive statements and aims to assess consumers online shopping satisfaction. Think about your recent online shopping experiences and please rate your level of agreement or disagreement with the following statements. Respond to every statement please.

Online Experience	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
My experience with online shopping was better than I expected	1	2	3	4	5
The service level provided by online shopping was better than I expected	1	2	3	4	5
Online shopping can meet demands in excess of what I required for the service	1	2	3	4	5
Online Satisfaction	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I am satisfied with the performance of online shopping	1	2	3	4	5
I am pleased with the experience of online shopping	1	2	3	4	5
My decision to use online shopping was a wise one	1	2	3	4	5

Section F - Consumers Subsequent Shopping Behaviour

This section consists of 15 descriptive statements and aims to assess consumers subsequent shopping behaviour. Please rate your level of agreement or disagreement with the following statements. Respond to every statement please.

OBT Ad Purchase Intentions	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
There is a high likelihood that I would purchase personalised advertised products/ services	1	2	3	4	5
There is a high probability that I would consider buying personalised advertised products/ services	1	2	3	4	5
If I am going to buy products/ services, there is a high probability of me buying the personalised advertised products/ services	1	2	3	4	5
OBT Advertising Acceptance	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I like receiving personalised adverts which are based on my previous online activities	1	2	3	4	5
It is a great idea to receive personalised adverts that are based on my previous online activities	1	2	3	4	5
I have a good feeling about personalised adverts that I receive, based on my previous online activities	1	2	3	4	5
In general, I have a positive attitude towards receiving personalised adverts that are based on my previous online activities	1	2	3	4	5
OBT Advertising Avoidance	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I intentionally ignore any personalised advertising online	1	2	3	4	5
I dislike any personalised advertising online	1	2	3	4	5
It would be better if there were no personalised advertising online	1	2	3	4	5
I discard personalised advertising online without opening it	1	2	3	4	5
I opt-out from receiving personalised advertising, asking marketers to take me off their contact lists	1	2	3	4	5
Continuance of Online Shopping	**Strongly disagree → Strongly agree**				
	1	**2**	**3**	**4**	**5**
I will use online shopping on a regular basis in the future	1	2	3	4	5
I will frequently use online shopping in the future	1	2	3	4	5
I will strongly recommend that others use online shopping	1	2	3	4	5

Section G - Demographics

This section consists of 3 questions and aims to gather demographic information for statistical purposes only. Please select the option that best matches your response. Respond to all questions please.

What is your age?	18 - 29 years	1
	30 - 39 years	2
	40 - 49 years	3
	50 - 59 years	4
	60 years or older	5

What is you gender?	Male	1
	Female	2
	Prefer not to say	3

Which one of the following income categories best describes your gross (before deductions) monthly household income? This question will be used for statistical purposes only.	R0 - R9 999	1
	R10 000 - R19 999	2
	R20 000 - R39 999	3
	R40 000 - R69 999	4
	R70 000 - R99 999	5
	R100 000 - R149 999	6
	R150 000 - R199 999	7
	R200 000 - R299 000	8
	R300 000 or more	9

Thank you for completing the survey and supporting my research.

Appendix C: Data Analysis

C.1: EFA - Consumers' Knowledge of Personalised Adverts

Table 1: Consumers' knowledge of personalised adverts Correlation Matrix

Omitted B6 (Communality = 0.157)

Correlation Matrix						
		B1	B2	B3	B4	B5
Correlation	B1	1.00	**0.65**	**0.71**	**0.72**	**0.69**
	B2	**0.65**	1.00	**0.69**	**0.70**	**0.64**
	B3	**0.71**	**0.69**	1.00	**0.82**	**0.78**
	B4	**0.72**	**0.70**	**0.82**	1.00	**0.76**
	B5	**0.69**	**0.64**	**0.78**	**0.76**	1.00

Table 2: Consumers' knowledge of personalised adverts KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.90**
Bartlett's Test of Sphericity	Approx. Chi-Square	874.35
	df	10
	Sig.	**0.000**

Table 3: Consumers' knowledge of personalised adverts Total Variance Explained

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**3.87**	77.37	**77.37**	3.60	71.92	**71.92**
2	0.38	7.70	85.07			
3	0.33	6.61	91.68			
4	0.24	4.86	96.53			
5	0.17	3.47	100.00			

Extraction Method: Principal Axis Factoring.

Table 4: Consumers' knowledge of personalised adverts Factor Matrix

Factor Matrix[a]	
	Factor 1
B4	0.90
B3	0.90
B5	0.85
B1	0.81
B2	0.77

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Rotated Factor Matrix[a]

a. Only one factor was extracted. The solution cannot be rotated.

C.2: EFA - Consumers' Perceptions of OBT Advertising

Table 5: Consumers' perceptions of OBT advertising Correlation Matrix

Correlation Matrix																					
		C1.1	C1.2	C1.3	C1.4	C2.1	C2.2	C2.3	C2.4	C2.5	rC3.1	rC3.2	rC3.3	rC3.4	rC3.5	rC4.1	rC4.2	rC4.3	rC4.4	rC4.5	rC4.6
Correlation	C1.1	1.00	**0.73**	**0.76**	**0.73**	**0.66**	**0.69**	**0.71**	**0.47**	**0.66**	0.26	0.22	0.17	0.19	0.20	**0.34**	**0.31**	**0.31**	**0.32**	**0.39**	**0.39**
	C1.2	**0.73**	1.00	**0.83**	**0.82**	**0.75**	**0.76**	**0.73**	**0.54**	**0.64**	0.27	0.23	0.19	0.17	0.22	**0.34**	**0.32**	**0.31**	**0.30**	**0.38**	**0.46**
	C1.3	**0.76**	**0.83**	1.00	**0.88**	**0.76**	**0.81**	**0.74**	**0.44**	**0.63**	0.26	0.23	0.19	0.21	0.19	**0.37**	**0.35**	**0.35**	**0.33**	**0.44**	**0.47**
	C1.4	**0.73**	**0.82**	**0.88**	1.00	**0.75**	**0.80**	**0.71**	**0.52**	**0.65**	0.25	0.22	0.16	0.10	0.14	**0.33**	**0.34**	**0.32**	**0.31**	**0.41**	**0.44**
	C2.1	**0.66**	**0.75**	**0.76**	**0.75**	1.00	**0.85**	**0.78**	**0.47**	**0.68**	0.26	0.23	0.18	0.22	0.19	0.30	0.29	**0.30**	0.28	**0.37**	**0.41**
	C2.2	**0.69**	**0.76**	**0.81**	**0.80**	**0.85**	1.00	**0.77**	**0.48**	**0.70**	0.29	0.24	0.18	0.21	0.18	**0.32**	**0.31**	**0.30**	0.29	**0.41**	**0.37**
	C2.3	**0.71**	**0.73**	**0.74**	**0.71**	**0.78**	**0.77**	1.00	**0.54**	**0.79**	0.22	0.21	0.17	0.17	0.17	**0.31**	0.29	0.28	0.27	**0.35**	**0.38**
	C2.4	**0.47**	**0.54**	**0.44**	**0.52**	**0.47**	**0.48**	**0.54**	1.00	**0.62**	**0.38**	**0.32**	**0.34**	0.17	**0.30**	**0.38**	**0.38**	**0.35**	0.27	0.22	**0.39**
	C2.5	**0.66**	**0.64**	**0.63**	**0.65**	**0.68**	**0.70**	**0.79**	**0.62**	1.00	**0.32**	**0.31**	0.25	0.20	0.27	**0.39**	**0.36**	**0.35**	**0.33**	**0.38**	**0.39**
	rC3.1	0.26	0.27	0.26	0.25	0.26	0.29	0.22	**0.38**	**0.32**	1.00	**0.88**	**0.80**	**0.60**	**0.79**	**0.75**	**0.73**	**0.70**	**0.66**	**0.48**	**0.61**
	rC3.2	0.22	0.23	0.23	0.22	0.23	0.24	0.21	**0.32**	**0.31**	**0.88**	1.00	**0.85**	**0.65**	**0.82**	**0.75**	**0.71**	**0.68**	**0.65**	**0.48**	**0.58**
	rC3.3	0.17	0.19	0.19	0.16	0.18	0.18	0.17	**0.34**	0.25	**0.80**	**0.85**	1.00	**0.66**	**0.83**	**0.68**	**0.65**	**0.63**	**0.61**	**0.40**	**0.49**
	rC3.4	0.19	0.17	0.21	0.10	0.22	0.21	0.17	0.17	0.20	**0.60**	**0.65**	**0.66**	1.00	**0.66**	**0.56**	**0.52**	**0.55**	**0.56**	**0.39**	**0.45**
	rC3.5	0.20	0.22	0.19	0.14	0.19	0.18	0.17	**0.30**	0.27	**0.79**	**0.82**	**0.83**	**0.66**	1.00	**0.75**	**0.73**	**0.69**	**0.67**	**0.50**	**0.57**
	rC4.1	**0.34**	**0.34**	**0.37**	**0.33**	0.30	**0.32**	**0.31**	**0.38**	**0.39**	**0.75**	**0.75**	**0.68**	**0.56**	**0.75**	1.00	**0.94**	**0.88**	**0.80**	**0.60**	**0.71**
	rC4.2	**0.31**	**0.32**	**0.35**	**0.34**	0.29	**0.31**	0.29	**0.38**	**0.36**	**0.73**	**0.71**	**0.65**	**0.52**	**0.73**	**0.94**	1.00	**0.91**	**0.82**	**0.64**	**0.73**
	rC4.3	**0.31**	**0.31**	**0.35**	**0.32**	**0.30**	**0.30**	0.28	**0.35**	**0.35**	**0.70**	**0.68**	**0.63**	**0.55**	**0.69**	**0.88**	**0.91**	1.00	**0.83**	**0.69**	**0.76**
	rC4.4	**0.32**	**0.30**	**0.33**	**0.31**	0.28	0.29	0.27	0.27	**0.33**	**0.66**	**0.65**	**0.61**	**0.56**	**0.67**	**0.80**	**0.82**	**0.83**	1.00	**0.64**	**0.71**
	rC4.5	**0.39**	**0.38**	**0.44**	**0.41**	**0.37**	**0.41**	**0.35**	0.22	**0.38**	**0.48**	**0.48**	**0.40**	**0.39**	**0.50**	**0.60**	**0.64**	**0.69**	**0.64**	1.00	**0.73**
	rC4.6	**0.39**	**0.46**	**0.47**	**0.44**	**0.41**	**0.37**	**0.38**	**0.39**	**0.39**	**0.61**	**0.58**	**0.49**	**0.45**	**0.57**	**0.71**	**0.73**	**0.76**	**0.71**	**0.73**	1.00

Table 6: Consumers' perceptions of OBT advertising KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.93**
Bartlett's Test of Sphericity	Approx. Chi-Square	5109.05
	df	190
	Sig.	**0.000**

Table 7: Consumers' perceptions of OBT advertising Total Variance Explained

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**10.15**	50.73	**50.73**	9.91	49.55	49.55	6.41	32.06	**32.06**
2	**4.39**	21.93	**72.66**	4.16	20.80	70.34	4.77	23.86	**55.92**
3	**1.10**	5.51	**78.17**	0.84	4.21	74.56	3.73	18.64	**74.56**
4	0.76	3.78	81.95						
5	0.50	2.50	84.45						
6	0.43	2.14	86.60						
7	0.41	2.04	88.63						
8	0.38	1.91	90.54						
9	0.26	1.32	91.86						
10	0.24	1.21	93.07						
11	0.22	1.12	94.19						
12	0.21	1.06	95.26						
13	0.19	0.93	96.19						
14	0.16	0.82	97.00						
15	0.14	0.70	97.70						
16	0.12	0.59	98.29						
17	0.11	0.53	98.82						
18	0.10	0.48	99.30						
19	0.09	0.45	99.75						
20	0.05	0.25	100.00						

Extraction Method: Principal Axis Factoring.

Table 8: Consumers' perceptions of OBT advertising Factor Matrix

Rotated Factor Matrix[a]			
	Factor 1	Factor 2	Factor 3
C2.2	**0.88**	0.09	0.12
C1.4	**0.87**	0.02	0.22
C1.3	**0.87**	0.04	0.24
C2.3	**0.86**	0.09	0.09
C1.2	**0.86**	0.08	0.17
C2.1	**0.85**	0.10	0.12
C1.1	**0.79**	0.08	0.18
C2.5	**0.77**	0.21	0.12
C2.4	**0.56**	0.29	0.09
rC3.3	0.09	**0.90**	0.21
rC3.2	0.13	**0.87**	0.31
rC3.5	0.08	**0.82**	0.37
rC3.1	0.17	**0.82**	0.34
rC3.4	0.09	**0.63**	0.28
rC4.3	0.18	0.49	**0.79**
rC4.2	0.19	0.54	**0.74**
rC4.4	0.17	0.49	**0.71**
rC4.6	0.33	0.36	**0.68**
rC4.1	0.21	0.59	**0.67**
rC4.5	0.31	0.25	**0.66**

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.[a]
a. Rotation converged in 6 iterations.

C.3: EFA - Consumers' Perceived Level of Control

Table 9: Consumers' perceived level of control Correlation Matrix

Correlation Matrix					
		D1	D2	D3	D4
Correlation	D1	1.00	**0.86**	**0.84**	**0.68**
	D2	**0.86**	1.00	**0.87**	**0.74**
	D3	**0.84**	**0.87**	1.00	**0.73**
	D4	**0.68**	**0.74**	**0.73**	1.00

Table 10: Consumers' perceived level of control KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.85**
Bartlett's Test of Sphericity	Approx. Chi-Square	**852.29**
	df	6
	Sig.	0.000

Table 11: Consumers' perceived level of control Total Variance Explained

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**3.37**	84.17	**84.17**	3.17	79.32	**79.32**
2	0.35	8.84	93.01			
3	0.16	3.90	96.91			
4	0.12	3.09	100.00			
Extraction Method: Principal Axis Factoring.						

Table 12: Consumers' perceived level of control Factor Matrix

Factor Matrix[a]	
	Factor 1
D2	0.95
D3	0.93
D1	0.90
D4	0.78

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Rotated Factor Matrix[a]

a. Only one factor was extracted. The solution cannot be rotated.

C.4: EFA - Consumers' Online Shopping Experience and Satisfaction

Table 13: Consumers' online shopping experience and satisfaction Correlation Matrix

Correlation Matrix							
		E1.1	E1.2	E1.3	E2.1	E2.2	E2.3
Correlation	E1.1	1.00	**0.83**	**0.56**	**0.67**	**0.74**	**0.76**
	E1.2	**0.83**	1.00	**0.56**	**0.66**	**0.71**	**0.71**
	E1.3	**0.56**	**0.56**	1.00	**0.55**	**0.57**	**0.60**
	E2.1	**0.67**	**0.66**	**0.55**	1.00	**0.87**	**0.76**
	E2.2	**0.74**	**0.71**	**0.57**	**0.87**	1.00	**0.82**
	E2.3	**0.76**	**0.71**	**0.60**	**0.76**	**0.82**	1.00

Table 14: Consumers' online shopping experience and satisfaction KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.88**
Bartlett's Test of Sphericity	Approx. Chi-Square	**1189.65**
	df	15
	Sig.	0.000

Table 15: Consumers' online shopping experience and satisfaction Total Variance Explained

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**4.48**	74.61	**74.61**	4.20	69.95	**69.95**
2	0.54	9.04	83.65			
3	0.47	7.79	91.44			
4	0.23	3.87	95.31			
5	0.16	2.74	98.05			
6	0.12	1.95	100.00			
Extraction Method: Principal Axis Factoring.						

Table 16: Consumers' online shopping experience and satisfaction Factor Matrix

Factor Matrix[a]	
	Factor 1
E2.2	0.91
E2.3	0.89
E1.1	0.86
E2.1	0.85
E1.2	0.83
E1.3	0.65

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Rotated Factor Matrix[a]

a. Only one factor was extracted. The solution cannot be rotated.

C.5: EFA - Consumers' Subsequent Shopping Behaviour

Table 17: Consumers' subsequent shopping behaviour Correlation Matrix

Correlation Matrix																
		F1.1	F1.2	F1.3	F2.1	F2.2	F2.3	F2.4	rF3.1	rF3.2	rF3.3	rF3.4	rF3.5	F4.1	F4.2	F4.3
Correlation	F1.1	1.000	**0.894**	**0.849**	**0.599**	**0.625**	**0.614**	**0.555**	0.281	0.270	0.275	**0.360**	**0.327**	0.294	0.288	**0.307**
	F1.2	**0.894**	1.000	**0.864**	**0.577**	**0.584**	**0.582**	**0.541**	0.297	0.297	**0.313**	**0.360**	**0.360**	0.297	0.287	0.291
	F1.3	**0.849**	**0.864**	1.000	**0.631**	**0.627**	**0.634**	**0.576**	**0.308**	**0.314**	**0.301**	**0.365**	**0.330**	0.262	0.258	0.297
	F2.1	**0.599**	**0.577**	**0.631**	1.000	**0.839**	**0.826**	**0.825**	**0.459**	**0.496**	**0.437**	**0.469**	**0.477**	0.120	0.110	0.199
	F2.2	**0.625**	**0.584**	**0.627**	**0.839**	1.000	**0.842**	**0.804**	**0.449**	**0.498**	**0.436**	**0.493**	**0.411**	0.183	0.177	0.255
	F2.3	**0.614**	**0.582**	**0.634**	**0.826**	**0.842**	1.000	**0.849**	**0.441**	**0.515**	**0.451**	**0.469**	**0.427**	0.153	0.113	0.207
	F2.4	**0.555**	**0.541**	**0.576**	**0.825**	**0.804**	**0.849**	1.000	**0.499**	**0.600**	**0.505**	**0.471**	**0.446**	0.147	0.116	0.229
	rF3.1	0.281	0.297	**0.308**	**0.459**	**0.449**	**0.441**	**0.499**	1.000	**0.778**	**0.730**	**0.833**	**0.565**	0.101	0.066	0.112
	rF3.2	0.270	0.297	**0.314**	**0.496**	**0.498**	**0.515**	**0.600**	**0.778**	1.000	**0.840**	**0.729**	**0.600**	0.055	0.058	0.129
	rF3.3	0.275	**0.313**	**0.301**	**0.437**	**0.436**	**0.451**	**0.505**	**0.730**	**0.840**	1.000	**0.715**	**0.554**	0.127	0.110	0.180
	rF3.4	**0.360**	**0.360**	**0.365**	**0.469**	**0.493**	**0.469**	**0.471**	**0.833**	**0.729**	**0.715**	1.000	**0.643**	0.151	0.101	0.148
	rF3.5	**0.327**	**0.360**	**0.330**	**0.477**	**0.411**	**0.427**	**0.446**	**0.565**	**0.600**	**0.554**	**0.643**	1.000	0.071	0.042	0.125
	F4.1	0.294	0.297	0.262	0.120	0.183	0.153	0.147	0.101	0.055	0.127	0.151	0.071	1.000	**0.866**	**0.774**
	F4.2	0.288	0.287	0.258	0.110	0.177	0.113	0.116	0.066	0.058	0.110	0.101	0.042	**0.866**	1.000	**0.808**
	F4.3	**0.307**	0.291	0.297	0.199	0.255	0.207	0.229	0.112	0.129	0.180	0.148	0.125	**0.774**	**0.808**	1.000

Note: Reverse scoring that was done

Table 18: Consumers' subsequent shopping behaviour KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.89**
Bartlett's Test of Sphericity	Approx. Chi-Square	3423.82
	df	105
	Sig.	**0.000**

Table 19: Consumers' subsequent shopping behaviour Total Variance Explained

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**7.264**	48.426	**48.426**	6.997	46.650	46.650	4.653	31.019	**31.019**
2	**2.667**	17.783	**66.209**	2.463	16.418	63.068	3.932	26.213	**57.233**
3	**1.904**	12.691	**78.899**	1.664	11.095	74.163	2.540	16.930	**74.163**
4	0.899	5.997	84.896						
5	0.513	3.419	88.315						
6	0.375	2.501	90.816						
7	0.227	1.514	92.330						
8	0.208	1.388	93.718						
9	0.183	1.220	94.938						
10	0.161	1.072	96.010						
11	0.154	1.030	97.040						
12	0.127	0.844	97.884						
13	0.119	0.793	98.677						
14	0.105	0.699	99.376						
15	0.094	0.624	100.000						

Extraction Method: Principal Axis Factoring.

Table 20: Consumers' subsequent shopping behaviour Factor Matrix

Rotated Factor Matrix[a]			
	Factor 1	Factor 2	Factor 3
F1.1	**0.832**	0.097	0.225
F1.3	**0.830**	0.129	0.195
F1.2	**0.799**	0.126	0.227
F2.3	**0.781**	0.382	0.017
F2.1	**0.773**	0.388	0.002
F2.2	**0.769**	0.377	0.071
F2.4	**0.712**	0.456	0.026
rF3.2	0.228	**0.882**	0.009
rF3.1	0.192	**0.852**	0.039
rF3.3	0.189	**0.829**	0.087
rF3.4	0.248	**0.817**	0.080
rF3.5	0.289	**0.613**	0.018
F4.2	0.107	0.015	**0.945**
F4.1	0.122	0.044	**0.901**
F4.3	0.177	0.086	**0.819**

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 5 iterations.

C.6: Regression Analysis - Research Hypothesis 1.1

Hypothesis 1.1: Consumers' knowledge of personalised adverts have a significant influence on their perceptions of OBT advertising, specifically their perception of the benefits and personalisation of OBT advertising (H1.1a), privacy concerns concerning OBT advertising (H1.1b) and perception of the intrusiveness of OBT advertising (H1.1c).

Hypothesis 1.1a

Table 21: Research Hypothesis 1.1a - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
Benef.Pers	3.09	0.88	229
MC_Knowledge	0.00	0.60	229
MC_Control	0.00	1.15	229
Interaction	-0.12	0.64	229

Table 22: Research Hypothesis 1.1a - Correlations SPSS output

Correlations					
		Benef.Pers	MC_Knowledge	MC_Control	Interaction
Pearson Correlation	Benef.Pers	1.000	0.070	-0.003	0.163
	MC_Knowledge	0.070	1.000	-0.174	-0.146
	MC_Control	-0.003	-0.174	1.000	-0.032
	Interaction	0.163	-0.146	-0.032	1.000
Sig. (1-tailed)	Benef.Pers		0.144	0.485	0.007
	MC_Knowledge	0.144		0.004	0.013
	MC_Control	0.485	0.004		0.313
	Interaction	0.007	0.013	0.313	

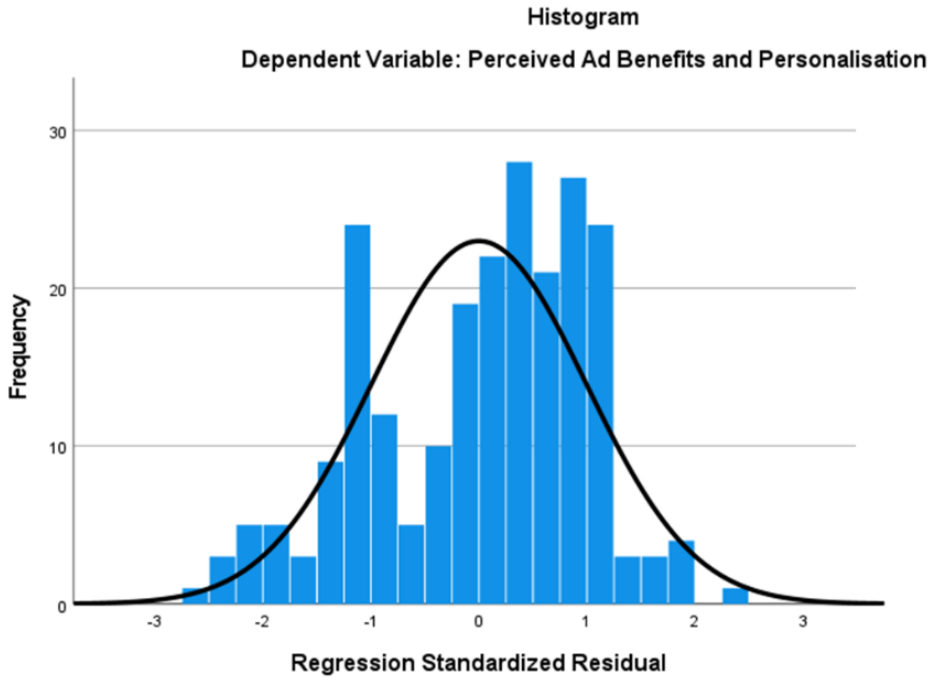


Figure 1: Histogram regression standardised residual: Perceived ad benefits and personalisation (Research hypothesis 1.1a)

Source: SPSS Output (2021)

Hypothesis 1.1b

Table 23: Research Hypothesis 1.1b - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
PrivConcern	4.00	0.98	229
MC_Knowledge	0.00	0.60	229
MC_Control	0.00	1.15	229
Interaction	-0.12	0.64	229

Table 24: Research Hypothesis 1.1b - Correlations SPSS output

Correlations					
		PrivConcern	MC_Knowledge	MC_Control	Interaction
Pearson Correlation	PrivConcern	1.000	0.087	-0.302	-0.088
	MC_Knowledge	0.087	1.000	-0.174	-0.146
	MC_Control	-0.302	-0.174	1.000	-0.032
	Interaction	-0.088	-0.146	-0.032	1.000
Sig. (1-tailed)	PrivConcern		0.094	0.000	0.091
	MC_Knowledge	0.094		0.004	0.013
	MC_Control	0.000	0.004		0.313
	Interaction	0.091	0.013	0.313	

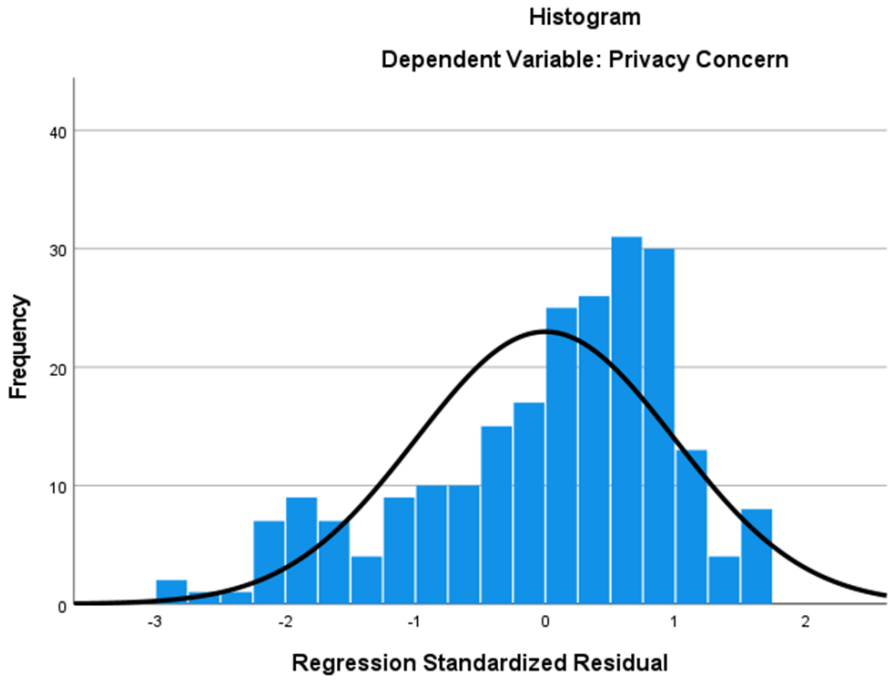


Figure 2: Histogram regression standardised residual: Privacy concerns (Research hypothesis 1.1b)

Source: SPSS Output (2021)

Hypothesis 1.1c

Table 25: Research Hypothesis 1.1c - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
Intrusive	3.61	1.06	229
MC_Knowledge	0.00	0.60	229
MC_Control	0.00	1.15	229
Interaction	-0.12	0.64	229

Table 26: Research Hypothesis 1.1c - Correlations SPSS output

Correlations					
		Intrusive	MC_Knowledge	MC_Control	Interaction
Pearson Correlation	Intrusive	1.000	0.049	-0.244	-0.127
	MC_Knowledge	0.049	1.000	-0.174	-0.146
	MC_Control	-0.244	-0.174	1.000	-0.032
	Interaction	-0.127	-0.146	-0.032	1.000
Sig. (1-tailed)	Intrusive		0.230	0.000	0.028
	MC_Knowledge	0.230		0.004	0.013
	MC_Control	0.000	0.004		0.313
	Interaction	0.028	0.013	0.313	
N	Intrusive	229	229	229	229
	MC_Knowledge	229	229	229	229
	MC_Control	229	229	229	229
	Interaction	229	229	229	229

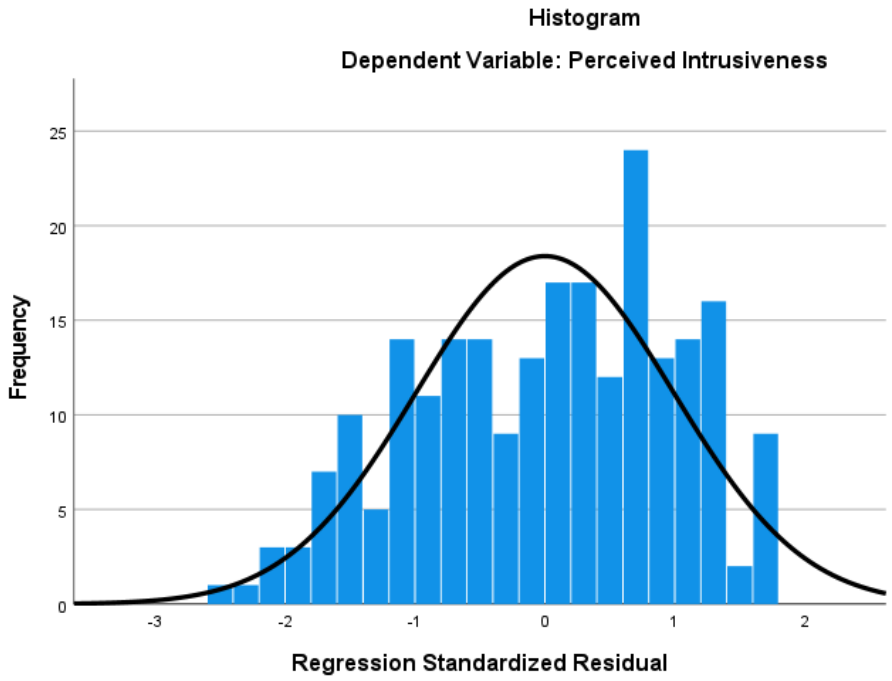


Figure 3: Histogram regression standardised residual: Perceived intrusiveness (Research hypothesis 1.1c)

Source: SPSS Output (2021)

C.7: Regression Analysis - Research Hypothesis 1.2

Hypothesis 1.2: Consumers' perceptions of OBT advertising have a significant influence on their online shopping experience, specifically the perceived benefits and personalisation associated with OBT advertising (H1.2a), privacy concerns concerning OBT advertising (H1.2b) and perceived intrusiveness of OBT advertising (H1.2c).

Table 27: Research Hypothesis 1.2 - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
OnlineExp	3.74	0.721	229
Benef.Pers	3.09	0.882	229
PrivConcern	4.00	0.979	229
Intrusive	3.61	1.060	229

Table 28: Research Hypothesis 1.2 - Correlations SPSS output

Correlations					
		OnlineExp	Benef.Pers	PrivConcern	Intrusive
Pearson Correlation	OnlineExp	1.000	0.353	-0.180	-0.298
	Benef.Pers	0.353	1.000	-0.296	-0.454
	PrivConcern	-0.180	-0.296	1.000	0.757
	Intrusive	-0.298	-0.454	0.757	1.000
Sig. (1-tailed)	OnlineExp		0.000	0.003	0.000
	Benef.Pers	0.000		0.000	0.000
	PrivConcern	0.003	0.000		0.000
	Intrusive	0.000	0.000	0.000	

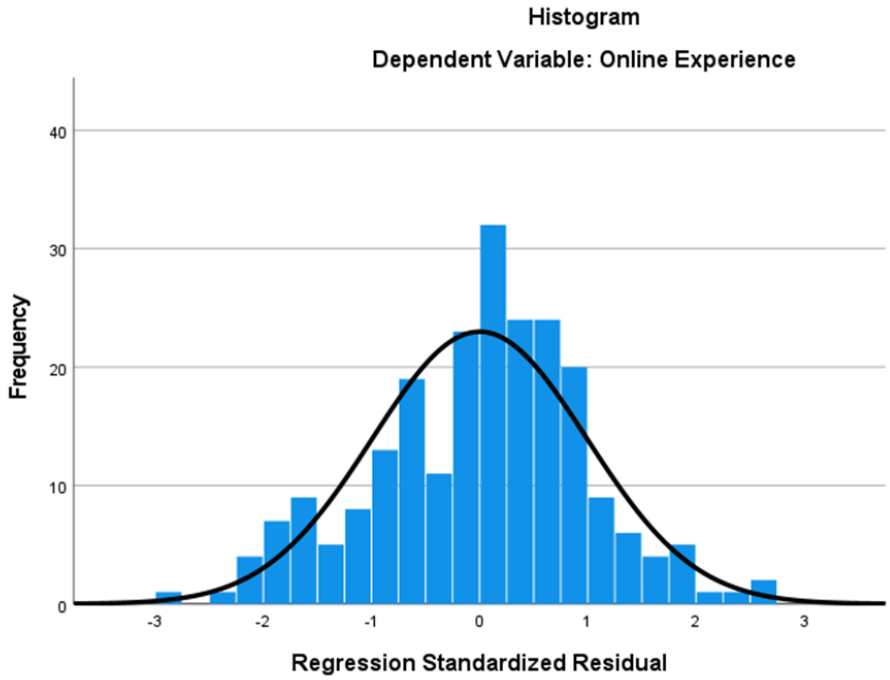


Figure 4: Histogram regression standardised residual: Online satisfaction (Research hypothesis 1.2)

Source: SPSS Output (2021)

C.8: Regression Analysis - Research Hypothesis 1.3

Hypothesis 1.3: Consumers' online shopping experience amid OBT significantly influences their online shopping satisfaction.

Table 29: Research Hypothesis 1.3 - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
OnlineSat	3.91	0.69	229
OnlineExp	3.74	0.72	229

Table 30: Research Hypothesis 1.3 - Correlations SPSS output

Correlations			
		OnlineSat	OnlineExp
Pearson Correlation	OnlineSat	1.000	0.809
	OnlineExp	0.809	1.000
Sig. (1-tailed)	OnlineSat		0.000
	OnlineExp	0.000	

Table 31: Research Hypothesis 1.3 - Model summary SPSS output

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809[a]	0.655	0.654	0.404

a. Predictors: (Constant), OnlineExp
b. Dependent Variable: OnlineSat

Table 32: Research Hypothesis 1.3 - ANOVA SPSS output

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.224	1	70.224	431.175	.000[b]
	Residual	36.971	227	0.163		
	Total	107.195	228			

a. Dependent Variable: OnlineSat
b. Predictors: (Constant), OnlineExp

Table 33: Research Hypothesis 1.3 - Coefficients SPSS output

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.034	0.141		7.328	**0.000**	0.756	1.312
	OnlineExp	0.770	0.037	0.809	20.765	**0.000**	0.697	0.843

a. Dependent Variable: OnlineSat

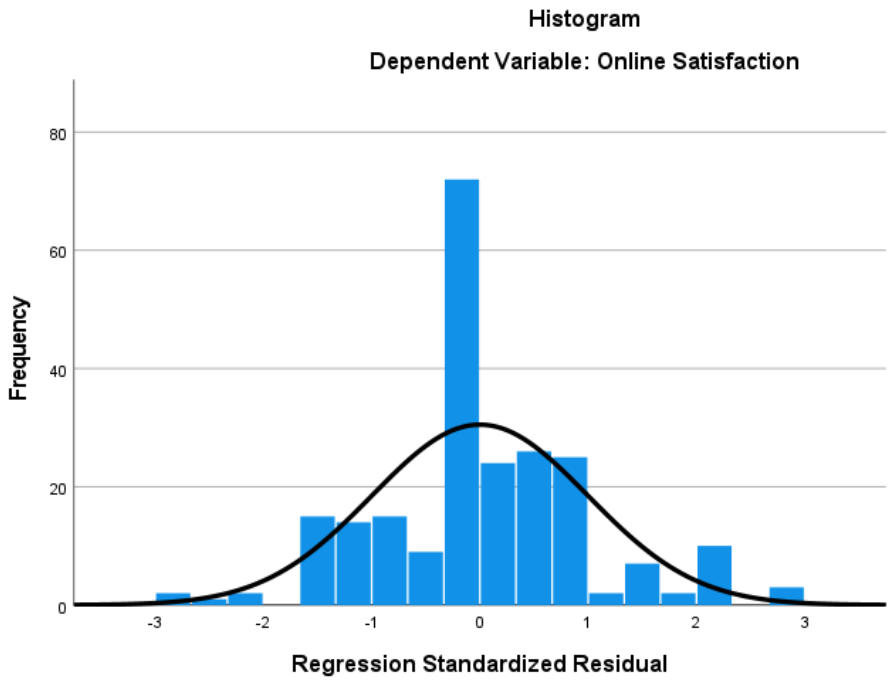


Figure 5: Histogram regression standardised residual: Online satisfaction (Research hypothesis 1.3)

Source: SPSS Output (2021)

C.9: Regression Analysis - Research Hypothesis 2.1

Hypothesis 2.1: Consumers' perceived level of control (informed consent) significantly moderates the relationship between their knowledge of personalised adverts and their perceptions of OBT advertising, specifically their perceptions of the benefits and personalisation of OBT advertising (H2.1a), their privacy concerns concerning OBT advertising (H2.1b) and their perceptions of the intrusiveness of OBT advertising (H2.1c).

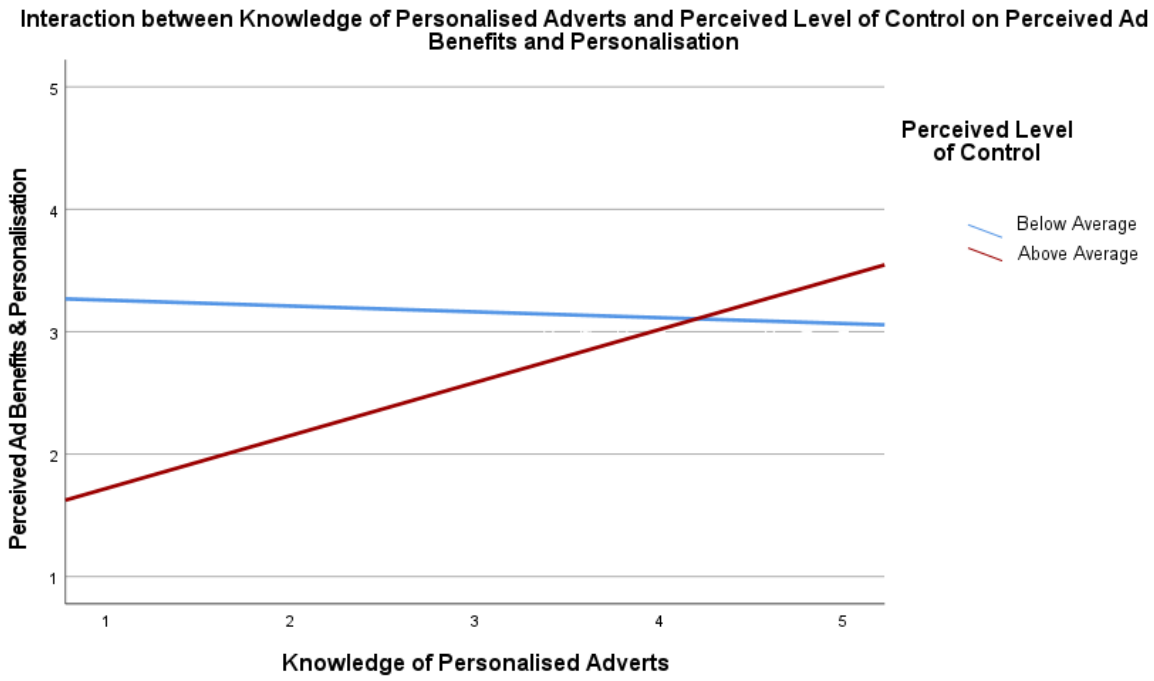


Figure 6: The interaction between knowledge of personalised adverts and perceived level of control on perceived ad benefits and personalisation (Research hypothesis 2.1a)

Source: SPSS Output (2021)

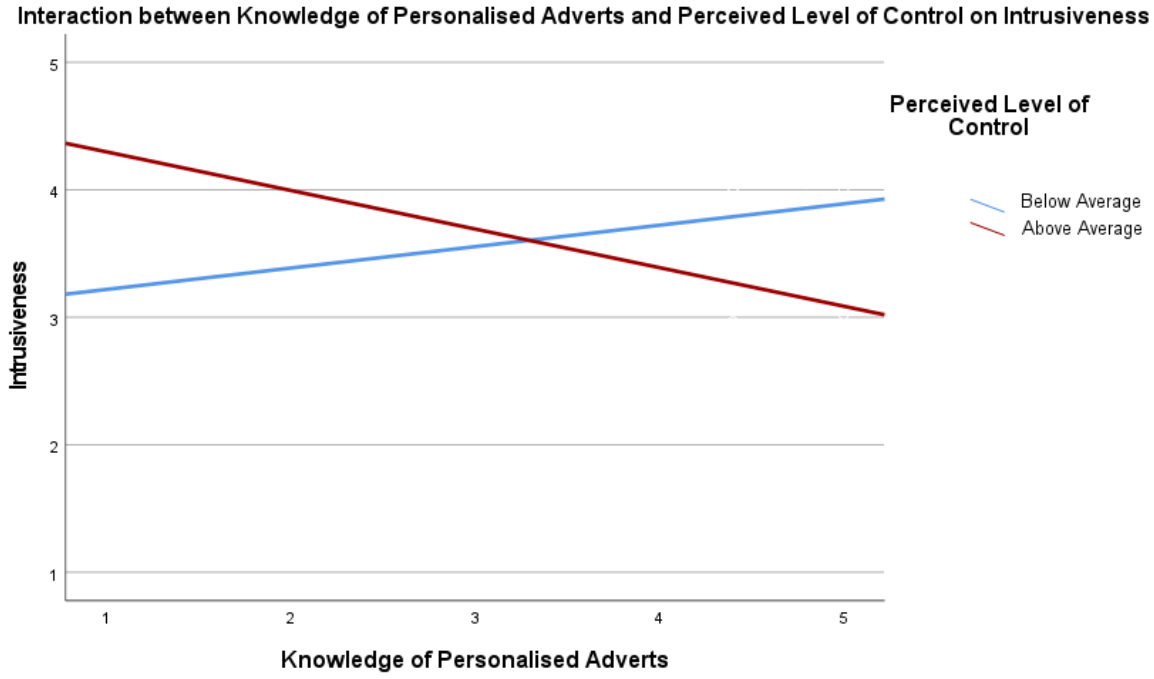


Figure 7: The interaction between knowledge of personalised adverts and perceived level of control on perceived intrusiveness (Research hypothesis 2.1c)

Source: SPSS Output (2021)

C.10: Regression Analysis - Research Hypothesis 3.1

Hypothesis 3.1: Consumers' online shopping satisfaction amid OBT significantly influences their purchase intentions of OBT advertised commodities and acceptance of OBT advertising

Table 34: Research Hypothesis 3.1 - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
Intent.Accept	2.74	0.949	229
OnlineSat	3.91	0.686	229

Table 35: Research Hypothesis 3.1 - Correlations SPSS output

Correlations			
		Intent.Accept	OnlineSat
Pearson Correlation	Intent.Accept	1.000	0.358
	OnlineSat	0.358	1.000
Sig. (1-tailed)	Intent.Accept		0.000
	OnlineSat	0.000	

Table 36: Research Hypothesis 3.1 - Model summary SPSS output

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.358[a]	0.128	0.124	0.888

a. Predictors: (Constant), OnlineSat
b. Dependent Variable: Intent.Accept

Table 37: Research Hypothesis 3.1 - ANOVA SPSS output

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.273	1	26.273	33.301	.000[b]
	Residual	179.093	227	0.789		
	Total	205.366	228			

a. Dependent Variable: Intent.Accept
b. Predictors: (Constant), OnlineSat

Table 38: Research Hypothesis 3.1 - Coefficients SPSS output

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	0.805	0.341		2.363	**0.019**	0.134	1.476
	OnlineSat	0.495	0.086	0.358	5.771	**0.000**	0.326	0.664

a. Dependent Variable: Intent.Accept

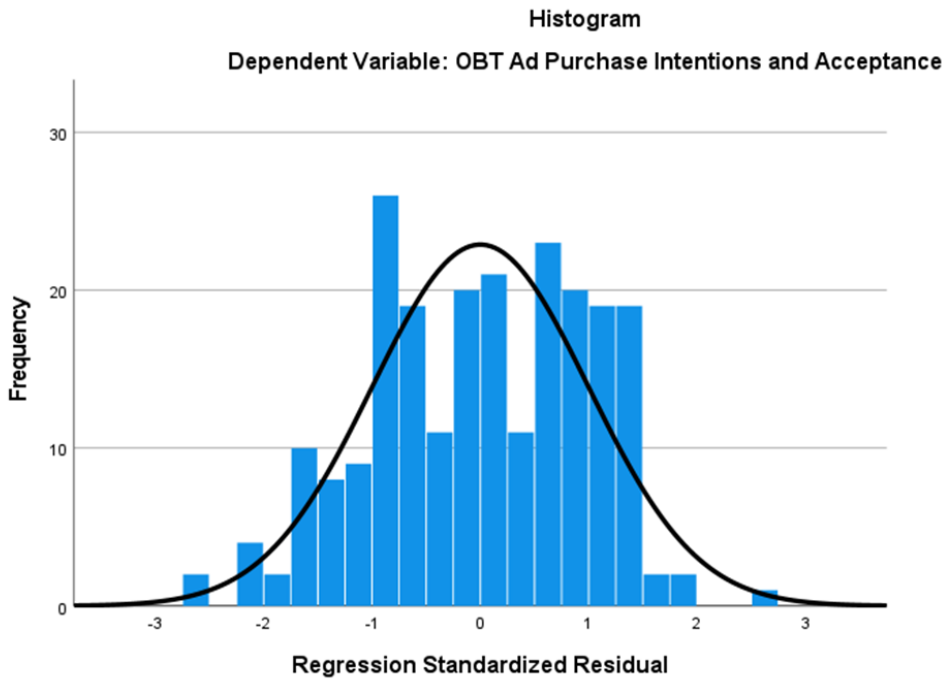


Figure 8: Histogram regression standardised residual: OBT ad purchase intentions and acceptance (Research hypothesis 3.1)

Source: SPSS Output (2021)

C.11: Regression Analysis - Research Hypothesis 3.2

Hypothesis 3.2: Consumers' online shopping satisfaction amid OBT significantly influences their avoidance of OBT advertising

Table 39: Research Hypothesis 3.2 - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
Avoidance	3.33	1.032	229
OnlineSat	3.91	0.686	229

Table 40: Research Hypothesis 3.2 - Correlations SPSS output

Correlations			
		Avoidance	OnlineSat
Pearson Correlation	Avoidance	1.000	-0.287
	OnlineSat	-0.287	1.000
Sig. (1-tailed)	Avoidance		0.000
	OnlineSat	0.000	

Table 41: Research Hypothesis 3.2 - Model summary SPSS output

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.287[a]	0.082	0.078	0.991

a. Predictors: (Constant), OnlineSat
b. Dependent Variable: Avoidance

Table 42: Research Hypothesis 3.2 - ANOVA SPSS output

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.029	1	20.029	20.403	.000[b]
	Residual	222.840	227	0.982		
	Total	242.870	228			

a. Dependent Variable: Avoidance
b. Predictors: (Constant), OnlineSat

Table 43: Research Hypothesis 3.2 - Coefficients SPSS output

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.022	0.380		13.216	**0.000**	4.273	5.770
	OnlineSat	-0.432	0.096	-0.287	-4.517	**0.000**	-0.621	-0.244

a. Dependent Variable: Avoidance

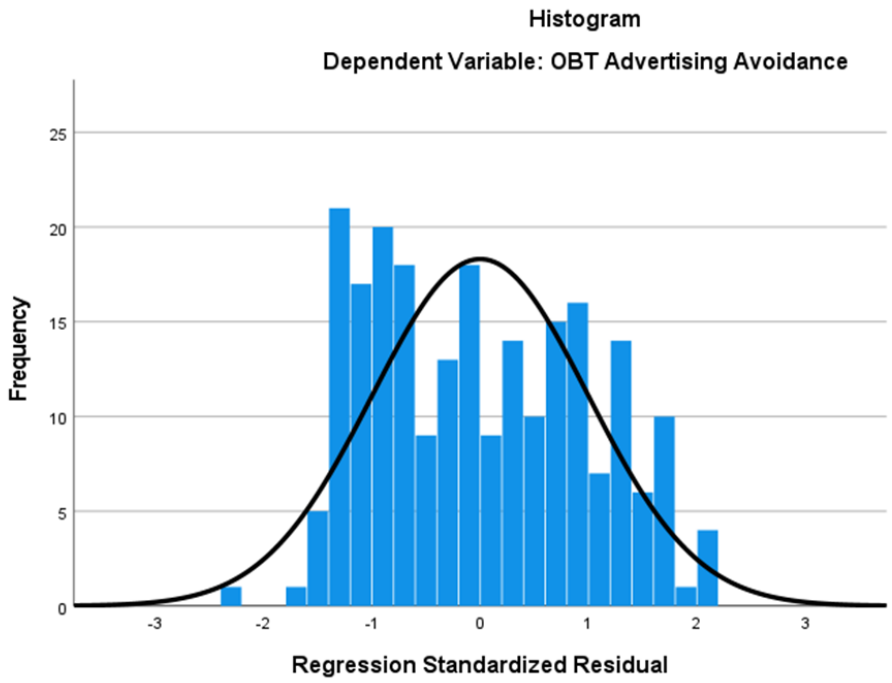


Figure 9: Histogram regression standardised residual: OBT ad avoidance (Research hypothesis 3.2)

Source: SPSS Output (2021)

C.12: Regression Analysis - Research Hypothesis 3.3

Hypothesis 3.3: Consumers' online shopping satisfaction amid OBT significantly influences their continuation with online shopping

Table 44: Research Hypothesis 3.3 - Descriptive statistics SPSS output

Descriptive Statistics			
	Mean	Std. Deviation	N
Continuance	3.92	0.817	229
OnlineSat	3.91	0.686	229

Table 45: Research Hypothesis 3.3 - Correlations SPSS output

Correlations			
		Continuance	OnlineSat
Pearson Correlation	Continuance	1.000	0.652
	OnlineSat	0.652	1.000
Sig. (1-tailed)	Continuance		0.000
	OnlineSat	0.000	

Table 46: Research Hypothesis 3.3 - Model summary SPSS output

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652[a]	0.425	0.423	0.621

a. Predictors: (Constant), OnlineSat
b. Dependent Variable: Continuance

Table 47: Research Hypothesis 3.3 - ANOVA SPSS output

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.625	1	64.625	167.831	.000[b]
	Residual	87.409	227	0.385		
	Total	152.034	228			

a. Dependent Variable: Continuance
b. Predictors: (Constant), OnlineSat

Table 48: Research Hypothesis 3.3 - Coefficients SPSS output

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	0.882	0.238		3.705	**0.000**	0.413	1.351
	OnlineSat	0.776	0.060	0.652	12.955	**0.000**	0.658	0.895

a. Dependent Variable: Continuance

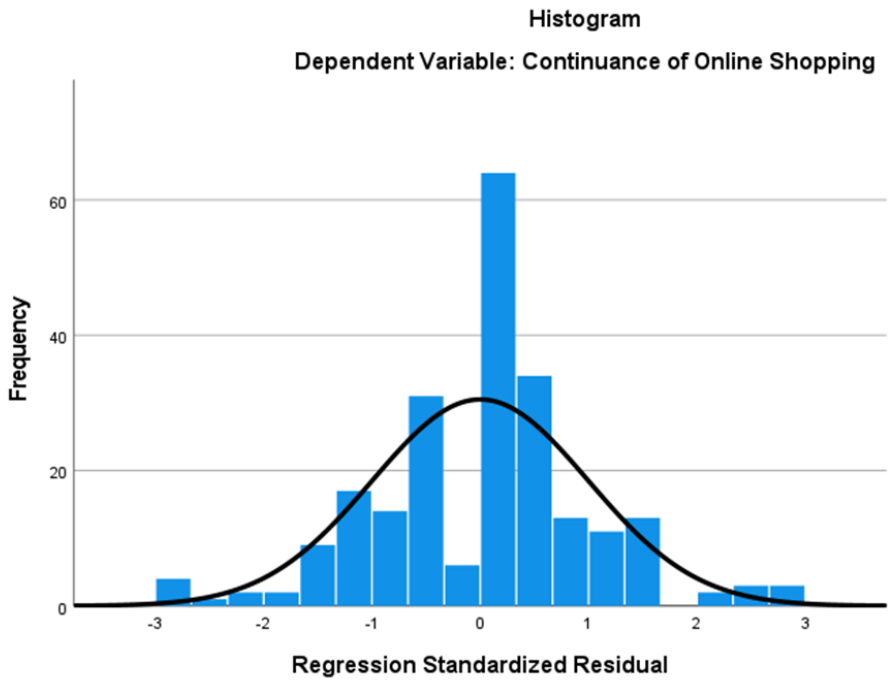


Figure 10: Histogram regression standardised residual: Continuance of online shopping (Research hypothesis 3.3)

Source: SPSS Output (2021)