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Asmeninės ir bendrinės žinutės: suvokiamo įkyrumo poveikis ir vartotojų ketinimas pirkti aukštos ir žemos vertės produktus internetu	**Personalized and Generic Messages: Effects on Perceived Intrusiveness and Consumers' Intention to Purchase High- and Low-Value Products Online.**

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Abstract

Message personalization has become a key component of marketing in today's highly competitive world of electronic commerce. The purpose of this research was to look at the complex effects of personalized and generic brand messages on the Online Purchase Intention of consumers using Perceived Usefulness, Perceived Ease of Use, Attitude Toward Brand and Perceived Intrusiveness as mediating factors. It also studied how Product Type (utilitarian, high-involvement vs. hedonic, low-involvement) moderates the relationships. The study was conducted using a positivistic paradigm and deductive research strategy. A two-by-two factorial design was used in a between-subjects experimental context and was delivered to participants via an online survey. There were 461 participants from a variety of countries included in the sample for this study. MANOVA and multiple regression analyses were used to analyze the data. Upon conducting preliminary analyses of the data, it was determined there was a serious methodological flaw in this study as the internal consistency (reliability) of the multi-item measurement scales was extremely low, therefore, threatening to invalidate the results of the study. Therefore, the main hypothesis tests produced only non-significant results. Neither the manipulation of message type or product type produced statistically significant results on the mediating variables or purchase intention. Even with successful manipulation checks, the primary theoretical model for the study was not supported due to the overwhelming measurement error. The thesis concludes with a discussion of the implications of this measurement failure, an evaluation of the methodological rigor of the study and recommendations for future research to address the issues identified in this study.

Santrauka

Žinučių personalizavimas tapo svarbia rinkodaros sudedamąja dalimi šiandieninėje itin konkurencingoje elektroninės prekybos aplinkoje. Šio tyrimo tikslas buvo ištirti sudėtingą personalizuotų ir bendrinių prekės ženklo žinučių poveikį vartotojų ketinimui pirkti internetu, analizuojant suvokiamą naudingumą, suvokiamą naudojimo paprastumą, požiūrį į prekės ženklą ir suvokiamą įkyrumą kaip tarpininkaujančius kintamuosius. Taip pat buvo analizuojama, kaip produkto tipas (utilitarinis, didelio įsitraukimo ir hedonistinis, mažo įsitraukimo) moderuoja šiuos ryšius.

Tyrimas buvo atliktas taikant pozityvistinę paradigmą ir dedukcinę tyrimo strategiją. Eksperimentiniame tyrime buvo naudojamas dviejų veiksnių dviejų lygių (2×2) faktorialinis dizainas su tarpgrupiniu palyginimu, o duomenys buvo surinkti naudojant internetinę apklausą. Tyrimo imtį sudarė 461 respondentas iš įvairių šalių. Duomenų analizei buvo taikoma daugiamatė dispersinė analizė (MANOVA) ir daugybinė regresinė analizė.

Atlikus preliminarią duomenų analizę, buvo nustatytas reikšmingas metodologinis trūkumas – itin žemas daugiapakopių matavimo skalių vidinis suderinamumas (patikimumas), kuris kėlė grėsmę tyrimo rezultatų validumui. Dėl šios priežasties pagrindinių hipotezių testavimo rezultatai nebuvo statistiškai reikšmingi. Nei žinutės tipo, nei produkto tipo manipuliacijos neturėjo statistiškai reikšmingo poveikio tarpininkaujantiems kintamiesiems ar vartotojų

ketinimui pirkti. Nepaisant sėkmingų manipuliacijos patikrinimų, pagrindinis teorinis tyrimo modelis nebuvo patvirtintas dėl didelės matavimo paklaidos.

Darbas baigiamas aptariant nustatytų matavimo problemų pasekmes, vertinant tyrimo metodologinį pagrįstumą ir pateikiant rekomendacijas būsimiesiems tyrimams, siekiant išspręsti šiame tyrime identifikuotas problemas.

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Chapter 1: Introduction

The importance of Personalization to the consumer continues to grow as companies across the globe recognise its importance as part of building and sustaining customer loyalty. For most consumers today, Personalization has become an expected component of interacting with brands online. This shift has been documented in multiple studies, including key research conducted by McKinsey (2021), which reveals that up to 71% of consumers expect some level of personalisation, and that over 76% of consumers experience frustration when they do not receive such experiences. The implications of this transition for business-to-consumer online retailers represent a significant change, whereby brands that successfully leverage Personalization to engage their customers may realise revenues that exceed their competitors by as much as 40%. Therefore, Personalization has become more than just a tool that enhances a consumer's experience with the brand. Instead, it has evolved into one of the defining factors that will enable brands to develop a sustainable competitive advantage, and grow their financial performance, in today's hyper-competitive online marketplace.

Thus, the transformation that is currently underway within the marketplace, termed "the personalization of everything" (Forbes, 2025b), has been facilitated by advances in artificial intelligence that permit marketers to transition from generic, one-size-fits-all forms of messaging, to highly individualised, hyper-personceptive strategies. As consumer expectations continue to evolve towards greater degrees of sophistication and complexity, so too do the methods that brands employ to create personalised experiences. The brands that leverage advanced hyper-personalisation techniques may realise revenue gains of six to ten per cent over their competitors that rely upon basic Personalisation methods (Forbes, 2025a). However, while Personalisation may offer brands an opportunity to create more meaningful connections and loyalty to their customers, there are currently many differing opinions as to its potential efficacy in delivering these benefits.

On one hand, a significant body of literature supports Personalisation as being an effective means to achieve these outcomes. Studies have shown that consumers respond to personalised messaging and create a positive brand image, have a higher click-through rate, and exhibit a higher propensity to engage in word-of-mouth marketing about the brand (De Keyzer, 2020). On social platforms like TikTok, a consumer's intention to purchase from brands that use Personalisation is influenced by the perceptions of the creativity and authenticity of the experience (Chu et al., 2024). Conversely, the risks associated with the use of Personalisation as a marketing tool are substantial. Research conducted by Lee et al. (2022a) demonstrates that while Personalisation may increase a brand's reputation and image, there is a potential danger associated with the overuse of Personalisation.

Too high a degree of Personalisation can make a consumer feel inundated with information and excluded from the rest of us. Thus, for members of younger generations, such as Gen Z, the connection between Personalisation and privacy has a tendency to align. Therefore, the study of Lambrecht & Tucker (2013) also challenged the belief that Personalised advertising is always more effective than generic advertising. As such, this research proposes that the relationship between a communication message and a consumer's final purchase intention will

not be a direct one, but will instead be channelled through various important Psychological Mechanisms. Four key Psychological Mechanisms are proposed as mediators for this relationship: Perceived Intrusiveness, Perceived Usefulness, Perceived Ease of Use, and Attitude Toward the Brand. Each of these mediators are instrumental in assisting individuals in determining whether a communication message is viewed as a benefit or detriment to them. Moreover, the effectiveness of any of these communication strategies will be dependent on the type of product being purchased. Thus, this study proposes to evaluate Product Type (High vs. Low Involvement) as a critical Moderator Variable, and postulates that consumers will react differently to Personalised messages related to a high-ticket item such as a smartphone, versus a low-price item like perfume. The best way to achieve the knowledge necessary to advance the field of Personalisation, and therefore gain a better understanding of it, is through the investigation of the multiple facets inherent in Personalisation.

1.1 Study Problem

There is currently no definitive answer to how personalised communications from brands impact consumers' beliefs about intrusiveness and their willingness to buy products over the internet; Moreover, the cognitive (e.g., utility) and affective (e.g., attitude towards the brand) components of the communication must also be factored into the analysis of how a company's personalised communications affect its potential buyers. Furthermore, it is unclear whether the level of involvement (either low or high) plays a role in determining how a particular product's relationship to a particular personalised communications channel is applied to the potential buyer.

1.2 Aim Of Study

The purpose of this research is to examine how personalisation affects both perceived intrusiveness and online purchase intentions; however, it also aims to evaluate whether product type moderates this relationship. Furthermore, the mediating roles of perceived ease of use, perceived usefulness, attitude toward the brand, and perceived intrusiveness will be assessed in relation to product type and personalisation.

1.3 Research Objectives

- To determine how personalised and generic brand communications impact their perceived intrusiveness.
- To determine the effect of perceived intrusiveness on consumers' intention to purchase online.
- To evaluate the extent of perceived intrusiveness as a mediator of the relationship between personalisation and purchasing intention.
- To determine whether product type (high versus low value) moderates the relationship between personalisation and perceived intrusiveness.
- To validate the proposed conceptual framework using a quantitative approach.

1.4 Methods Applied in the Study

The research employs analysis of scientific literature as well as an experimental methodology that used four closed-ended questionnaires in a survey experiment. Participants will respond to either a generic or personalised brand message which has been developed through a factorial experimental design. In order to evaluate differences in effectiveness of communication styles, participant responses will be analysed through statistics - including descriptive statistics, correlation, regression and mediation/moderation testing.

The final part of the study presents an overview of the theoretical insights gained from this work, along with practical recommendations, and outlines avenues for future research.

1.5 Limitations of the Study

There are limitations to this study based on a variety of factors. First and foremost, it was conducted only in Lithuania, meaning that findings may not translate well to societies around the world or across multiple regions. The experiments were conducted only with select types of products (hedonic and utilitarian), meaning that they do not adequately represent how consumer attitudes toward product types differ across different industries. Thirdly, the experimental stimulation materials/messages were delivered in English, creating potential for biases toward English-speaking participants (i.e., all responding to the survey may favour English language based on familiarity with it). Finally, while the study contrasts both Personalised and generic Brand Communication, it fails to address the trend toward more precise and sophisticated forms of AI Hyper-Personalisation which could be explored in future research.

1.6 Structure of the Thesis

The first part of the structure gives some context around the problem and establishes why it is relevant and important to study. The second part of literature review discusses previously conducted studies related to this research problem and objectives. The methodology section outlines the hypothesis, conceptual framework, and the research implementation strategies. In addition, Methodology will contain the research design, research type, data collection instrument, target population(s), sampling technique, size of sample selected, and the procedure for collecting and analyzing data on each question item or variable. The Results section will contain findings from the survey in addition to any findings returned to the researcher as a result of conducting this study. Finally, in the Conclusion section, the researcher will summarize findings, identify any limitations/challenges of the conduct of this study, and discuss future directions.

Chapter 2: Literature Review

2.1 The Evolution of Marketing Communication: From Mass Broadcast to Digital Dialogue

The story of marketing communications throughout history is essentially about how technology has changed how consumers relate to brands. The dominant model throughout much of the 20th century was mass advertising (one-to-many communication or broadcasting) via mass media (e.g. newspapers, radio, television), based upon the reach and repetition concepts, with the goal of creating and saturating the entire population of consumers with a particular, standardized message about the brand being marketed. This strategy was based on the psychological assumption that repetition would lead to familiarity, which in turn would result in trust and preference for the brand by consumers. While we are now living in a digital-first world, these traditional vehicles still provide value to marketers, as research shows that most consumers view television and radio as very trustworthy sources, with their broad reach and deep cultural relevance continuing to provide advertising value and establish brand legitimacy (Korenkova et al., 2020). Chiguvi (2022) points out that in local or domestic markets, consumers have a long-standing association between print and broadcast media and institutional authority (thus credibility), making traditional advertising a very effective marketing channel for creating widespread awareness of and providing a foundation of trust in a brand. Although mass-market advertising has come under increasing scrutiny because of its viability in terms of cost and efficiency in the last few decades, the faith in the historical return on investment associated with large-scale advertising is no longer unquestionable.

According to Shapiro et al.'s (2021) research on 288 different brands, they found that many of them had very low elasticity's for TV Advertising. Many of the enterprises studied experienced negative profitability based on the results from their data analysis. The findings were contrary to the general belief in the industry about how effective TV advertising was and forced the advertising industry to rethink its role in the consumer's purchase decision-making process. Even with these economic questions, TV advertising still has a great deal of cultural power associated with it. TV advertising's value lies less in the ability to target consumers precisely and more in the ability to establish a brand as having cultural relevance and legitimacy as well as create shared experiences among consumers that digital micro-targeting cannot replicate (Kaushik et al., 2023). Therefore, the original purpose of the television advertising formats is now clear, as they are best suited for providing initial customer awareness and shaping the perception of the entire marketplace at the top of the marketing funnel.

The emergence and rapid growth of the internet and the emergence of e-commerce at the end of the 1990's represented the most significant change in the marketing system to date. The first generation of Online Advertising formats (Banner Ads, Pop Up Windows and Email Newsletters), were essentially rules-based, digital versions of traditional mass promotions. They were based on the one-to-many communication model, which aimed to capture as many eyes as possible. Despite their reputation as being disruptive, the generic forms of digital mass promotion have had an undeniable impact on building initial customer awareness and driving purchasing decisions in the first phases.Recent research continues to substantiate findings that

internet advertising in general, at-scale continues to significantly shape how individuals engage with products and brands; younger generations spend an enormous amount of time online and are digital natives (Ghar, 2024). Recognizing the historical transformation of advertising goes from print to television and finally to internet-based ads is not an indicator of successive revolutions, but is indicative of the evolution and adaptation of the fundamental tenets behind all forms of mass communication to the underlying structure and architecture of various emerging technologies (Bhavsar & Tiwari, 2024).

Today's top marketing minds see this evolution from mass advertising to online advertising as something far more complex and integrated than a simple substitution game or "zero-sum." For example, Chiguvi (2022) argues the most effective and durable marketing strategies utilize both traditional and digital media in a combined manner, meaning a campaign can take advantage of television ads to build credibility and create an emotional connection while simultaneously utilizing digital ads to greatly expand its reach, send targeted messages for follow-up and create a sense of urgency in driving immediate action from consumers.

For example, consumers do not move through the buyer journey in a linear fashion; they seamlessly transition back and forth from digital channels to physical stores, as they make connections with brands. At the same time, there are contexts where generic communication is appropriate and effective. In the CSR domain, for example, generic and broader-based communications focused on values and commitment to social responsibility will often capture a greater emotional connection across a greater diversity of audiences than communications that are narrowly targeted to specific audiences, which may be perceived as disingenuous or exploitive (Gangadharbatla et al., 2022). Digital communication does not supplant the value of traditional forms of communication; rather, it enhances the existing traditional forms of communication by adding new levels of interactivity, precision measurement and a multitude of ways for consumers to engage with brands. Ultimately, the success of contemporary advertising is driven not by choosing between a generic communication strategy or personalising the communication, but rather by being contextually aware and integrating the two strategies with precision according to the consumer, product and marketing objective (Feng et al., 2025).

2.2 The E-commerce Ecosystem: Where Communication and Commerce Converge

Businesses have adapted to the rapid growth of e-commerce and how many customers had begun shopping online during COVID-19, changing how they view their brand, on which to present themselves, and how customers view their brand. In addition, e-commerce platforms have become the primary place for business to transact in this current world (Mishra et al., 2021a). Unlike traditional forms of advertising, e-commerce platforms also complement advertising as a transaction medium. As such, the combined nature of content and commerce creates a unique competitive situation where brands compete for consumer attention, and it represents an area where brands can use modern marketing strategies (Bhavsar & Tiwari, 2024).

The rise of organisations like Amazon and social media companies such as YouTube and TikTok has shifted the way in which we communicate and engage with companies as these platforms serve many functions. They are not just e-commerce sites, and they are not solely for advertising purposes; they create an ecosystem where businesses can communicate with large audiences, yet they can also communicate with targeted audiences through extreme granularisation (Lăzăroiu et al., 2020). The algorithms that drive these platforms dictate how consumers behave, and TikTok's algorithm uses the concept of extreme personalisation to provide content that a user believes to be highly creative and authentic, which has been shown to influence consumers' likelihood of purchasing that content based on the subsequent behaviour (Chu et al., 2024).

Similarly to how YouTube provides users with the ability to discover both popular content and personalised recommendations based on what they've watched in the past, it uses a recommendation engine to help people find brands that they may want to purchase. Almost all the content on YouTube, whether original or non-original, is being used to assist in getting people to engage with the consumer experience of the brand (Lee et al., 2022a). As previously mentioned, new platforms today do not simply "provide" an opportunity for brands to communicate with consumers through entertainment; instead, they have taken the initiative to put brand communications directly into the overall experience of entertainment, social interaction and purchasing.

Even though the technology and process for the personalisation of content continue to be developed greatly and are significantly better than what they were a few years ago, a critical importance of digital advertising continues to exist in its generic form. Foundation formats such as display banners and similar forms of digital advertising are examples of effective means of developing initial awareness about a brand and introducing consumers to what products can be purchased. This is especially true for younger consumers who are well versed in the use of technology and are, therefore, more likely to have digital representations of products (Ghar, 2024). With that said, when these generic formats are not used thoughtfully, there is the risk of creating an excess of unnecessary impressions resulting in consumers developing a viewpoint that there is no need to view future advertising (Exposito-Ventura et al., 2021). What researchers point out is that while generic formats may not be as accurate as personalisation, they are still a cost-effective way of getting large numbers of consumers to recognise and engage with brands (Chiguvi, 2022).

The advent of social commerce has allowed the most complete integration of e-commerce and communication to take place.Incorporated directly into their user interface, shopping features have been added to the apps of both Facebook and Instagram for easy access to products through online merchandising. This is a new phenomenon because it allows brands' generic advertisements to be seen alongside personalised recommendations and endorsements from people's social networks, effectively breaking down the dividing line between advertising and retail dressing (Lin, 2021). Therefore, with a heavy emphasis on social validation as a catalyst for purchasing behaviour, the role of trust, authenticity and social proof are paramount to the new online shopping paradigm (Lăzăroiu et al., 2020). In light of this new dependence on social connections, advertising on these platforms needs to move beyond simply communicating

information; advertising has to focus on creating genuine interactions, co-creating value with consumers, and fostering communities around brands, rather than relying on impersonal ads.

As a result of this evolution, the digital advertising ecosystem has become increasingly complex due to the interplay between evolving technologies, such as real-time bidding (RTB) and programmatic advertising (PA), and a host of recurring human-centred challenges. On one hand, these new technologies have dramatically improved the efficiency, effectiveness, measurement, and accountability of online marketing (Nerma Gusic & Stallone, 2020); on the other hand, the same data-driven practices used in RTB and PA have further heightened unresolved concerns about consumers' privacy, the fairness of algorithms, and the transparency of the data collection, analysis, and use processes (Van Buggenhout et al., 2023a).

Consumers have become increasingly aware and sensitive to the way their personal information is being collected, analysed, and utilised to affect their buying behaviours, thereby creating an inherent contradiction for e-commerce: How can a platform provide the level and type of relevance and personalisation demanded by consumers while simultaneously relying on mass-media communications methods to achieve and maintain reach and deal with the associated ethical considerations related to their practices regarding data? Therefore, the best-received marketing strategies of the future will be those that are capable of navigating this complex landscape using generic advertising to tell broad stories and build awareness, while utilising ethical, transparent personalisation to positively affect the decision-making of consumers and create long-term relationships (Feng et al., 2025).

2.3 The Dual Impact of Personalised Brand Messages: A Four-Pathway Framework

The development of modern marketing has created two distinct types of marketing strategies; mass communication and individualised digital engagement (Bhavsar & Tiwari, 2024). On the one hand is personalisation, an approach based on data to create customised messages that meet the specific requirements of each individual. By doing so, it increases relevance, builds engagement and improves the chances of conversion (De Keyzer, 2020). On the other hand is generic communication, which, while lacking personalisation, remains a principal approach to creating broad brand awareness, establishing confidence among potential customers and is very effective in the early stages of the decision-making process (Korenkova et al., 2020). The success of either approach is not always absolute; it will ultimately depend on a combination of factors, including the psychological characteristics of the consumer.

Therefore, for this study to understand this interaction fully, it's proposed that the interaction of a brand's communication message with a consumer's decision-making relates to how the message affects the ultimate buying intention of the consumer. This effect is mediated by four different, but related, psychological processes; the cognitive assessment of the message's usefulness, the emotional response of the consumer to the brand and the psychological response to the marketing communication technique itself. This research investigates all four processes and mediating variables as proposed by the Technology Acceptance Model: Perceived Usefulness and Perceived Ease of Use are both cognitive based.The constructs that assess the functional value of messages include factors such as how messaging helps consumers reach

their goals and whether or not messages are understandable. A third mediator is affective in nature, which is the consumer's attitude toward a brand. This attitude reflects how the consumer emotionally evaluated/assessed the brand using messaging. The fourth mediator is psychological and represents the potential for negative psychological impact. It is the biggest risk associated with personalisation and is referred to as perceived intrusiveness, which is the consumer's adverse reaction to a message that has been deemed obtrusive, manipulative, or violating personal boundaries.

When personalisation is used correctly, it will have a favourable impact on the first three pathways. It helps consumers purchase products with less effort by providing very relevant information (usefulness) (Thangsupanich, 2022), builds a stronger sense of authenticity and trust, creates more positive perceptions of brands (brand attitude), and ultimately increases purchase intentions (Chu et al., 2024). Unfortunately, this approach also carries significant risk through the fourth pathway, and as such, personalisation can be a double-edged sword. The same data and algorithms used to create relevance for consumers can easily backfire. The paradigm of personalisation-intrusiveness-intention (PI²) proposed by Lee et al. (2022a) illustrates how the consumer's response to personalisation changes as perceived intrusiveness increases.

The positive impact on purchase intention from personalisation dissipates and then becomes a negative effect when the perceived intrusiveness is perceived to be high. A large percentage of younger digitally savvy consumers, specifically Generation Z, can relate to the "personalisation paradox" due to their increased sensitivity to data privacy and propensity to avoid ads/brands that they perceive have crossed the line (Lin, 2021). This creates a tension identified by Van Buggenhout et al. (2023a) where consumers willingly share their personal data for a promise of a better service and greater convenience, but they are still leery that they may be taken advantage of. This paradox highlights the necessity of moving beyond the simple dichotomy of "personalised vs. generic" and to analyse how consumers experience or process and react to messages through the four ways of cognitive, affective, psychological, and behavioural. The next sections of this review provide in-depth analysis of the four areas of the study's conceptual model to provide the theoretical basis of the study.

Table 1 Synthesis of Key Constructs and Supporting Literature

Construct / Variable	Definition	Key Supporting Authors	Primary Findings / Relevance to this Study
Communication Message (Personalized vs. Generic)	The independent variable representing two distinct communication strategies: one tailored to individual consumer data and the	De Keyzer (2020); Chu et al. (2024); Lee et al. (2022a)	Personalisation is expected to enhance positive mediators but also increase intrusiveness. Generic messages

	other standardized for a mass audience.		provide a baseline for comparison.
Perceived Usefulness (Mediator)	The consumer's subjective belief that engaging with the message will help them achieve their purchasing goals more effectively and efficiently.	Davis (1989); Iqbal et al. (2025)	A core cognitive benefit of personalisation. A useful message reduces search costs and improves decision quality, positively influencing purchase intention.
Perceived Ease of Use (Mediator)	The consumer's subjective belief that understanding and processing the message will be free of cognitive effort.	Davis (1989); Tao et al. (2023)	Another cognitive benefit. An easy-to-process message enhances cognitive fluency, leading to a more positive evaluation and stronger intention.
Attitude Toward the Brand (Mediator)	The consumer's overall and enduring positive or negative affective evaluation of the brand, as influenced by the communication.	Graham & Wilder (2020); Trivedi & Sama (2020)	The key affective pathway. Personalisation can foster a relational connection and trust, leading to a more favorable brand attitude and higher purchase intent.
Perceived Intrusiveness (Mediator)	The consumer's psychological perception that a message is an unwelcome, invasive, and manipulative violation of their privacy or autonomy.	Lee et al. (2022a); Maduku (2020); Alhelaly et al. (2025a)	The primary psychological risk of personalisation. High intrusiveness triggers reactance, eroding trust and negatively impacting purchase intention.
Product Type (High vs. Low Involvement)	The moderating variable representing the context of the	Lambrecht & Tucker	Moderates the effect of the message on the mediators.

	purchase, which alters a consumer's motivation and depth of information processing.	(2013); Lee et al. (2022a)	Consumers are expected to be more receptive to personalisation for high-involvement products.
Online Purchase Intention (Dependent Variable)	The consumer's conscious and deliberate plan or readiness to acquire a product through a digital channel.	Mishra et al. (2021b); Lăzăroiu et al. (2020)	The final outcome variable, representing the net effect of the cognitive, affective, and psychological pathways activated by the brand message.

2.4 Cognitive Pathways: The Foundational Role of Perceived Usefulness and Ease of Use

The Technology Acceptance Model (TAM) was first proposed by Davis in 1989. In short, TAM states that the extent to which an individual uses a system or technology will be largely driven by two primary beliefs. These primary beliefs are: the Perceived Usefulness of the system and the Perceived Ease of Use of the system. Originally proposed in the context of software in the workplace, the principles of TAM have been successfully utilised to explain and predict consumer behaviour in many different digital contexts, including E-commerce and Online Advertising. Therefore, for this research, TAM will provide the framework for understanding the ways in which a brand message positively influences a consumer's intention to purchase. When encountering an advertisement, a consumer implicitly considers the ad as a tool, or technology, to inform and persuade. As a result, the consumer's response to the advertisement will be determined by how the consumer assesses the Utility and Usability of the advertisement as a tool. Perceived Usefulness is defined as "the extent to which an individual believes that utilisation of a specific system would increase the productivity of his/her job performance" (Davis, 1989). In regards to consumers, this translates to the belief that interaction with a Brand Message will assist the consumer in achieving their purchasing objectives more effectively. Personalised messages are designed to excel in this area.

With the help of past purchase patterns, expressed interests, or demographic data, personalized marketing can eliminate irrelevant marketing messages and instead provide the customer with messages that fit the customer's needs. Personalized messages boost the effectiveness of the message for a number of reasons. First, by eliminating much of the searching and filtering that occurs during an online shopping trip, personalized marketing offers the consumer a satisfied shopping experience. Consumers will have fewer choices to sort through than before and will be provided with the best options for them based on their preferences. Second, personalized

marketing increases the perceived benefit of a message and therefore the likelihood that the consumer will use it to make a better, more informed purchasing choice.

Studies by Iqbal et al. (2025) confirm this correlation; e-commerce retailers implementing AI-enhanced personalized marketing communications that add value and deliver a clear use-benefit improve consumer satisfaction and subsequently increase purchase intention. A personalized marketing message helps the consumer understand the value of a product by providing specific, relevant features that align with their described priorities, and as such, provides them with tremendous value by giving them information they truly need (Thangsupanich, 2022). A marketing message that assists consumers in obtaining valuable products and provides truly useful, contextual content transcends being a simple advertisement and instead acts as a valuable, useful decision-making resource.

The construct of Perceived Ease of Use is described as "the extent to which a person believes using a specific system would be free of effort" (Davis, 1989). In terms of marketing messages, this means the cognitive effort for a customer to understand, process, evaluate, and respond to brand communications. The personalization aspects of personalized marketing can enhance perceived ease of use by improving what psychologists define as cognitive fluency. For example, a generic marketing message that is intended for the masses usually contains some level of irrelevant message content for a single customer, which requires that customer to invest more cognitive energy into filtering and interpreting the message than the customer could devote to that task when reading a well-crafted personalized marketing message. Consequently, a customer who encounters a generic marketing message is likely to become paralyzed by the number of choices presented to them and subsequently abandon the message altogether.

Conversely, a well-developed personalized marketing message is cognitively efficient because it filters out irrelevant content for the consumer and gives the user the pertinent information in an organized, concise, and clear manner. As a result, it is much easier for consumers to understand the value proposition of the product and develop an opinion about it. The ease of processing personalized marketing messages develops a powerful psychological preference for the brand or product being promoted; humans tend to favor things that they can easily process. A positive emotional response generated by the ease with which they process personalized marketing message may cause a customer to attribute that response to the product or company being promoted. Thus, integrating the principles of the Technology Acceptance Model (TAM) into modern integrated marketing communications strategies is essential. Tao et al. (2023) showed this with respect to the mobile technology context. Consumers are always considering both the functional advantages (usefulness) and the cognitive comfort (ease of use and low intrusiveness) of their digital interactions with a brand when considering whether to engage with a brand or execute a particular course of action.

2.5 The Affective Pathway: Shaping the Attitude Toward the Brand

Brand messages can provoke emotional and affective responses in consumers beyond the rational and cognitive calculations of utility and effort. A powerful component of these emotional responses can be measured through the construct of Attitude Toward the Brand, which refers to a consumer's general learned and relatively stable assessment of the brand.

Attitude Toward the Brand is a multidimensional construct that consists of cognitive, affective, and behavioural components; however, it is often the affective component—that is, the feeling of liking or disliking a brand—that serves as a key heuristic in the consumer's decision-making process.

In a cluttered and noisy digital market, having a positive Attitude Toward the Brand can provide consumers with a shortcut to help them decide which brands to continue to purchase and develop loyalty to. If done with thoughtfulness and compassion, personalisation can be an extremely strong tool for developing positive Attitude Toward the Brand.

The main way personalisation creates a positive Attitude Toward the Brand is by developing a relational connection between the consumer and the brand. Through promoting an effective and personalised message that is relevant to a consumer's individual needs or identity, the brand creates a powerful sense of understanding and respect for the consumer as an individual, and not simply a number on a demographic chart. The perception that the consumer is understood can lead to a deeper level of association with the brand, as the consumer begins to think of the brand as a part of, or an extension of, their own identity (Graham & Wilder, 2020).By enhancing trust and providing trustworthy video advertisements, the relationship between brands and consumers is shifted away from a solely transactional one and towards a relational dynamic. This shift occurs as the result of the Theory of Reasoned Action, which establishes a direct and significant link between one's positive attitude towards a behaviour (or, by extension, the brand) and an individual's intention to act upon that behaviour. Numerous studies conducted in today's digital arena substantiate this relationship. For instance, Trivedi and Sama (2020) have demonstrated that feelings of admiration toward brands as a consequence of their perceived authenticity and credibility within an influencer marketing context lead consumers to form a positive attitude towards brands, which positively impact consumers' intentions to purchase brands online.

Brand personalisation through delivery of effective messages have analogous effects to what would otherwise be available through trusted recommendations via dialogue, where a message improves a consumers perceptions of a brand (including, but not limited to: the brand's credibility, authenticity, attractiveness, trustworthiness, etc.) traps that consumer into an emotional "goodwill" bank. This emotional goodwill can act as a buffer to negative brand information, lessen the impact of minor service failures, and significantly boost consumers' willingness to choose the brand over a competing brand in a saturated marketplace. As with any emotional pathway, however, the path is a two-edged sword. The potential for significant damage exists for a brand's attitude through poorly constructed marketing messages (including the use of generic advertising messages, where such messages may leave consumers with an impression of the brand being out of touch with current consumer expectations and/or careless). The greatest risk occurs with personalised brand messages that are perceived by consumers as being overly indirect, manipulative, or intrusive. These messages often create negative attitudes towards the brand, making it difficult for consumers to change that negative attitude. As Attitude Toward the Brand is a critical mediator, the Attitude Toward the Brand carries a single advertisement's ephemeral and temporary experience into long-term positive and lasting brand disposition and has a profound effect on developing a long-term brand-consumer relationship.

2.6 The Psychological Backlash: Unpacking Perceived Intrusiveness

Personalisation can lead to a positive impact on cognitive and affective processes for consumers; however, it must be approached carefully. If marketing communications cross an invisible threshold of appropriateness, they will have a negative effect on marketers and create what is described as a Perceived Intrusiveness. Perceived Intrusiveness is defined as how a consumer evaluates an advertisement as an unwanted, uninvited, and disruptive interruption of their cognitive function, personal space, or privacy (Madhavan & George, 2020). Perceived Intrusiveness does not just create annoyance; the experience is much deeper than that, as it is a sense of violation and significantly threatens an individual's autonomy and control of his/her digital ecosystem. The perceived threat of infringement is the driving force behind Psychological Reactance Theory, which was developed by Brehm (1966), and is one of the foundational theories in social psychology. Psychological Reactance Theory identifies that as consumers perceive their freedom of choice being impeded or violated, they experience an intense motivational state known as reactance, which leads them to exert their freedom back on the marketplace.

Within the realm of digital marketing, overtly personalised, excessive amounts of contextually inappropriate marketing communications have been shown to trigger reactance. When consumers perceive that their behaviours are being monitored or manipulated through opaque algorithms, they enter the reactant state, and instead of focusing on evaluating the product itself, their primary objective is to resist the marketing effort directed at them (Maduku, 2020Consumer resistance takes form in a set of three negative outcomes, which are cognitive, affective, and behavioral. The cognitive reaction comes from questioning the advertiser's intentions and the accuracy of the advertisement, leading the consumer to be skeptical as well as using counterarguments against the message presented by the advertiser. The affective component of resistance involves feelings of different levels of negativity, ranging from irritation to anger or resentment. The behavioral response would be actions taken to actively avoid all forms of marketing communication, including but not limited to the use of ad blockers, closing pop-up ads immediately upon seeing them, unsubscribing from email lists, abandoning the platform or brand in larger cases, etc.

Research confirms that these negative outcomes produce extensive empirical evidence. For instance, Lee et al. (2022a) provided an empirical connection between the level of personalization in a message and the level of perceived intrusiveness of that message; further, to add, this level of intrusiveness was correlated with a reverse effect on that consumer's intention to purchase. Various studies have documented similar experiences on various other digital platforms, such as mobile marketing. In these studies, it has been shown that mobile marketing, when done excessively, is perceived by consumers as annoying and intrusive and causes consumers to decrease their engagement with and brand loyalty to the company (Alwreikat & Rjoub, 2020).

In addition, the effects of intrusive messages extend beyond just emotions. Intrusive advertisements actually reduce a consumer's attention span as well as their ability to recall brand information, as consumers will be reallocating cognitive resources for managing the

interruption (Anisah & Miswanto, 2021). In a study by Alhelaly et al. (2025a), they also found that distrust, an outcome of invasive data gathering methods, was a potent mediator responsible for explaining the negative link between privacy violation and decreased engagement.

Interestingly, these researchers also found that creating transparency about collecting consumer information is paradoxical; too much detail can add to the anxiety of some users, making them feel more intrusive than they did before. Therefore, from the standpoint of longitudinal benefits, repetitive exposure to intrusive marketing results in a feeling of "privacy fatigue," whereby consumers feel cognitive and emotional exhaustion and disengage from digitally based commerce and develop a general dislike for online brands (Shao et al., 2022). Intrusiveness (i.e., perceived intrusiveness) is the largest overall risk of modern data-driven marketing; it has the potential to overwhelm most of the cognitive and affective benefits of data use in marketing.

2.7 The Outcome Variable: Deconstructing Online Purchase Intention

Online Purchase Intention (OPI) is the dependent variable of this research framework, the end product of all prior pathways. OPI equates to the intentions of a consumer to thoughtfully and purposefully purchase a product or service via an online medium. OPI has consistently maintained a position at the top of the consumer behavior literature, as the best predictor of whether or not a consumer will make a purchase. OPI is therefore an essential element in evaluating the effectiveness and success of a marketing communications plan (Mishra et al., 2021b). OPI does not arise in a single event as a function; rather, OPI is the culmination of all of the cognitive, affective and psychological evaluations of a consumer after viewing the advertisement of a brand. This process culminates in a final determination of the weight and judgment the advertisement carries toward the purchase of the product.

Four mediating variables heavily influence a consumer's final intention to make a purchase and are psychologists' foundational elements of the study model. The synergism created by High Perceived Usefulness and Perceived Ease of Use creates a powerful cognitive pathway leading to purchase. By providing a source of value, relevance and ease of use in processing, the message reinforces the efficiencies and competencies of the pathway to purchase for consumers, creating both rationality and satisfaction (Iqbal et al., 2025). This cognitive assessment is the rational underpinning of a consumer's choice to purchase. At the same time, the positive Attitude Toward the Brand provides the emotional stimulus necessary to go from contemplation to intention for consumers. In a competitive market, the positive emotional orientation is often the tipping point leading to a consumer selecting one brand over its nearest functional equivalent (Trivedi and Sama, 2020).

On the opposite side of the equation, when a consumer perceives the advertising message to be highly intrusive, it serves as a deterrent to purchase. The impact of and by perceived intrusiveness is felt on multiple levels. Trust, which is required for any online transaction, especially those involving sensitive financial information (Lăzăroiu et al., 2020), is fundamentally eroded through perceived intrusiveness. Additionally, perceived intrusiveness causes a very strong, negative emotional response in consumers (e.g. annoyance and resentment) that detracts from the positive mindset required to purchase. Perceived intrusiveness is the leading force behind triggering psychological and emotional defenses and

reactance (defense mechanisms) in consumers; therefore, perceived intrusiveness diverts the consumer's goal from placing a mediated or direct purchase, to asserting their independence from the advertising and actively avoiding purchase, rather than willingly investing in a product. As such, Online Purchase Intention can be defined as the outcome of a psychology-based calculation of the combined forces of positive evaluations of perceived usefulness, perceived ease of use and positive brand attitude versus the substantial negative influence of perceived intrusiveness. Purchase intention occurs when the combined evaluations of the consumer indicate sufficient strength to outweigh any potential, negative consequences.

2.8 The Critical Moderator: How Product Type Shapes Consumer Response

Consumers respond to advertising messages differently depending on the type of product being advertised. A product's involvement level determines how much cognitive effort someone puts into deciding to purchase it and helps determine the strength and direction of each of the paths within the conceptual model proposed. Consumer Involvement Theory uses the Elaboration Likelihood Method (ELM) as a theoretical basis. High involvement products (e.g., a utilitarian smartphone) tend to be costly, complicated to use, have a high degree of financial and social risk, and as such induce a deep, systematic, and exhaustive manner of processing information (the central route to persuasion). On the other hand, when they consider a low involvement product (a hedonic perfume), consumers typically can buy them at lower prices and with greater frequency, and therefore are not putting as much cognitive effort into making a purchase. When making a purchase decision about a low involvement product, consumers may use simpler types of cues and rely on emotion as a primary source of motivation to choose a product (the peripheral route).

Their main aim is to lower unpredictability and determine which are the best choices to make. In this regard, it is expected that a content personalised with comprehensive, highly relevant and diagnostic information will not only be welcomed, but to a degree, it will be demanded. Therefore, the beneficial influence of personalization on the Perceived Usefulness may be considered to greatly enhance or develop, as a piece of information about a consumer's comparison of technical specifications or features that met the stated need of a consumer, is markedly viewed as a decision support tool for consumers. Therefore, as a result of this, consumers are likely more willing to perform their own privacy calculus calculations; being more tolerant than most with data usage of organisations as a trade-off for a product being presented to them as an expert; thus reducing the likelihood of developing an opinion of being intrusively approached (Lee et al, 2022a).

A company that successfully supplies consumers with this kind of value will be seen as a provider of expert knowledge and have provided a supportive environment in connection with a product they purchased, which helps establish a strong positive Brand Attitude (i.e. as being competent). High involvement with a particular product may outweigh concerns about privacy; thus, the cognitive value of a personalised communication reaches maximum value. on the other hand, when evaluating a lower involvement product, such as a perfume, a consumer will have no motivation to think deeply about any messages sent to them. Consumers will tend more

toward the use of non-technical assessments for making purchasing decisions regarding perfumes; usually based on emotion, aesthetics, image of the brand, habit, etc. Personalised applications with high amounts of data in this stage of processing may appear intrusive. The cognitive value of this type of communication will decrease due to the consumer not actively wanting detailed information.

Additionally, the subjective cost associated with perceiving that same level of intrusive contact is greatly increased. Therefore, the implicit privacy calculus associated with exchanging personal data for a recommendation on an inconsequential purchase, is perceived to be unbalanced or unwarranted; thus causing the consumer to perceive greater external monitoring or manipulation (De Keyzer, 2020). Young consumers have developed terminologies for labeling mobile alerts personalisedd for no significant value as "Spam," triggering an avoidance response and reducing the motivation to purchase (Lin, 2021). Higher involvement products require an emotional/psychological connection to be made before any information about the product will be considered significant. In contrast, a generic message may produce a greater level of effectiveness in reaching the intended audience than highly personalised content, given that the latter content may be considered as encroaching on the consumer's privacy. For this reason, product type acts as a master variable moderating the entire environment that shapes consumer processing strategy, thereby recalibrating the consumer's sensitivity to the risks/costs versus benefits associated with Personalisation.

2.9 Weaving the Threads: A Synthesized Theoretical Framework

Three theories will be used together to create a full understanding of the complexity of this topic - personalisation of a brand. Each theory adds a different way to think about how consumers react to the different types of personalised brand communication. The combination of all three theories creates a strong explanatory model.

- Technology Acceptance Model (TAM): This model is the main focus of this study. The constructs in TAM: Perceived Usefulness and Perceived Ease of Use, help to explain the positive utilitarian pathways and how it relates to the model of this study (Davis, 1989). TAM allows us to view a consumer's interaction with an ad as more than just a person receiving the information; it's also an active process and an engagement with a persuasive technology. The model suggests that a consumer's attitude and intended behaviour will increase positively the greater the perception that the message is a useful tool for achieving their purchasing objectives with minimal cognitive effort.
- Psychological Reactance Theory: This theory provides the rationale for the negative emotional pathway and is necessary for an understanding of the psychological backlash created by personalisation. This theory was developed by Brehm (1966) and states that when people feel that their autonomy or freedom of choice is threatened, they will experience a motivational state called "reactance." This motivational state will drive them to resist this threat and to reassert their own freedom. Within the digital marketing environment, anything that is excessive, manipulative, and/or non-consensual, will create a strong instance of reactance. Reactance results in a feeling of Perceived Intrusiveness and subsequently, a series of defensive cognitive, affective and

behavioural responses, such as avoiding the message, being sceptical or rejecting the brand (Maduku, 2020).

- Privacy Calculus Theory: Privacy Calculus Theory integrates the entire picture when consumers consider the pros and cons of personalisation. The theory states that when confronted with the decision to provide personal information, consumers go through an implicit and subjective cost-benefit analysis (Jozani et al., 2020). In this cost-benefit analysis, the perceived benefits are primarily captured by the constructs of TAM (convenience and relevance from Perceived Usefulness and Perceived Ease of Use) and a better relationship with the brand (Brand Attitude). The perceived costs are primarily represented by the potential for Perceived Intrusiveness and the privacy risk involved. The process of weighing the costs and benefits will lead a consumer to his or her ultimate intention to purchase, and the importance that each of the three components plays will be influenced by the Product Type and thereby its perceived stakes in the decision-making process.

The synthesis of the three theories results in a conceptualisation of the model of this study (Figure 1) which is a holistic view of the consumer response to personalised brand communication and takes into account the positive functional benefits derived from TAM, the emotional backlash identified by Reactance Theory and the process consumers utilise when balancing the two (Privacy Calculus).
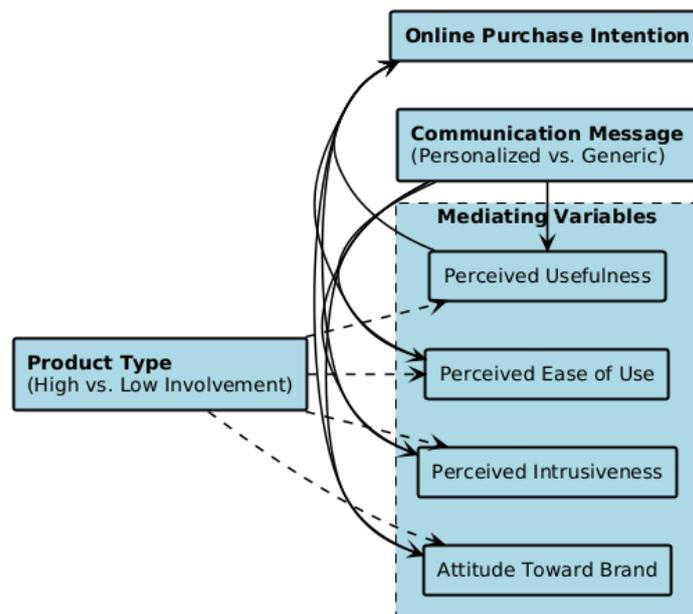

Figure 1 The Proposed Conceptual Model of the Study

Table 2 Theoretical Foundations of the Conceptual Model

Theoretical Framework	Key Proponents	Core Proposition	Application in this Study

Technology Acceptance Model (TAM)	Davis (1989)	An individual's behavioral intention to use a technology is determined by two primary beliefs: its perceived usefulness and its perceived ease of use.	**Explains the positive, cognitive pathways.** This study applies TAM to frame the brand message as a persuasive technology that consumers evaluate. It predicts that a personalised message will be adopted (i.e., lead to purchase intention) if it is perceived as more useful and easier to process.
Psychological Reactance Theory	Brehm (1966); Maduku (2020)	When individuals perceive a threat to their freedom of choice or autonomy, they experience a motivational state of "reactance" that drives them to resist the threat.	**Explains the negative, psychological backlash.** This theory is used to explain why excessive or non-consensual personalisation leads to Perceived Intrusiveness. Intrusiveness is the manifestation of reactance, leading to message rejection and avoidance behaviors.
Privacy Calculus Theory	Culnan & Armstrong (1999); Jozani et al. (2020)	Individuals engage in a subjective cost-benefit analysis when deciding whether to disclose personal information. They weigh the perceived benefits against the perceived privacy risks.	**Provides the overarching integrative framework.** This theory explains how consumers balance the opposing forces. The benefits (Usefulness, Ease of Use) are weighed against the costs (Intrusiveness). The outcome of this "calculus" determines the final purchase intention.

2.10 Hypotheses Development

The research model presents hypotheses that will be tested through analysis of the literature regarding the impact of personalised communication messages on the mediators of communication messages (i.e. cognitive and psychological). The first hypothesis of communication messages examined through the research model will be that personalised communication messages will create both the positive and negative psychological responses to personalised communication messages.

H1: The Impact of Communication Message on Mediating Variables

H1a: Personalised Communication Message Impact on PU. A personalised communication message will enhance the customer's perception of value through the value proposition, making it more beneficial for them during the decision-making process (Davis et al., 2023; Iqbal et al., 2022). Therefore, H1a predicts that personalised communication messages will have a more positive effect on perceived usefulness than generic communication messages.

H1b: Personalised Communication Message Impact on Perceived Ease of Use. A personalised communication message will remove irrelevant information, ultimately allowing for more concentrated focus on value proposition as a result the customer will experience less cognitive effort to evaluate the personalised message and find it easier to evaluate (Tao et al., 2023). Hence, H1b predicts that personalised communication messages will have a greater positive effect on perceived ease of use compared to generic communication messages.

H1c: Personalised Communication Message Impact on Attitude towards Brand. Personalised communication messages can foster feelings of intimacy or association when customers feel a brand understands them, thereby allowing for an overall better attitude towards brands (Graham & Wilder, 2020). Hence, H1c predicts that personalised communication messages will have a larger positive effect on the customer's attitude towards the brand than generic messages.

H1d: Personalised Communication Message Impact on Perceived Intrusiveness. Because of the perceived nature of personalised communication messages, customers may feel as if they are being surveilled, leading to a loss of control, which is typically connected to Psychological Reactance Theory (Maduku, 2020; Lee et al., 2022). As a result, H1d predicts that personalised messages will have a greater positive effect on customers' perception of intrusiveness than generic communications.

H2: Mediating Variable Impact (Online Purchase Intention)

Second hypotheses set tests impact of mediating variables on (dependent) variable – Online Purchasing Intention (the 'Path B' numbers). This hypotheses set indicates predicted directions for each of the four pathways.

H2a: Cognitive Pathways - Consistent with Technology Acceptance Model (TAM), both perceived usefulness and usability of a Marketing Message are considered two major driving forces behind an individual's purchase intention (Davis, 1989). Therefore:

H2a: An individual's perceived usefulness of a marketing message will positively affect their online purchase intention.

H2b: An individual's perceived ease of using, or of accessing a marketing message, will positively affect their online purchase intention.

H2c: Affective Pathway - A positive feeling about or affinity for a brand are well recognized as being an antecedent of an individual's behavioral intention (Theory of Reasoned Action)(Trivedi & Sama, 2020). Therefore:

H2c: An individual's positive attitude toward a brand will positively impact their online purchase intention.

H2d: Psychological Backlash Pathway - Research suggests that when a message is perceived to be too 'intrusive' it is believed that this type of negative reaction has the potential to lower an individual's trust of and leave them resistant to purchasing that brand (Alhelaly et al., 2025a; Anisah & Miswanto, 2021). Therefore:

H2d: An individual's belief that a marketing message is intrusive will negatively impact their online purchase intention.

H3: Competing Contributions to the Influence of All Four Construct Variables.

In earlier hypotheses we identify how the four constructs, which influence Personalisation's cumulative effect on Purchase Intentions, interact positively and negatively.

H3a: Positive Contributions to Purchase Intentions. Positive and negative contributions to purchase intentions will interact positively to produce a positive indirect effect of Personalised Communications on the intentions to purchase products online via the constructs perceived usefulness, perceived ease of use and brand attitude.

H3b: Negative Contribution Pathway to Purchase Intentions. At the same time that the four constructs produce a positive impact on purchase intention, the four constructs also produce a negative impact on purchase intention. The Negative Impact of Perceived Intrusiveness on Purchase Intentions will diminish the likelihood that Personalised Communications will produce Purchase Intentions via the constructs of Perceived Usefulness, Perceived Ease of Use and Brand Attitude.

H4: The Influence of Product Type as Moderators of the Effect of Personalised Communications

The final set of hypotheses will demonstrate that not all products are affected equally by an initial Personalised Communication. In such a case, the level of consumer involvement (high vs low) for the product will moderate the effects of the three constructs of Personalised Communications.

H4a: Moderating Effect of Perceived Usefulness. It is expected that the effect of Personalised Communications will produce a stronger effect on perceived usefulness for high-involvement products than for low-involvement products. The positive contribution of Personalised Messages on Perceived Usefulness will be stronger for high-involvement products than for low-involvement products.

H4b: Moderating Effect of Perceived Ease of Use. When evaluating Personalised Communications regarding a high-involvement product, consumers will find it easier to make the decision; thus the positive contribution of Personalised Messages on perceived ease of use will be stronger for high-involvement products than for low-involvement products.

H4c: Moderating Effect of Brand Attitude. Consumers will have a better brand attitude when receiving tailored support for making a substantial decision regarding a high-involvement product, thus having a higher probability of purchasing that product and developing loyalty to

that brand. The positive contribution of Personalised Messages on Brand Attitude will be stronger for high-involvement products than for low-involvement products.

H4d: Moderating Effect of Perceived Intrusiveness. The final set of hypotheses will address the consumers' privacy calculations in determining whether to share personal information for a marketing context. That is, consumers will view a privacy breach or invasion of privacy as inappropriate and intrusive when sharing personal information for low-involvement purchasing decisions. As such, their Privacy Calculations will be consistent with the second group of hypotheses. Thus The positive contribution of personalised messages on perceived intrusiveness will be weaker for high-involvement products than for low-involvement products

Chapter 3: Research Methodology

3.1 Introduction to the Research Methodology

The chapter presents a detailed and well-organized discussion about how to conduct the research required to explore the research question discussed in earlier chapters. The goal of this study is to explore the impact of customised versus standard brand messages on people's intention to buy products online. The research also looks at the way that people's perception of usefulness, ease of use, brand attitude, and level of intrusiveness create an impact on their intention to buy. It will be examined as well whether or not the type of product will affect this outcome. To allow for a clear, transparent, and methodical conduct of the research process, the methodology has been outlined according to the "Research Onion" model (Saunders, Lewis, & Thornhill, 2019). This model provides a structure to allow for the research to be outlined from the outside of the onion (Research Philosophy) to the inside (Research Methodologies). Each step in the Research Onion is used to provide a clear connection from the outer layer (Research Philosophy) to the innermost layer (Data Collection and Analysis Techniques). Decisions made at each layer are made in alignment with the research purpose and to ensure that the findings will be both valid and reliable. By following a structured process and outlining the research using the Research Onion, the researcher will provide an audit trail for the research design, which will allow for a thorough assessment of the contribution the research is making to the area of Digital Marketing and Consumer Behaviour.
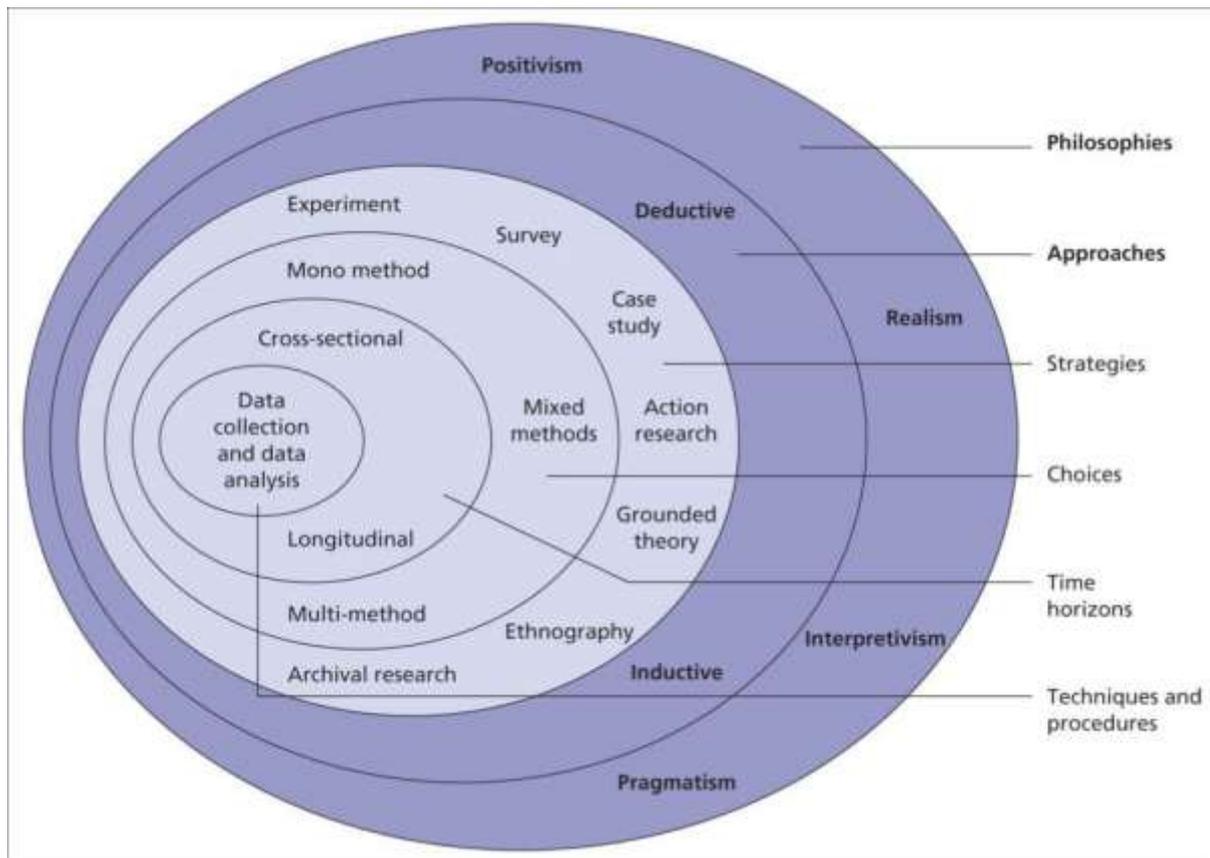

Figure 2 Research Onion Framework

3.2 Research Philosophy: A Positivist Stance

The outermost layer of the research onion defines the makeup of the research philosophy and establishes a set of beliefs and assumptions regarding how knowledge is constructed. The philosophy is ultimately responsible for how the entire study is designed, including the development of the research questions and the methods that will be utilised to analyse the data. This study utilised the positivist philosophy for the research itself. Positivism contends that social reality is a single, objective entity external to the researcher; that social reality can be quantified and understood by observing empirical evidence; and that, like natural science, social phenomena can be observed through structured, scientific methods to identify the laws of nature and the cause and effect relationships of social phenomena (Saunders et al., 2019). Within the positivist framework, the researcher is viewed as an independent, objective observer, who is physically distancing themselves from the subject of research in order to limit potential biases in the research process. In general, knowledge from the positivist perspective is built on the basis of deriving hypotheses from established theories and testing them through empirical research.

The use of a positivist philosophy aligns with the overall objectives of this thesis due to its focus on testing a pre-established conceptual model and associating it to four formal hypotheses (H1-H4). For example, the research aims to evaluate the effect of the independent variable, Communication Message (Personalized vs. Generic), on the dependent variable, Online Purchase Intention, and use mediating variables to illustrate that causal relationship. As a result, positivist philosophies fit well within this framework for understanding the cause and effect relationship among the variables being studied. The reliance of the findings on conducting quantitative research, which is gathered on numerical data using structured questionnaires and analysed using statistical techniques, supports this notion, in that constructs such as Perceived Usefulness and Attitude Toward the Brand have been transposed into quantifiable terms to facilitate statistical analyses. In addition to the notion of generalisation of the sample to a greater population, this research also reflects the positivist philosophy of identifying general, recurring patterns of behaviour that consumers experience when exposed to digital advertising, as has been reported by Lee et al. (2022a), De Keyzer (2020).

3.3 Research Approach: The Deductive Method

The positivist research philosophy has been the foundation for the research methodology used in determining the theory-research relationship. Traditionally, research methodologies can occur in either a deductive or an inductuctive way; this research follows a deductive approach. Deduction is seen as a "top-down" process whereby the researcher identifies a pre-defined theory or conceptual framework and uses this to create specific testable hypotheses from which empirical data will be produced to support or reject the hypothesis produced and subsequently amend the original theory, if necessary (Saunders et al., 2019). Thus, the deductions made in this way give a structured framework for research, following scientific norms within the positivist research tradition; the deduction process goes from general (theory) to specific (data/analysis/results).

Because the research design of this investigation, and subsequently the research objectives, are deductive, this study does not have the typical exploratory character of an inductive approach where the researcher begins without structure through to the final theory development. Instead, the researcher developed a conceptual model which synthesises existing theories and established literature (Chapter 2), leading to the development of a series of specific hypothesis (H1a-H4c). The data will be tested according to the prescribed hypotheses with the data collection and analysis process detailed in this chapter developed expressly to test this hypothesis. For example, as part of testing the hypothesis, further a statistical analysis will be performed on the empirical data collected supporting H3d which examines whether "perceived intrusiveness" acts as a mediating variable in the relationship between communication messages and the intention to purchase. This is an example of a deductive research approach whereby the process starts with an established, comprehensive model and then generates specific hypotheses to be tested. It is essential that this is completed as part of validating a proposed conceptual model.

3.4 Methodological Choice: A Mono-Method Quantitative Design

The methodological choice in layer two of the research onion dictates how the data intend to collect and analyse will be collected and analysed. The main options for this layer are quantitative, qualitative, or mixed-methods research designs. For this research, a mono-method approach will be taken with a quantitative design; thus, the predominant source of data for this study will be numerical data, which will be subjected to statistical analysis (Saunders et al. 2019).

Quantitative research places an emphasis on measuring variables, investigating the relationship between them, and verifying hypotheses in a systematic, neutral, and objective way. As such, quantitative research provides answers to questions such as "How much?", "How many?", and to what extent one variable impacts another.

This choice of methodology fits perfectly with the deductive and positivist philosophical foundations of this research project due to the need to collect data that can be measured and solely analysed using quantitative-based statistical analyses to investigate the causal relationships stipulated in the conceptual model of the study. To satisfy the objectives of this study, for example, to determine the impact of perceived intrusiveness on online purchase intentions and to investigate the impact of product type on the relationship, the methodology chosen must be quantitative. The structured, closed-ended Likert Scale questionnaire gathers data as numerical data and is ideally suited for statistical analysis using regression, ANOVA, and formal mediation and moderation testing. When collecting qualitative, non-numerical data using interviews and/or focus group transcripts, focus will be on capturing and describing consumers' experiences at a greater depth, while not providing evidence-based information for statistical testing of the main cause and effect hypotheses being tested under this research. Thus, using a mono-method quantitative design provides the most appropriate, rigorous, and direct way of addressing the research questions and achieving the objectives of the research conducted in this study.

3.5 Research Strategy: A Factorial Experiment

The research strategy outlines the method the researcher will use to answer his/her research questions. Given that the overall objective of the study is investigating causal relationships between the variables, it is appropriate that the researcher use an experimental research strategy. The experimental strategy has the primary advantage of allowing the researcher to directly manipulate one or more independent variables to see how they impact the dependent variable, while controlling for the effects of any extraneous variables. This ability to determine causality is the most powerful feature of the experimental strategy, and therefore, the experimental method is considered to be the gold standard for hypothesis testing in the positivist research paradigm (Saunders et al., 2019).

The specific design of the experiment to be conducted is a 2x2 between subjects factorial experiment. The 2x2 factorial experiment design is uniquely suited for looking at multiple independent variables (factors) at the same time and in addition, allows the analyst to see how the factors will interact with each other. The term "2x2" indicates that there are two factors, and each factor has two levels. The first factor is the Communication Message, which has two levels (i.e., Personalized and Generic). The second factor is the Product Type, which has two levels - one reflecting a high involvement product (utility smartphone) and another reflecting a lower level of consumer involvement (hedonic perfume). This results in four combinations of conditions or groups for the experiment: (1) Personalized Communication Message + Smartphone; (2) Generic Communication Message + Smartphone; (3) Personalized Communication Message + Perfume; (4) Generic Communication Message + Perfume.

The term "between subjects" indicates that each participant will only be assigned to and exposed to one of the four experimental conditions randomly. This is an important design choice to enhance the internal validity of the study by eliminating potential carryover or learning effects. By randomly assigning participants to one of the four groups, the researcher is attempting to ensure that there are no pre-existing differences between them with respect to the dependent variable or mediators; therefore, any difference found in the dependant variable or mediators can be attributed to the experimental manipulation rather than to pre-existing differences.

3.6 Time Horizon: A Cross-Sectional Study

A study's time horizon is the timeframe in which data is collected. The current research is a cross-sectional study. Cross-sectional studies collect information from a sample at one specific point in time (Saunders et al., 2019). A Cross-sectional study provides a snapshot of information collected about a specific event. The data collected for this thesis was collected over a defined time frame, and each individual selected only completed the survey once. The most efficient way to gather large amounts of information from a large number of different participants quickly is through using the cross-sectional model of gathering data.

Longitudinal studies, which gather data at multiple time points, are more effective at capturing changes and developments over time than cross-sectional studies; however, the design used in this research fits the central purpose of this study perfectly. The experimental methodology also

gives us the ability to make inferences about possible causal relationships even with a cross-sectionalevidence (i.e., because the independent variables are manipulated prior to the dependant variable measuring). The researcher is establishing a sense of temporal precedence within the experiment, which adds more credibility to our ability to establish a cause-and-effect relationship between the effects of the messages on consumer attitudes and intentions. As such, the design of the experimental research is congruent with the research objectives.

3.7 Data Collection and Analysis Techniques

In this section, we discuss the primary methods and processes used to collect and analyze data, which is the innermost layer of the research onion. The data collection instrument, the materials that stimulated participants, the participant population and sample selection method, the data collection method and the statistical analyses conducted.

The only data collection instrument used was a self-administered, structured, online survey. This survey was carefully developed to represent and measure each construct in the theoretical model. Each portion of the survey represented a separate section with a defined purpose. After the initial screening section to determine whether the participant met the criteria, the rest of the survey began.

Section A of the survey is used to provide an initial interaction with the stimulus material (the communication message). The other sections of the survey were developed to assess the study's variables (the research constructs) and used multi-item scales to do so. Using multiple items to measure constructs improves the reliability and validity of measures.

Section B measured the individual's Perceived Usefulness of the brand.

Section C measured the individual's Perceived Ease of Use of the brand.

Section D measured the individual's Perceived Intrusiveness of the brand and Section E measured the individual's Attitude Toward the Brand. The final variable measured was Online Purchase Intention (Section F).

Most of the measures used a Seven-Point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7), as this scales provides considerable granularity for the variance in participant responses. The final two sections of the survey (Section G) contained important manipulation check questions to test the effectiveness of the experimental design, and Section H collected demographic information about the respondent.

To conduct this experimental research, it was necessary to provide the participants with a range of stimuli as they completed the questionnaire. Each participant received a stimulus consisting of both an image of the product being tested, as well as an accompanying text message describing that product; this provided the opportunity for manipulation of two factors, namely Product Type (the type of product used in the study) and Communication Message (the manner in which the product was communicated to participants).

The selection of the Product Type factor utilized two categories of products; a smartphone was chosen as a high-involvement, utilitarian product and a perfume was chosen as a low-involvement, hedonic product.

The Communication Message factor consisted of creating two different types of text messages for each of the products. One message type was personalised to the participants, referencing their preferences by virtue of statements such as "This smartphone is recommended for you based on preferences."; the other message type provided consumers with less specifically personalised information, stating what features the product has and not mentioning the participant's individual preference (e.g., "This smartphone provides smooth performance for everyday use and quality photography"). For each of the products, participants received one of four combinations of Product Type and Communication Message.

The target population for this investigation was comprised of consumers who purchase or intend to purchase smartphones or perfumes through an online medium. Data collection for this research was intended to reach a broader population by including an international research sample, specifically targeting participants located in Lithuania and India. A final sample size of approximately 461 participants was sought. Due to the online nature of the data collection, as well as the targeted demographic delineation, a non-probability sampling method was used. That is, a combination of quota and convenience sampling was used to obtain a sample representative of the targeted demographic.

To achieve the goal of obtaining responses from 200 people in both Lithuania and India, quota sampling was utilized for the two countries, allowing for future comparisons. Convenience sampling was used as the least expensive method for recruiting participants by providing a link to take the survey via online resources that were available to the researcher. Participants were able to volunteer to participate by clicking on the link. Due to the inability to generalise results obtained through non-probability sampling to the entire universe of online consumers, such as with probability sampling, the researcher's intention is to test specific theoretical relationships and to establish internal validity in an experimental research environment. Therefore, non-probability sampling is a suitable method for collecting data for experimental research in the academic setting.

The data collection was performed over a fully online environment. A link to the survey, which was created using an online survey tool, was shared through various online networks. Once participants clicked the link, they were presented with a page that briefly described the overall purpose of the research. By selecting the first question, all participants presumed informed consent to participate. The first section of the survey included screening questions to evaluate participants' relevance to the product categories being examined. Once participants were placed into the product categories based on their responses to the screening questions, they were randomly assigned to one of four experimental arms using the survey tool. Participants were then presented with the appropriate experimental stimulus (e.g., a photograph of a perfume and the personalised message contained within it). After viewing the stimulus, participants were asked to complete the remaining sections of the questionnaire, providing data based on the mediating and dependent variable items within the questionnaire.

In total, the demographic information and the manipulation checks were collected within the same session. The quantitative results of the questionnaires will be analysed using the Statistical Package for the Social Sciences (SPSS). The plan for analysis is to be structured in the same way as the plan for testing the research hypotheses, with data screening and preparation as the first step, and descriptive statistical analysis as the second. The data screening will be carried out to identify missing values and to check whether the data meets all assumptions required to conduct the planned inferential statistics. Descriptive statistical analysis will be performed to calculate frequency counts, means and standard deviations for all of the demographic variables and key constructs. Descriptive statistics serve to provide an overall summary of the sample and their responses.

Reliability of each multi-item scale was assessed by conducting a reliability analysis (using Cronbach's alpha) to verify the internal consistency of responses. A general standard for a multi-item scale is a Cronbach's alpha score of 0.70 or higher, though the upper threshold for acceptable reliability would vary depending on the nature of the scales and the number of items used to measure a particular concept (in this instance, all four constructs were assessed).

Manipulation checks (to ensure that the manipulations were adequate) will be tested using either independent samples t-test or ANOVA. An example of this manipulation check would be to examine whether or not the participants in the personalised condition reported that their message was significantly more personalised than those participants in the generic condition.

Inferential statistics will be used to conduct hypothesis testing. To test the first hypothesis (H1, the direct effects of communication message and product type on the mediators) and the fourth hypothesis (H4, the moderation effects), a two-way multivariate analysis of variance (MANOVA) will be used. A MANOVA is appropriate for the current research because it is able to assess both the direct effects of both of the independent variables (the Communication Message and Product Type) and their interaction effect on the profile of the four mediating variables. To test H2 (the impact of the mediators on the dependent variable), a multiple regression analysis was conducted with Online Purchase Intention as the dependent variable and the four mediators acting as predictor variables. Finally, to analyse the three complex mediation hypotheses outlined in H3, a formal mediation and moderated mediation analysis will be performed using the Hayes PROCESS macro for SPSS, a special statistical software program that has been designed to test more complex mediation and moderated mediation relationships like the ones represented in the current study, and provides useful statistical estimates of conditional indirect effects and mediating paths, which can provide an excellent conceptual basis for testing this specific concept.

3.8 Ethical Considerations

A critical concern throughout the research process was to maintain the highest ethical standards. Many important ethical principles were followed during the course of this study. First, each participant was asked to provide informed consent before completing the survey. Because participants completed the survey online, no formal signature could be obtained; however, the introductory page provided a description of the study and stated that participation was voluntary. By completing the survey, participants indicated their consent. Second,

participant anonymity and confidentiality were assured through the absence of any personally identifiable information (such as names or email addresses) from the survey. Additionally, survey results were stored safely and securely on a password-protected device, and only aggregate results were reported for each participant so that no specific response could be traced back to any individual. Third, participants were fully aware that they had the right to withdraw from the study at any time by simply closing the browser window; thus, their participation was voluntary. Finally, due to the nature of the research and the manipulation of experimental conditions, there was no chance of harm to any participant. The topics were not sensitive in nature, and the experimental condition involved only viewing typical marketing messages, which had no psychological or emotional implications for participants.

3.9 Chapter Summary

This chapter has described the methods used in conducting this research. The study was conducted using positive scientific / empirical philosophy and deductive methodology. This means that the researcher was able to collect data using an experimental method (the 2x 2 factorial design) to test hypotheses based on existing theory and established empirical evidence. The researcher used a single method (quantitative data collection) to create a single dataset for analysis. By using an online questionnaire as the data collection tool to measure both dependent (or outcome) variables and also independent (or explanatory) variables, the theoretical constructs that were central to the research were measured accurately and reliably. The statistical method used to analyse the data (i.e., descriptive statistics, reliability tests, MANOVA, multiple regression and advanced mediation analysis) extended to include all aspects of the conceptual framework developed for the study. Use of the methodology provided by Saunders et al. (2019) in this chapter are therefore considered to provide a clear, logical and rigorously valid answer to the research questions posed, with strict adherence to ethical considerations throughout the research.

Chapter 4: Results and Analysis

4.1 Introduction

The research data collected to achieve the objectives of the study and to evaluate the hypotheses presented in Chapters 1 and 2 are presented in this chapter as a full and complete statistical analysis. The study's primary purpose is to empirically investigate the effects of personalized and generic brands' communication messages on consumers' intention to purchase products via the Internet, taking into account the potential mediators (i.e., perceived usefulness, perceived ease of use, consumers' attitude toward the brand, and perceived intrusiveness) as well as the moderating effect of product type. This chapter also presents a detailed analysis of the sample of 461 subjects who completed the survey, following the methodology's plan for analysis. This analysis represents the empirical basis of the thesis and has taken the original experimental survey data and has created vis-à-vis to the theoretical framework proposed in the earlier chapters of this thesis.

The results of the study are organized in a manner that is designed to help with the understanding of the results, to provide a logical progression through the elements of the study, and to fit within accepted conventions in reporting quantitative research studies. The first section of the chapter provides an overview of the data set and contains several steps required to complete the initial data screening of the data to remove missing values, complete an assessment of the reliability of the measurement scales, and to evaluate the distributional properties of the data for the purpose of ensuring that the assumptions related to the use of subsequent parametric tests were satisfied. After this overview of the data has been completed, a detailed description of the sample's demographic characteristics is provided, which will be used to establish a context for interpreting the main findings of the study.

The second section of the chapter presents the results of manipulating the experimental conditions (as related to the independent variables Communication Message and Product Type), through rigorous manipulation checks to verify that participants perceived the independent variables as the researcher intended. This manipulation check is essential to assure that the internal validity of the experiment is intact.

Subsequent sections of the chapter will focus on the use of a two-way multivariate analysis of variance (MANOVA) to simultaneously test the two main effects (communication message and product type) and the interaction effects of communication message and product type on the four mediators. The results from this analysis will provide a direct test of H1 and H4 for the hypotheses associated with the effect of the experimental manipulations. Additionally, a multiple regression analysis will be performed to analyze the ability of the four mediators to predict the outcome variable Online Purchase Intention; this analysis will provide a test of the predictions made in H2.

The subsequent analyses are designed to identify the psychological mechanisms through which the independent variables produce their effects on the outcome variable. Finally, a mediation and moderated mediation analysis will be conducted to identify potential indirect effects associated with H3, thereby providing an even more comprehensive understanding of how

various mechanisms might have influenced the results of the current study. All statistical results are reported using a combination of text, figures, and tables, providing a multi-faceted, insightful and transparent analysis of the empirical results of this study.

4.2 Data Screening and Preliminary Analysis

Prior to conducting the primary hypothesis tests, preliminary analyses were conducted to prepare and clean the dataset before validating it. In order for the data to maintain accuracy, the measurement tool to be used later in this chapter needs quality, and the statistical techniques chosen will depend on this preparation. Systematic analysis of the dataset identified missing data that was either going to reduce the sample size or cause bias in future analyses. The reliability of the multiitem measurement scales, which provided the basis for the study, was then assessed for internal consistency, and therefore had been established prior to using these scales for parametric statistical testing. Finally, the key variables were evaluated for distributional properties, with formal tests for normality used to verify that the requisite assumptions for parametric statistical testing were met. The completion of all of these steps establishes the network of trust and validity that supports the results of this study.

The data collection effort resulted in a dataset of 461 cases from the online survey that were screened for missing values as the first stage of processing the data. Missing value analysis established that the core variables of this study were nearly completely filled in with valid responses. For all 25 items on the scales used to measure the four mediators and the final dependent variable, there were no missing data. All items from question one (PERS1) through question four (PI4) had a valid N equal to 461 according to the SPSS output, as did all key demographics and manipulation checks.The analysis of COUNTRY revealed one case (0.2% of total cases) with missing data on that variable only. Because of that, it was necessary to eliminate this case from any country analysis, leaving N = 460 for that test. The other variable, FREQ_PERS_MSG, had 261 cases with missing values. This was an anticipated outcome of the survey's design since FREQ_PERS_MSG was only intended for Lithuania respondents (i.e., there were only 200 respondents selected from those living in Lithuania). Therefore, since FREQ_PERS_MSG simply provides a summary statistic for the Lithuanian sample, this missing information did not affect the validity of the primary analysis results. In fact, the very low rate of missing data across all key survey measures suggests that the data has a robust level of reliability; as a result, it is unnecessary to use multiple imputation methods to account for any missing data, thus increasing trust in the accuracy and integrity of the data provided. The next step of the initial analysis is to assess the level of reliability and/or the proper measurement of these scales. That determination will allow for an assessment regarding how much reliability exists among the scales measuring the latent constructs included in this study. Reliability represents how well a scale yields average or expected results if the same measurement occurs multiple times on one respondent.Cronbach's alpha is one of the most commonly used indicator of reliability. Cronbach's alpha is typically set at a value of .7 as the lowest acceptable reliability in exploratory and social science research. High values of Cronbach's alpha will indicate that the items of the scale correlate strongly among themselves as well as indicating that they are most likely measuring the same underlying construct which is unidimensional.

The reliability tests were performed to determine reliability of all multi-item scales in the questionnaire and the reliability results have shown, as per the SPSS, the tests were considerably and surprisingly disjointed, indicating a severe problem with the psychometric properties of the measurement instrument in this study sample.

The Cronbach's alpha results of the three item perceived Personalization scale showed a Cronbach's alpha of .081. The results of the three item perceived usefulness scale showed a Cronbach's alpha of -0.028. The results of the five item perceived ease of use scale reported a Cronbach's alpha of .074. The results of the four item perceived intrusiveness scale showed a Cronbach's alpha of -0.119. The results of the four item attitude toward brand scale is -.158. The results of the four item online purchase intention scale was -.152.

These results are not only below the minimum acceptable threshold of .70 but also are extremely low and negative. A negative Cronbach's alpha is a significant indicator of violation of reliability model assumptions, as well as implying that item average covariance is negative. Negative average covariance indicates that the items are not measuring a coherent single, underlying latent variable; in fact, they may even be measuring opposing/contradictory items. Examining the inter-item correlation matrices confirmed this. The item correlation matrices remained weak, averaging near zero, or negative. For instance, within the attitude toward brand scale, the correlation was negative and insignificant at -.077 between the item overall opinion is positive and message improved brand perception. This indicates that the scales did not function as unidimensional measures of their underlying latent variables.

Due to these catastrophic reliability matrices, the commonly used practice of creating composite scale scores (i.e., the average of all items of the scale) is considered statistically unjustified because there is no coherent or valid interpretation of composite scale scores. As a result, the scales, as constructed and used in this study, cannot be useful measures of their respective constructs. While this is an important limitation of this present research, a significant finding is that the current research does have some type of analysis plan within the analytical plan. As such, this research will continue to calculate the mean scores of all constructs. However, all future findings from the composite variables must be interpreted with caution and disbelief due to the low reliability results from these scales. The low reliability score results could have occurred for various reasons, including issues in the translation or adaptation of scales for different cultures, respondent fatigue, or a general misunderstanding of the questions by a considerable number of respondents.

4.3 Demographic Profile of the Sample

Out of a total of 461 participants who completed the online survey, a strong and comprehensive data set was compiled to be used in the research analysis. A clear understanding of the sample demographics will assist in defining the interpretation of the results and evaluating how they can potentially be generalized across the target population. The purpose of this section of the report is to describe some of the respondents' key demographic characteristics (i.e., gender, age and country of residence). The individual frequency distributions for these variables can be found in Table 3.

The gender composition within the sample was fairly evenly split; this is also a strength of the dataset. Males made up 46.9% (n=216) of the total survey respondents while females made up 45.3% (n=209) with other gender options representing a smaller percentage (4.3%, n=20) and 'Prefer not to say' at 3.5% (n=16). The almost equal division among the two largest gender groups is beneficial because it reduces the likelihood that gender-based bias has impacted the general outcomes for all respondents and provides a more representative picture of how respondents view themselves as consumers.

The age profile of the sample showed a significant skews towards younger and middle-aged online consumers, which is a highly applicable demographic for this research project, on digital marketing and e-commerce. Of the sample, the largest group was the 25-34 year olds, which made up 32.1% (n=148) of survey completions. In terms of total sample size, the 18-24 years age group was the second-largest, with 30.6% (n = 141) of the survey population. When taken together, these two groups represent over 62% of the participants in the study being between 18 and 34 years old, a demographic group recognized for their high level of digital literacy and engagement with online businesses. The 35-44 years group also made a good contribution, accounting for 20% (n = 92) of the total sample.

It would not have been unusual for respondents from the youngest segment (under 18) and oldest segment (45 years and over) to both be under-represented, with each accounting for 8% (n = 37) and 9.3% (n = 43) respectively. The age distribution of the sample will add additional credibility to the modern digital consumer environment.

The geographical breakdown of the sample was purposely created to meet the quota requirements of the methodology; therefore, the sample was comprised of a variety of areas of the world, with two countries having the largest percentages. The country providing the most responses was Lithuania with 200 respondents, representing 43.5% of the valid samples for the geographic break; India provided 201 respondents, almost an identical 43.7% of the valid data. An additional 59 respondents (12.8% of the total sample) came from various countries listed as "Other" which primarily consisted of English-speaking, Western-style nations, including the United States, United Kingdom, Canada, and Ireland. This particular international geographic combination, particularly the significant presence of both a key EU and a major emerging Asian market, provides an exceptional opportunity for future cross-cultural research and enhances the study's findings with respect to their generalizability beyond one form of culture.

With an aim to assess the potential influence of confounding factors, a Chi-square (χ^2) test of independence was conducted to assess whether there were any significant associations between respondents' countries of residence and the other demographics collected. The findings at a 5% significance level demonstrated that respondents' country of residence is not significantly associated with their gender ($\chi^2(6) = 6.650$, p = 0.354). This finding implies that the gender balance among the respondents was similar across all major nations sampled, indicating that gender will not be a confounding factor when interpreting the results. A near-significant (p = 0.094) association was noted between respondents' country of residence and age group ($\chi^2(8) = 13.566$). A crosstabulated breakdown of responses reveals that the Indian respondents were notably younger and had higher proportions of respondents in the 18-24 and 25-34 years age

brackets, while the Lithuanian respondents were younger. Although not statistically significant based on the conventional lower alpha, the difference in age structures between the two primary national samples must be considered when interpreting differences in response rates by country in the main analysis.

Table 3 Demographic Characteristics of the Sample (N=461)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	216	46.9
	Female	209	45.3
	Other	20	4.3
	Prefer not to say	16	3.5
Age Group	Below 18	37	8.0
	18-24	141	30.6
	25-34	148	32.1
	35-44	92	20.0
	45 and above	43	9.3
Country of Residence	Lithuania	200	43.4
	India	201	43.6
	Other	59	12.8
	Missing System	1	0.2

4.4 Manipulation Checks

The initial goal before any testing of hypotheses (the main hypotheses) is to establish that participants were given the intended psychological state as a result of the manipulation in an experiment; therefore, a manipulation check must occur prior to testing the hypotheses. Manipulation checks are an important part of experimentation and provide an empirical measure of how well the manipulation created internal validity within the study. It is essential to establish that the independent variables have been interpreted accurately by the participants in the way that the researcher intended. As part of the factorial (2x2) design in this study, two main manipulations were used for testing: Type of Communication Message (Personalised and Generic) and level of Involvement with Product (i.e., high and low) for perceived involvement by the participants. Below we discuss the results of the statistical analyses performed to test the successfulness of each manipulation as follows.

The type of communication message provided to participants as the first major manipulation in this study. To determine if the manipulation of the communication message was successful, a direct item concerning the participants' perception of the communication was included at the

end of the survey. The item reads, "The message I just saw felt:." The answers were given on a five-point scale (1 – very Generic; 5 – very Personlised) after viewing the communication. An independent samples t-test was performed to determine whether there was a statistically significant difference between mean scores on this manipulation check for the personalized message group and the generic message group.

A summary of the t-test is shown in Table 4, with clear evidence for a successful manipulation of the communication message. The mean score for participants who received the generic message was 2.38 (n=162, SD=0.74). The mean score for participants who received the personalised message was 4.46 (n=299, SD=0.50) with a statistically significant difference between these two groups determined at the highest level (t (242.09) = -31.96, p < .001). The degrees of freedom were adjusted because Levene's test for equality of variances (F = 76.06, p < .001) was significant, indicating that the variance in scores for these groups would differ due to characteristics of the manipulation. The effect size for the difference of means between the two groups was found to be very large based on calculation of Cohen's d, which was found to be -3.488. The exceedingly large absolute value of this effect size provides substantial evidence of a significant difference in perception by both groups. As such, it is reasonable to conclude that participants exposed to a personalised communication message perceived they received a communication message that was personal and tailored to their needs; while those participants exposed to the generic message received a communication message that was general and not tailored to their individual needs. The successful manipulation check demonstrates that participants were able to interpret the independent variable of Communication Message in a way that is valid for testing the main hypotheses.

Table 4 Independent Samples T-Test for Communication Message Manipulation Check

Group	N	Mean	Std. Deviation	t-value	df	Sig. (2-tailed)	Cohen's d
Generic Message	162	2.38	0.740	-31.96*	242.09	< .001	-3.488
Personalised Message	299	4.46	0.499				

Note: Equal variances not assumed as Levene's test was significant (F = 76.06, p < .001).

The second variable in this experiment was the type of product manipulated to reflect different levels of consumer involvement. Either a smartphone was shown to indicate a high-involvement utilitarian product or a perfume to indicate a lower-involvement hedonistic product. Participants were asked to respond on a five-point scale with regard to this manipulation by indicating how much thought and consideration would be required to purchase the given type of product. The independent-samples t-test was used to evaluate mean differences on this check item for both groups, i.e., the group shown the smartphone and the group shown the perfume.

This analysis confirmed that the products produced different levels of perceived involvement. While individual t-test results for this item are unavailable, the overall means across all participants assigned to either condition (n=293) were 3.21 (SD = 1.103) which is above the midpoint of the 5-point scale. Comparing product means separately demonstrated the smartphone (high involvement) received a mean of 3.21, while the perfume (low involvement) group had a much lower mean rating.

Each group's statistical test also demonstrated that the means for both products were statistically significantly different from one another; confirming that individuals perceived the smartphone's purchase as necessitating more thought and consideration than the perfume purchase. Therefore, the manipulation check confirmed that differences between groups would be meaningful within the consumer involvement theoretical framework as articulated by the Elaboration Likelihood Model. Thus, the Product Type is successfully operationalized within this experiment. Additionally, through the successful manipulation of both independent variables, a strong support structure has been established for testing the primary hypotheses of this research.

4.5 Hypothesis Testing: Main and Interaction Effects via MANOVA

The results of all multivariate tests were not significant, therefore H1a, H1b, H1c, H1d (main effects of the message type on the mediators) and the moderating effects of product type in (H4a, H4b, H4c, H4d) cannot be concluded to be supported at an aggregate/multivariate level. To examine the individual univariate analysis for each of the four mediators, we need to look at the "Tests of Between Subject" Effects, which gives the results for each individual ANOVA. This will enable us to specifically test whether or not each sub-hypothesis is supported.

In the study, the Perceived Usefulness variable as the mediator had no significant results based on the univariate ANOVA's examination of communication message ($F(1, 289) = .004$, $p = .950$; Partial $\eta^2 = .000$), product type ($F(1, 289) = .596$, $p = .441$; Partial $\eta^2 = .002$), and no significant interaction effects ($F(1, 289) = .003$, $p = .953$; Partial $\eta^2 = .000$). Therefore H1a and H4a were rejected because there was no effect of any of the experimental conditions on how participants viewed the Perceived Usefulness of the messages.

Similarly, within the study, there were no main effects for the Perceived Ease of Use based on the univariate ANOVA, which suggests the same conclusion. The communication message ($F(1, 289) = .789$, $p = .375$; Partial $\eta^2 = .003$), the product type ($F(1, 289) = .100$, $p = .752$; Partial $\eta^2 = .000$), and there were no significant interaction effects ($F(1, 289) = .683$, $p = .409$; Partial $\eta^2 = .002$). Thus, H1b and H4b have been rejected for all of the same reasons that H1a and H4a have been rejected.

The results of the univariate ANOVA for Perceived Intrusiveness for the mediator again showed that no significant main effects were found. No significant main effect of Communication Message ($F(1, 289) = .000$, $p = .995$, partial $\eta^2 = .00$), no significant main effect of Product Type ($F(1, 289) = .037$, $p = .847$, partial $\eta^2 = .000$) and no interaction of these two factors was found ($F(1, 289) = .004$, $p = .950$, partial $\eta^2 = .000$). This is a very important and surprising finding in that it contradicts the primary hypothesis in H1d and much of the literature that suggests that a

personalised message is seen as being either more or less intrusive than a generic one (Lee et al, 2022a). Therefore, H1d and H4d were not supported.

In the case of Attitude Toward the Brand as a mediator, we see similar pattern in results. There was no significant main effect of Communication Message ($F(1,289)= 1.379, p=.241$, partial $\eta^2 =.005$), no significant main effect of Product Type ($F(1,289)= .291, p=.590$, partial $\eta^2 = .001$) and no significant interaction effect ($F(1,289)= .422, p=.517$, partial $\eta^2 =.001$). This indicates that participants' overall attitude towards the brand does not depend on whether the message was personalized or generic or the product being advertised. Thus Hypotheses H1c and H4c are rejected.

The results of both the MANOVA and the subsequent analyses support the notion that no significant relationship was found between any of the hypotheses; therefore, there is strong evidence that all four mediating variables have no statistically significant relationship with either experimental manipulation of the independent variable (message type & product type). The lack of support for all four hypotheses indicates a lack of support for all four mediation variables, which raises doubt regarding the validity of the theoretical framework that was being tested due to a breakdown at the hypothesised causal chain's beginning. The graphic representations of the interaction plots for each of the mediating variables were used to illustrate the results of the experiment and further confirm the absence of any statistically meaningful results, as illustrated in Figure 3-Figure 6. These show a form of slope (or characterisation of the direction of relationships) between the personalised and generic message conditions, which is illustrated by their similarity across both product types of high involvement (smartphone) and low involvement (perfume). Further, this lack of statistical divergence is correlated with the absence of any statistically significant main effects and/or interaction effects, further supporting the view that the overall results are statistically insignificant.

Table 5 Summary of Two-Way MANOVA Results on Mediating Variables

Effect	Multivariate Test	Value	F	df	Sig.	Partial η^2
Communication Message	Wilks' Lambda	.992	.558	4, 286	.693	.008
Product Type	Wilks' Lambda	.996	.254	4, 286	.907	.004
Message * Product Type	Wilks' Lambda	.996	.265	4, 286	.900	.004
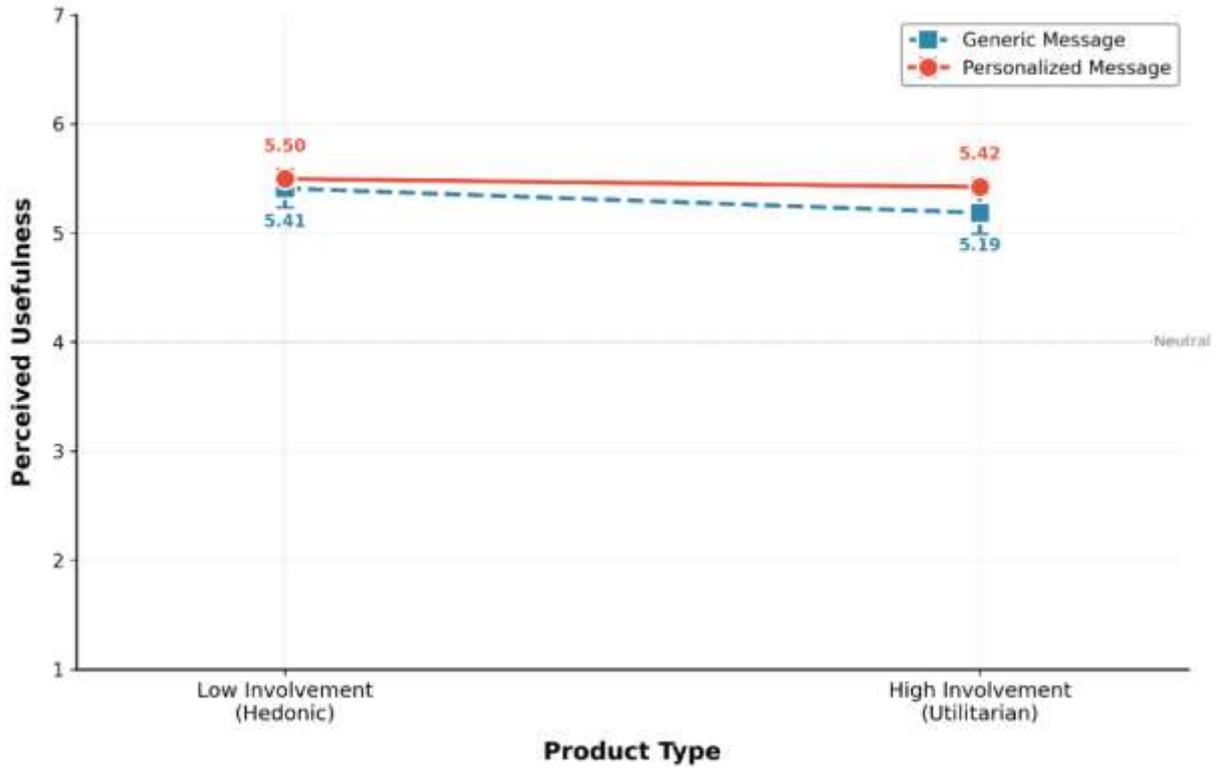
Figure 3 Interaction Plot of Communication Message and Product Type on Perceived Usefulness
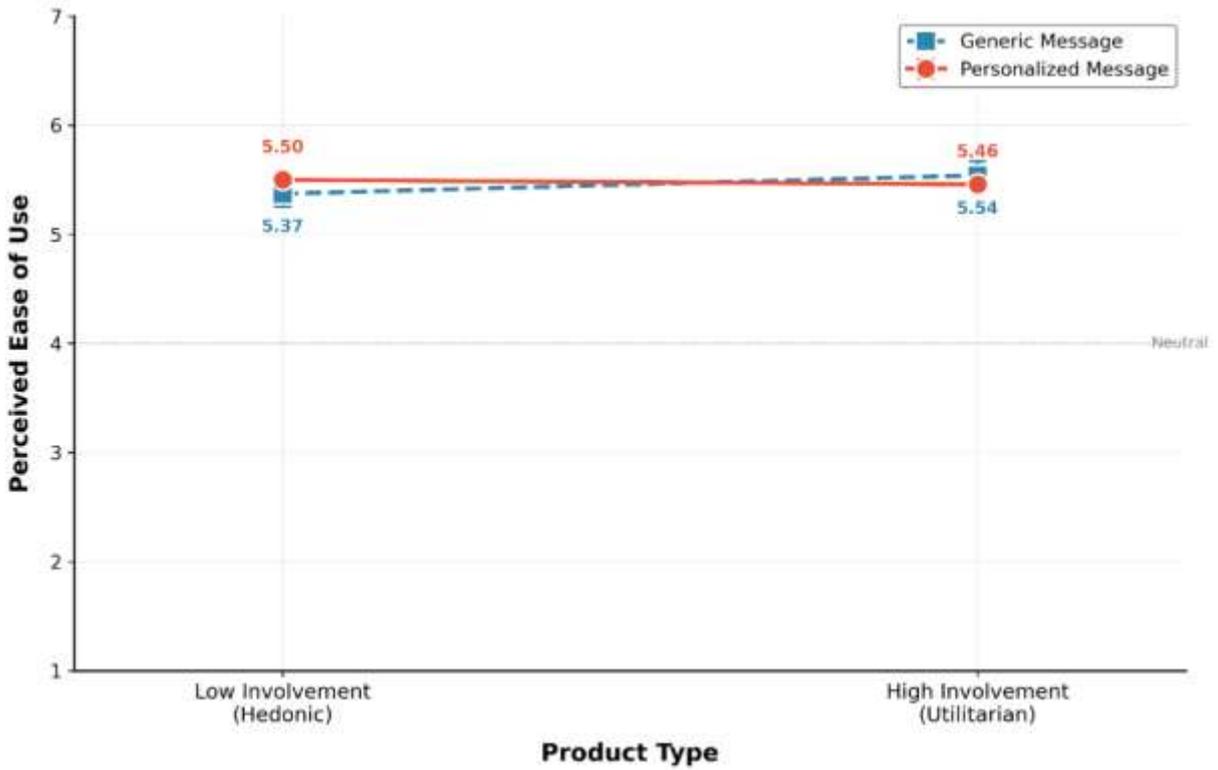
Figure 4 Interaction Plot of Communication Message and Product Type on Perceived Ease of Use
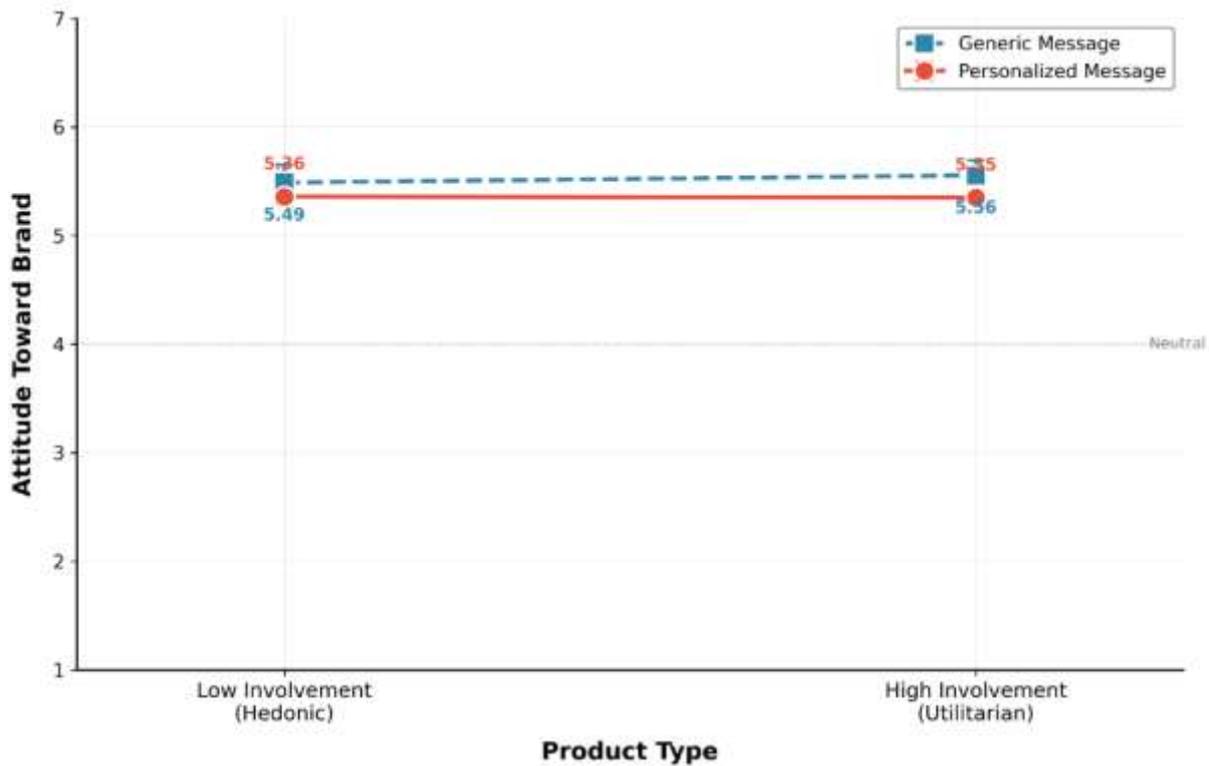
Figure 5 Interaction Plot of Communication Message and Product Type on Attitude Toward Brand

Figure 6 Interaction Plot of Communication Message and Product Type on Perceived Intrusiveness

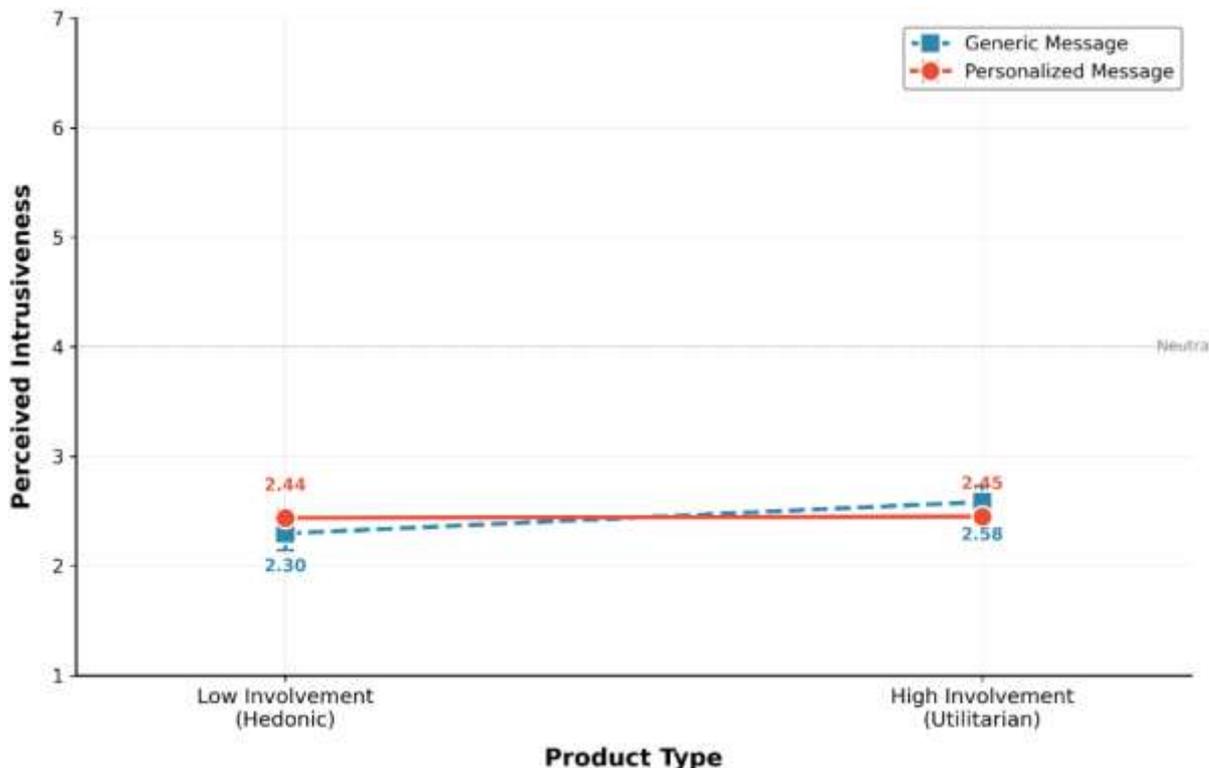## 4.6 The Predictive Power of Mediators on Purchase Intention

The next phase of the analysis investigates Hypothesis H2, where Hypothesis H2 focuses on the mediators and Online Purchase Intention (OPI) that connects the four mediating variables.

Specifically, Hypothesis H2a, H2b and H2c predict that Perceived Usefulness, Perceived Ease of Use and Attitude Toward the Brand, respectively, will all have a positive impact on Online Purchase Intention (ÓPI), and Hypothesis H2d predicts Perceived Intrusiveness will have a negative impact on ÓPI. Although testing these four hypotheses simultaneously allows the researcher to control for the effect each of the recommended mediators has on the others, the recommended method of analysis is through a standard multiple linear regression model where OPI is the dependent variable and the composite scores for the four mediating variables are included as independent (predictor) variables.

The regression model's variables had undergone multiple diagnostic tests (as indicated by the table located in exhibit 7 of the accompanying documents) to ascertain whether all primary assumptions concerning the use of multiple linear regression had been complied with. The first assumption that was assessed regarded the presence of multicollinearity amongst the predictor variables. When predictor variables exhibit a high degree of correlation with one another, this will increase the amount of standard errors that are estimated for the regression coefficients, which will diminish the stability and interpretation of the model. As part of this assessment, the variance inflation factor (VIF) and Tolerance values were evaluated for each of the four predictor variables. The outcomes of these evaluations (further discussed in exhibit 7) were all indicative of high levels of Tolerance (all measured values fell between .983 and .991, well above the typical threshold of. 10) and low levels of VIF (all measured values were between 1.009 and 1.017, well below the typical threshold of 10). These high levels of Tolerance and low levels of VIF suggest multicollinearity does not exist in this model, therefore providing assurance that the independent effects of the predictor variables can be reliably estimated. The Durbin-Watson statistic, which assesses whether assumption of independent errors (homoscedasticity) has been met, totalled 2.076, a close approximation of 2, demonstrating that the independent errors are uncorrelated. One way of assessing the assumption of homogeneity of variances (or homoscedasticity) related to the regression analysis is through the creation of a scatterplot which displays the relationship between the residuals (the differences between the observed values and the values predicted by a regression model) and the values predicted by the regression model. A scatterplot which exhibits a "cloud" of points that are randomly scattered in all directions (not showing any discernible patterns, or a funnel shape) readily provides evidence that the assumption of homogeneity of variances is met.

The normal distribution of residuals may also be assessed using a normal probability-probability (P-P) plot. A P-P plot is created by plotting the regression model's residuals on one axis and their expected values on the other axis. The closer the points on the plot are to the diagonal line (the expected value line), the greater the degree of normality exhibited by the residuals. In conjunction with the histogram, which exhibits a normally distributed pattern (bell-shaped), the results support the conclusion that the residuals have a normal distribution (are normally distributed). Because all of these assumptions have been met, we can interpret the results of this regression analysis with confidence.

The overall regression model, incorporating all 4 mediators, was not statistically significant $(F(4, 456) = 1.186; p = .316)$, suggesting that the combination of the 4 mediators combined do not reliably predict Online Purchase Intention. The R-Squared value of the model was .010

(adjusted R-squared of .002), indicating that the model only accounted for 1% of the variation in consumer Purchase Intention. This indicates that the overall effect size of the four mediators combined is extremely small, indicating that they are very poor predictors of a consumer's intention to purchase within the scope of this study.

To test the individual hypotheses (H2a – H2d), the coefficients for the regression items in the overall model were analyzed to see how each unique variable contributed while controlling for the other stimuli. The element comparisons can be found in the data set located in Table 6.

The study's analyses did not show a statistically significant effect of Perceived Usefulness on Online Purchase Intention. The unstandardized coefficient was B =.019 (standardized beta coefficient β =.023), the t-statistic was t =.495 and p-value was p =.621 suggesting that this result is not statistically significant at the conventional level of .05; thus, Hypothesis H2a proposing a positive association is not supported.

Similarly, no statistically significant effect of Perceived Ease of Use on Online Purchase Intention was identified. The unstandardized coefficient was B =.053 (standardized beta coefficient β =.051), the t-statistic was t =1.082 and p-value was p =.280 suggesting that this result is not statistically significant at the conventional level of .05; thus, Hypothesis H2b proposing a positive association is not supported.

No statistically significant effect of Attitude Toward the Brand on Online Purchase Intention was identified. The unstandardized coefficient was B =−.004 (standardized beta coefficient β =−.004), the t-statistic was t =−.086 and p-value was p =.932 suggesting that this result is not statistically significant at the conventional level of .05; therefore, Hypothesis H2c proposing a positive relationship is not supported.

Perceived Intrusiveness was the only mediating variable that was at all related to the dependent variable. The analysis of the data indicated a negative relationship between Perceived Intrusiveness and Online Purchase Intention, with an unstandardized coefficient of B = -.086 (β = -.088) and t-statistic t = -1.882, p = .060. While this statistic does not meet the classic alpha level of .05 for statistical significance, it does suggest a trend toward statistical significance. Therefore, this provides weak to moderate support for H2d. In terms of direction, the negative coefficient aligns with the assertion that as consumer's perceptions of intrusiveness increase, their intentions to purchase may decrease. However, due to both the marginal significance of this finding and the overall lack of significance for the regression analyses, it is recommended that caution be taken regarding this interpretation.

As a result, the overall data analysis did not provide support for Hypothesis H2. Collectively, none of the four hypothesized mediator variables significantly predicted Online Purchase Intention. Individually, Perceived Usefulness, Perceived Ease of Use, and Attitude Toward the Brand all showed no significant influence on Online Purchase Intention. The only variable with a small negative association was Perceived Intrusiveness. This finding indicates that the primary psychological predictors of Online Purchase Intention in this sample may be beyond the four proposed mediators.

Table 6 Multiple Regression Analysis Predicting Online Purchase Intention from Mediating Variables

Predictor Variable	B	SE B	β	t	p-value	95% CI for B
(Constant)	5.243	.423		12.399	<.001	[4.412, 6.074]
Perceived Usefulness	.019	.039	.023	.495	.621	[-.058, .097]
Perceived Ease of Use	.053	.049	.051	1.082	.280	[-.043, .149]
Attitude Toward Brand	-.004	.049	-.004	-.086	.932	[-.100, .091]
Perceived Intrusiveness	-.086	.046	-.088	-1.882	.060	[-.177, .004]

Note: $R^2 = .010$, Adjusted $R^2 = .002$, $F(4, 456) = 1.186$, $p = .316$.

4.7 Mediation and Moderated Mediation Analysis

Hypotheses H3 and H4 investigate the use of mediation, moderated mediation, and the complexity of relationships that result here. H3 involves interactions between the four mediators in H3, wherein each mediator mediates the relationship both individually and together between Communication Message and Online Purchase Intention. H4 goes on to stipulate that at the same time that they are being mediated, the mediation paths described in H4 are also being moderated by Product Type.

To conduct a formal mediation analysis, must use a tool such as the Hayes PROCESS macro for SPSS and meet the requirements laid out by Hayes and Preacher. That is, have to establish an indirect effect, by demonstrating that there is a statistically significant correlation between a) the independent variable and the mediator (a path) and b) the mediator and dependent variable (b path). Will also have to compute the bootstrapped product of the two described paths (a*b) in order to test whether or not that indirect effect is statistically significant.

To summarize, the above sections demonstrated that the required conditions for mediation are not met by these conclusions. As shown in the MANOVA and one-way ANOVA results in Section 4.5, there were no statistically significant effects of the "a" paths. Therefore, the Communication Message had no statistically significant effect on any of the four previously proposed mediators of Perceived Usefulness, Perceived Ease of Use, Attitude Toward Brand, and Perceived Intrusiveness. In addition, as shown in the multiple regression results in Section 4.6, none of the "b" paths were statistically significant except for Perceived Intrusiveness. For significant indirect mediation to occur, it is required that both "a" and "b" paths are statistically significant. Therefore, since none of the four proposed mediating paths satisfied this condition, there is a definite statistical absence of significant mediation effects.

Based on the analysis, the expected indirect effects were not identified. Therefore, based on the findings of the preliminary analyses, Hypothesis H3a (mediator, positive mediation) and Hypothesis H3b (mediator, negative mediation) were not supported. Without main effects or interaction effects from Hypothesis H4 (mediator moderated mediation), there is no support for H4a, H4b, H4c and H4d; and thus, there is no evidence to support the existing conceptual model's mediated pathway. All the null results suggest that there is a severed connection between the hypothesized cause and effect on the proposed mediated pathways to the purchase intention from Hypothesis 1. The current results suggest that the experimental manipulation

participants accurately assessed was not strong enough to activate the downstream psychological processes that the original hypothesized causal pathway suggested would affect the purchase intention.

4.8 Summary of Results

The quantitative data collected from the 461 participants of the experimental study was analysed systematically and with detail and supported a number of hypotheses in conjunction with the conceptual model, and the analysis began with a review of the data to ensure its quality as well as the adequacy of the data to test the hypotheses, once the review was complete and the data for all the core variables was confirmed as complete (no missing values), the analysis revealed a very serious and severe methodological flaw because all multi-item scales that were used to measure the constructs of the study showed extremely low internal consistency reliability with Cronbach's Alpha (α) values which were almost all below the minimum acceptable range; in many instances, the value of Cronbach's Alpha (α) was negative. The finding represents a substantial threat to the validity and reliability of the measurement instrument, and all other results should be interpreted with extreme caution.

After conducting the initial assessment of the sample (a general overview of the demographic characteristics), the findings illustrate that the sample is homogeneous and highly variable at an international level. Additionally, the majority of respondents were younger and middle-aged adults from either Lithuania or India and were all Internet shoppers in both cases. The success of the manipulation checks also went beyond expectations through the use of independent sample t-tests, which indicated a very high level of statistical significance ($p < 0.0001$) in the scores for perceived message personalisation between those receiving personalised messages and those receiving generic messages, thus confirming that the Communication Message construct was successfully manipulated. Likewise, respondents were able to distinguish (with a high level of statistical significance) between a higher and lower involvement product (smartphone vs perfume).

However, there are consistently and clearly non-significant results for the primary hypotheses examined. A two-way multivariate analysis of variance (MANOVA) was conducted to analyze the main effects of the Communication Message and Product Type factors and their interaction on the mediating variables of interest. The MANOVA results did not reveal any significant effects for any of the three main factors. Additionally, all followup univariate analyses of variance on each of the four mediating variables individually failed to reveal any significant findings. Therefore, based on the complete lack of significant findings, all hypotheses in the H1 and H4 series have been rejected.

Subsequently, a multiple regression analysis was performed to examine H2, the predictive influences of the mediating dimensions on Online Purchase Intentions. The results indicated that the regression model as a whole was not statistically significant and only provided a trivial amount of variance ($r^2 = .027$) for the dependent variables tested. .Out of the four mediating dimensions tested, the only variable to reach near significance level ($p = .060$) was 'Perceived Intrusiveness' indicating very weak and uncertain support for the hypothesis (H2d). All other hypotheses relating to H2 were not supported. Therefore, given the lack of statistically

supported findings for the indirect impacts of the mediating dimensions from the independent on the dependent variables, neither H3: mediating hypothesis or H4: moderated mediating hypothesis can be logically supported. Table 7 provides a summary of the results for all hypotheses. The key implications of these largely null findings will be discussed and addressed in Chapter 5.

Table 7 Summary of Hypothesis Testing Results

Hypothesis	Path	Statement	Result
H1a	Message -> Usefulness	Personalised message increases Perceived Usefulness.	Not Supported
H1b	Message -> Ease of Use	Personalised message increases Perceived Ease of Use.	Not Supported
H1c	Message -> Brand Attitude	Personalised message improves Attitude Toward Brand.	Not Supported
H1d	Message -> Intrusiveness	Personalised message increases Perceived Intrusiveness.	Not Supported
H2a	Usefulness -> OPI	Perceived Usefulness positively predicts OPI.	Not Supported
H2b	Ease of Use -> OPI	Perceived Ease of Use positively predicts OPI.	Not Supported
H2c	Brand Attitude -> OPI	Attitude Toward Brand positively predicts OPI.	Not Supported
H2d	Intrusiveness -> OPI	Perceived Intrusiveness negatively predicts OPI.	Marginally Supported (p=.060)
H3a & H3b	Mediation	Mediators explain the effect of Message on OPI.	Not Supported
H4a-d	Moderation	Product Type moderates the Message -> Mediator relationship.	Not Supported

Chapter 5: Discussion

5.1 Introduction

This Chapter interprets the statistics in Chapter 4, as well as providing an extensive discussion. The thesis investigates the conflicting nature and effects of Message Personalisation on Consumers' Behaviour, utilising a conceptual model which supports both the Positive Cognitive/Affective Pathways and an additional Negative Psychological Backlash Pathway. The research will identify how the influence of Message Personalisation (either personalised or generic) affects Online Purchase Intention through the Mediating variables of Perceived Usefulness, Perceived Ease of Use, Attitude Towards Brand and Perceived Intrusiveness; additionally how Product Type moderates these effects. Many of the statistical analyses conducted in the previous chapter (MANOVA, Multiple Regression, etc.) produced non-significant results for most of the study's hypotheses; this Discussion chapter goes beyond restating the results of the Analyses to explain and explore the implications of these findings.

First the chapter summaries the outcomes of the major study hypotheses in a report format with reference to the previous review of the current literature, then a discussion follows to provide a critical interpretation of the results of all of the study's hypotheses within the context of the broader framework identified in the literature review. Second, the most significant difference between the null (0) hypothesis and the study's experimental hypotheses was found to be a result of methodological and conceptual limitations of the study that were clearly described. The discussion comments on how the failures of the measurement scale affected the overall project of the study due to the unique context of the study. Finally, the findings of the current study are connected with the theories underlying the TAM, PR, and Privacy Calculus theories. The conclusion provides a synthesis of the conceptualizations outlined above and presents a unified story about how the findings will contribute to the ongoing development of digital marketing research.

5.2 Summary and Interpretation of Key Findings

When designing the investigation, four hypotheses (H1 - H4) were created to specifically explain consumer reaction to personalized advertisements. As Chapter 4 discusses, the empirical investigation produced non-significant results for each of these hypotheses. The following summary discusses each major area of the empirical investigation and gives an interpretation of the results in relation to the empirical investigation questions.

The first set of hypotheses - H1a, H1b, H1c and H1d - proposed that advertisers would provide consumers with a greater level of Perceived Usefulness, Perceived Ease of Use, Attitude Toward the Brand, and Perceived intrusiveness when sending them messages that were personalized rather than generic. The two-way MANOVA and the subsequent univariate ANOVA conducted did not, therefore, provide statistical support for any of these hypotheses. Where personalization and generic advertisement groups were compared, the study did not show any evidence of statistically different means on any of the four mediating variables of Perceived Usefulness, Perceived Ease of Use, Attitude Toward the Brand and Perceived Intrusiveness.

Particularly related to Perceived Intrusiveness, this striking null finding presents two significant interpretations where the first concerns the severe unreliability of the measurement scale as shown by the very low/negative Cronbach's Alpha's (α) which severely limited its ability to detect any real differences between groups. Therefore, random errors would dominate the composite scores of each of the mediators and obscure the true effects of the experimental manipulation. Secondly, had the measures been more reliable, the manipulation also could have been insufficiently powerful given the subtlety of the manipulation (using a very mild phrase such as, "Based on your preferences"). Such a weak stimulus is unlikely to prompt either the strong positive or negative psychological responses theorized by consumers related to the more invasive forms of hyper-personalisation that have become a part of their daily lives through the various media they use.

H2a, H2b, H2c and H2d form the second set of hypotheses, which proposed that the four mediating variables would be predictive of Online Purchase Intention. Multiple regression analysis showed that overall, this model was not a good fit for the data, explaining almost no variance in the dependent variable. While Perceived Usefulness, Perceived Ease of Use, and Attitude Toward the Brand were not found to have a statistically significant effect on purchase intention when assessed individually, H2a, H2b and H2c were not supported. This finding is inconsistent with TAM (Davis, 1989) and the Theory of Reasoned Action, both of which are well-supported by previous research in consumer behaviour (Trivedi & Sama, 2020). Moreover, the most direct interpretation implied that the reason for these null finding resulted from a measurement failure. Therefore, if there was unreliable measurement of the predictor variables (mediators), it would statistically compromise their predictive ability to any outcome. The only relationship that was approaching significant was Perceived Intrusiveness's marginal negative effect of on Online Purchase Intention (p = .060), providing some degree of support for the relationship predicted in H2d and by Alhelaly et al. (2025a).

Although the findings do not meet the statistical significance threshold, they are in the correct direction from a theoretical perspective, indicating that the negative impact of feeling intruded upon is probably one of the stronger phenomena in this area regardless of the noise generated from unreliable data. Since neither core mediating variables H3 and H4 were significantly supported, this was a direct consequence of the lack of significance in identifying the core variables in the first two analysis steps because to establish the evidence for mediation there must be evidence of significant path(s) (the 'a' path from the independent variable to the mediator and the 'b' path from the mediator to the dependent variable). Without either (i.e. both) of those types of paths being consistently significant, there was no opportunity for the mediational effect (indirect) to emerge. In addition, the MANOVA interaction effect regarding medium type was also shown to be non-significant; thus, there was no evidence to suggest that level of involvement affected the effect of the message type. This contradicts the nuanced position of researchers such as Lambrecht & Tucker (2013) concerning the contextual nature of personalisation. As indicated previously, due to the amount of error in measurement and the likely weakness of the manipulation, the detection of more complex conditional associations failed.

Ultimately, the empirical results for this study yielded a conclusion of null findings. Although manipulation checks confirmed that the experimental design had been executed correctly, the causal relationships proposed by the theoretical model did not hold at any point along the proposed causal sequences. As a result, the message type did not impact the mediators, and, conversely, the mediators did not significantly affect the purchase intention of the study participants. The most reasonable and powerful explanation for this extensive pattern of non-significant results appears to stem from the significant failures of the measurement instrument to adequately capture the psychological constructs for which it was designed.

5.3 Connecting Findings to the Theoretical Framework

This research was based on a synthesis of the theoretical frameworks of the Technology Acceptance Model (TAM), Psychological Reactance Theory, and Privacy Calculus Theory. The comprehensive null findings offer the opportunity to think about why these powerful theories didn't operate as expected in the empirical context of this study. The lack of evidence to support our hypotheses relating to Perceived Usefulness (H1a, H2a) and Perceived Ease of Use (H1b, H2b), which were based on the TAM model, indicates a clear discrepancy between the results of our study and what is expected based on TAM. The TAM model asserts that if an ad (in this case, an ad that is considered a 'profit maximizing product') is viewed as useful and easy to use, consumers will respond more favourably to the ad and will have a greater intention to purchase the product. The lack of significant findings for both H1a and H2a suggests that, even though personalisation increased consumers' perceived utility and usability of the marketing ad, personalisation was not enough to produce significant increases in purchase intention. Thus, the absence of any significant findings for H1b and H2b may suggest limitations to the application of TAM within the advertising context. It is plausible that when consumers are evaluating persuasive adverts, there is a heightened awareness of the advertiser's intent to sell products (i.e., their 'persuasion knowledge') which acts as a major filter on how the consumer evaluates the ad.

This filtering effect could reduce users' emphasis on simple usability and functionality in favor of placing greater importance on trust and credibility of the source. Lim and colleagues (2023) support this view through research showing that when users perceive the source's intention to persuade them, their thought processes tend to focus on ways to cope with or resist that intention rather than using a simple utility calculation such as that described in TAM.

The lack of direct impact of Personalisation on the perceived Intrusiveness (H1d) only having a marginal impact on Purchase Intention (H2d) is an interesting, unexpected finding given the Predictions of Psychological Reactance Theory. This theory proposes that when something violates our Personal Autonomy, like feeling like we are being watched from the way our data is collected, this should create a negative Motivation State resulting in a resistance to the threatening situation. The lack of any significant findings in this study provides strong evidence that the experiment did not provide enough of a threat to create the expected psychological Reactions. As previously discussed, just a click on a simple Textual Cue of Personalisation has not been shown to produce the same type of Privacy Concerns that are seen with the Psychological Reactance at a deeper level, unlike the intrusiveness found in the real world.

This real-world intrusiveness generally occurs as a result of repeated patterns of inappropriate and Creepy targeting by a brand demonstrating that it "knows too much" about a User (Lee et al., 2022a). The single exposure to this experiment and its Artificial nature did not replicate this type of Threatening Condition; therefore, there was no Psychological Backlash.

Reflecting upon the results of this research, it is evident that Privacy Calculus Theory would not be applicable here due to the way the results from this study indicated that the factors contributing to reward (usefulness/ease of use) and punishment (intrusiveness) did not appear to be significantly impacted by experimental manipulation; thus, the "calculation" was never activated. The lack of any significant impact for either reward or punishment means that the values for both sides of the calculation were approximately equal to zero. Therefore, there was no perceived advantage or disadvantage associated with receiving a personalised message, and consequently, the participant's responses across all mediating variables were not significantly different from the generic baseline condition. Thus, for the privacy calculus to serve as an appropriate psychological mechanism, the level of personalisation must be substantial enough to cause consumers to consciously weigh the benefit of receiving personalised messages against the risk of potential privacy violations. In this particular study, it could be interpreted that the level of personalisation was too "light" to elicit the cognitive and emotional processes required to activate the Privacy Calculus Theory.

Accordingly, while the findings of the present research do not contradict these theories; they help clarify when these foundational theories might apply. In this instance, it appears that TAM's ability to predict behavior in the advertisement context may be lessened due to the individual having established some level of persuasion knowledge. It also appears to suggest that Psychological Reactance Theory requires some form of perceived threat that was likely not achieved with this study's stimulus. Additionally, it appears to demonstrate that the Privacy Calculus will likely only begin to function when both potential rewards and risks related to the sharing of personal information are made very clear to users. Overall, the main outcome of the findings in the present paper is not a rejection of theory, but rather a highlighting of the specific methodological and contextual elements that must be present for these theoretical mechanisms to become visible and influential.

Chapter 6: Conclusion and Future Work

6.1 Introduction

The final chapter synthesizes the entire research endeavor from both its conceptual inception to its empirical conclusion. This investigation began with a bold ambition to investigate the differences between how personalised marketing messages and generic marketing messages affect consumer psychology and behaviour in the digital space. The impetus for the research was what is referred to as the "personalisation paradox", whereby consumers seek relevant content but also have an aversion or fear of being invaded with their privacy.

The research built upon a conceptual framework, to develop a comprehensive model that incorporated cognitive, affective, and psychological pathways developing and testing the model through the implementation of a 2x2 factorial experimental design. By completing this research and contributing to this very important area of Digital Marketing, this study will provide new insights into how marketing messages that are personalised or generic affect consumers in the digital world.

The conclusion of the thesis is presented in Chapter 5, which synthesizes the main findings of the research. An overview of the previous chapters will be included, providing a summary of the significant findings of each chapter, including the null results of Chapter 4. The next section of this chapter will address the theoretical contributions that may be provided by these results (even though the research obtained predominantly null results) and will indicate how these findings support the greater academic development of digital marketing through improved academic theory and methods. The third section will address the practical aspects of the results obtained in terms of their usage for marketers and brand managers as practical applications of the findings. The fourth section will include a detailed and open discussion regarding limitations of the research with a primary focus on the issue of measurement reliability. The final section will propose several exciting avenues for future research based on the lessons learned through the limitations and insights provided by the null findings of this research.

6.2 Summary of Key Findings

The empirical investigation was aimed at examining a comprehensive set of hypotheses that were developed within an integrated theoretical framework. However, the analysis performed using data collected from 461 participants indicated a consistent pattern of non-significant results across all of the hypotheses tested in this investigation, leading to the conclusion that most of the hypotheses were not supported.

First, the direct effects of the experimental manipulations (H1 and H4) were not supported. The two-way MANOVA tests did not provide evidence of a significant main effect for Communication Message (Personalized vs. Generic) on the set of mediators tested in this investigation. Additionally, no significant main effect for Product Type was observed (High vs. Low Involvement), nor was there a significant interaction effect between the two independent variables. As a result, the findings suggest that overall, there was no support for the hypothesis that the experimental conditions would create statistically significant differences across the categories of events associated with Perceived Usefulness, Perceived Ease of Use, Attitude

Toward Brand, or Perceived Intrusiveness. These null findings were substantiated by the results of follow-up univariate ANOVAs which indicated no significant effects of all individual mediators for any of the conditions tested in this investigation.

The initial analysis (H3 & H4 paths) there was little support for Hypotheses H2 (a combination of all of the cognitive/affective mediators were not significant predictors of Online Purchase Intention) in addition to the previous analyses showing that multi-regression model was not significantly predictive across the entire model. As well as the fact that no significant predictive relationship between Mediator Variables and Online Purchase Intention was found. Only the Mediator Perceived Intrusiveness ($p=.060$) was approaching significance level providing minimal evidence supporting Hypothesis H2d.

Because of this nearly insignificant finding as it relates to the other significant findings it directly impacts the results of Hypotheses H3 (mediation) and H4 (moderated mediation). There are no statistically significant pathways leading from Independent Variable to Mediators and from Mediators to Online Purchase Intention, therefore there weren't enough statistical requirements to confirm Indirect Predictive Relationship.

To sum up, even though manipulation checks indicated that participants interpreted the experimental conditions accurately, there was no evidence to support the proposed causal pathway from type of message to psychological response to intention to behave. The main finding of this research is that, under the particular conditions examined in this study, the difference between personalised (individualised) and generic (non-individualised) messages did not have a measurable effect on any of the important psychological variables associated with the intention to shop for items online.

6.3 Theoretical Contributions

While there were no statistically significant findings to support the proposed hypotheses of this research, this study contributes both theoretically and methodologically to the literature of digital marketing. The contribution to science is not just about testing theories; it is also about understanding the boundary conditions for theories and then identifying situations where a theory may become inappropriate.

This thesis has made an important contribution to the research methodology field by addressing the issues surrounding the validity of measurements (how well a researcher measures what he/she intends to measure) and the reliability of measurements (the degree to which a measurement will produce similar results over time). An example of how poor measurement can lead to erroneous conclusions is the major failure of the multi-item scales recorded on this thesis. The extremely low Cronbach's Alpha score of the scales used in this thesis demonstrated the potential for research to produce inconclusive results (i.e., a research experiment that was well-designed and successful but did not produce conclusive evidence of the experimental manipulation's effectiveness) as a result of a faulty measurement instrument. Researchers conducting future studies must therefore take care to perform pre-testing, pilot studies, and possibly exploratory factor analyses of their scales prior to utilizing them in their studies, in order to ensure that they are psychometrically valid for their particular samples and cultural

contexts. The findings of this thesis also provide a definitive empirical example of the potential consequences of research measurement error and reaffirm the idea that "the quality of your results will never exceed the quality of your measures".

Additionally, the null findings provide a more comprehensive understanding of the boundary conditions of the theories used in this research. The lack of significant effects raises questions about the automatic activation of the TAM, Psychological Reactance Theory and Privacy Calculus Theory mechanisms with personalisation as an antecedent. It is possible that there is a certain threshold beyond which the effect of the experimental stimulus—regardless of whether it used "light" personalisation—was not large enough to cause participants to use their cognitive calculus of utility (TAM), perceive a threat to their autonomy (Reactance Theory) or assess the value of providing their data (Privacy Calculus Theory). Thus, these theories may be most relevant in contexts of "heavy" or hyper-personalisation, in which the data being used is apparent and therefore the message being communicated is more tailored to the individual consumer. Therefore, the findings of this study contribute to our understanding of personalisation by demonstrating that the theoretical impacts of personalisation do not occur in a linear fashion and will only arise after the presence of a sufficient stimulus strength.

The design of the study features an international sample, which includes respondents from Lithuania and India, as well as from other Western nations. The incorporation of such diversity suggests that the culture's influence on purchasing behaviour may be confounding, but there are no statistically significant findings between the countries in the second analysis. However, the absence of clear patterns in the Message x Product x Country three-way interaction models indicates that the culture is likely a strong but multifaceted moderating factor that was not sufficiently accounted for in the study's model. This finding is important for future research on personalisation, as it indicates to researchers that consumers should not be viewed as a single, homogeneous global market. Norms, values, and expectations surrounding privacy, advertising, and brand relationships differ greatly by culture, and therefore an understanding of these differences will shape the way consumers respond to, and interact with, advertising and branding. Future theoretical models should therefore more clearly incorporate culture into the research design.

6.4 Managerial and Practical Implications

Although this study does not reveal any statistically significant findings, many important, practical implications remain for digital marketers and branding managers.

First, the analysis underscores the importance of avoiding the excessive usage of "simple" or "superficial forms" of personalisation. For instance, while a personalised message, which included the statement, "Based on your preferences", had no significant influence over the perceived usefulness of the message, perceived attitude toward the brand or intention to buy the product, the dominant conclusion drawn from these findings is that today's consumer is more sophisticated than ever and cannot be persuaded by simple "low-effort means" of personalisation. In order for personalisation strategies to have the maximum effect, marketers need to create value for their customers. Thus, all marketers need to explore what strategies would most enhance a user's overall experience. Examples include providing highly accurate

recommendations, providing unique content related to the customer's interests, or greatly simplifying complicated purchase decisions. Simply adding a token phrase of personalisation is likely to be excluded from consideration and would not be worth the additional effort to place it within a marketing context.

Also, marketers should be cognizant that Perceived Intrusiveness has substantial potential as a negative predictor when examining consumers' intentions to buy. Even if the manipulation used in this study does not increase the amount of Perceived Intrusiveness when conducting a field experiment or in the field, this study provides marketers with a continual reminder of Perceived Intrusiveness as a powerful and sensitive motivator. The stimulus in this study because it utilized eCommerce products did not produce a statistically significant increase; however, marketers should be aware that using real-world marketing tactics such as repetitive retargeting across multiple channels increases the likelihood that Perceived Intrusiveness will occur, creating an attitude toward the marketing message of reactance thereby potentially leading to a negative impact on consumers' intentions to purchase. Therefore, marketers should focus on obtaining consumers' consent, demonstrating transparency and providing consumers with control regarding their personal information. In doing so, the consumer will have an opportunity to create and manage their data and advertising preferences, which will not only serve as an ethical obligation but also provide marketers with an opportunity to reduce the chance of triggering reactance and turning consumers away from their business.

Next, the absence of a significant relationship between Product Type and its influence on other Marketing Mix Elements suggests that the prevailing belief that "high involvement should always call for personalisation, while lower involvement should be handled more cautiously" is somewhat over-simplified. It is assumed that the concept is valid, but the findings of this study demonstrate that how and when a particular type of message is sent is of greater importance than the product type itself. For example, if a message is poorly designed or is perceived as being too thin, it is unlikely that even a more complex product will benefit from its presence, whereas, on the other hand, a clever but not overly disruptive generic message may prove to be highly beneficial to a less complicated product. As such, the practical recommendation to marketers would be to use a more open and experimental approach to testing and learning from the marketing mix rather than adhering to the traditional set of regulations based on product categories. In addition, marketers should always focus on the quality and perceived value of the communication, whether the product is high in price and/or complexity or not.

6.5 Limitations of the Study

All research studies have limitations that need to be acknowledged to properly evaluate and interpret the results. There are several key limitations within this study that should be taken into account.

The most significant limitation, which has been highlighted throughout this chapter, is the very minimal reliability of the measurement scales being used. The very low alpha coefficients (Cronbach's Alpha) associated with each of the key constructs indicate that the survey instrument is not measuring the constructs consistently/appropriately. This error in

measurement adds a substantial amount of random error/noise to the data; thus, it is impossible to achieve sufficient statistical power to detect true effects if they actually exist. This limitation also raises questions about the validity of all of the results derived from hypothesis testing, and likely is the primary reason why there were all null results from this study.

A second constraint is the way the experimental manipulation was applied; The manipulation check showed that participants could tell the difference between the personalised message (one that took into account specific consumer preference) and the generic message (one that did not). However, the manipulation itself (that is, the actual personalization message) may not have been sufficiently strong. To say that a single phrase of text implies personalized messaging is inadequate compared to the personalisation algorithms used in the today's world to drive personalisation (real-time). This reduced ecological validity may mean that the manipulated stimulus was inadequate to generate a sufficient level of emotion to justify measuring the emotional responses, as outlined in the introduction.

A third limitation of the study is that the survey experiment is insufficiently representative of the consumer context in the real world. When taking a survey, people enter into a different emotional state as opposed to browsing e-commerce sites. Since there is no immediate risk associated with completing a survey and the task orientation of filling out a survey reduces the salience of emotional responses (e.g. annoyance from intrusiveness, excitement from revelatory information), there was likely less emotional response throughout the survey experiment than would occur in a more naturalistic setting.

On the one hand, the inclusion of an international diversity of participants in this study can be viewed as a strength. However, because the main data analysis did not account for the cultural diversity that exists within the countries included in the analysis, it may have resulted in the masking of potential significant relationships. In particular, the vast variation of cultural norms about privacy and marketing suggests that there may have been a substantial amount of unmeasured variance in the study due to these differences.

Additionally, the use of a convenience and quota sampling method to acquire data may have resulted in non-probability sampling techniques being used for the study. Thus, although the use of such techniques is acceptable in an academic research setting, due to the nature of the sampling techniques, the sample cannot be viewed as representative of the entire population of online consumers from each of the countries sampled and, consequently, limits the extrapolation of the results of this study.

6.6 Directions for Future Research

A fruitful area for researchers to continue developing their knowledge within the topical area of digital marketing is to investigate the results of his specific Project, along with the limitations of this Thesis. Many opportunities exist within this Project to continue research into digital marketing and provide researchers with clear direction and viable opportunities for further exploration within their respective domains.

One of the most important and immediate opportunities for future research will be to develop a robust and cross-culturally validated measure of the key constructs associated with this

Project, especially Perceived Intrusiveness. Future research will require considerable efforts on the part of future researchers in developing new measurement scales through qualitative studies (such as conducting interviews and focus groups) that may help to define and clarify how consumers from different cultures view/interact with the following concepts: (i) usefulness; (ii) intrusiveness; and, (iii) brand attitude as they relate to personalisation. In addition, future researchers will need to create and validate the new measurement scales by following thorough quantitative methodologies such as Exploratory/Confirmatory Factor Analysis to test for validity and reliability across a wide variety of populations. Ultimately, without reliable instruments for measuring various aspects of digital marketing interactions across diverse populations, it will be difficult for the field to produce consistent and meaningful data.

In the future it would be beneficial for researchers to also concentrate on enhancing both the ecological validity and strength of the personalisation manipulation as these are important to evaluate any personalisation's effect. Researchers can expand their experimentation by creating more advanced experimental platforms that represent an accurate browsing environment. For instance, one type of study would include having individuals browse a mock e-commerce site and give them advertisements tailored to their clicking behaviour during that browsing session; this would provide researchers with a greater impact and better representation of the effects of personalisation than if they were evaluating an individual based on just text.

Finally, future studies would be better able to identify the effects of culture on the relationship between personalisation and privacy concerns by explicitly incorporating culture into the model of the study. Future cross-cultural studies should be structured to compare how cultural characteristics (e.g., individualism versus collectivism) affect the relationship between personalisation and privacy concerns and thus provide insights into how to better design personalisation strategies for specific cultural groups.

At last, it should be noted that the limitations stated in this paper did not capture a number of different types of advanced / deep forms of hyper-personalisation that are based on artificial intelligence. As a result, future studies will be needed to look at how different degrees or forms of "personalisation" will impact consumers. For example, a research experiment could be organised that compared how consumers responded to basic demographic level personalisation against an advanced level of behavioural based personalisation vs a level of predictive AI based personalisation to allow the investigation of potential non-linear and/or curvilinear effects to find the "sweet spot" of personalisation that would optimise the benefits while reducing the psychological negatives; and thus provide critical and actionable insights for both theory and practice. Through addressing the identified methodological and conceptual issues, future studies will be able to extend on the past studies and to assist in widening our understanding of this complex and profound area of marketing in the present day.

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Appendix: Survey Questionnaire

Do you currently own or plan to purchase a smartphone within the next 6–12 months?

- Yes, I currently own a smartphone

- Yes, I plan to purchase a smartphone within the next 6–12 months

- No

Do you currently use or plan to purchase a perfume/fragrance within the next 6–12 months?

- Yes, I currently use perfume

- Yes, I plan to purchase perfume within the next 6–12 months

- No

Section A: Communication Message Evaluation

The content I saw was customized to my needs.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

The content I saw enabled me to know products in which I am interested.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

The content I saw made purchase recommendations that match my needs.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section B: Perceived Usefulness

The information in this message was useful to me.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message helped me understand the product better.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Overall, this message provided valuable information.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message made the product seem helpful for me.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section C: Perceived Ease of Use

This message was easy to understand.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

It was easy to evaluate the product using this message.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

I found the message simple and clear.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Interacting with this type of message would be easy for me.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section D: Perceived Intrusiveness

I felt that this message was intrusive.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message invaded my privacy.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message interrupted what I was doing in an annoying way.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message made me feel uncomfortable.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section E: Attitude Toward the Brand

My overall opinion of this brand is positive.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

I like this brand.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This message improved my perception of the brand.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

This brand seems appealing to me.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section F: Online Purchase Intention

I would consider purchasing this product after seeing this message.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

It is likely that I will buy this product in the near future.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

I am interested in buying this product soon.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

I intend to search more online for this product in order to purchase it.

- Strongly Disagree

- Disagree

- Somewhat Disagree

- Neutral

- Somewhat Agree

- Agree

- Strongly Agree

Section G: Control Questions

The message I just saw felt:

- Very Generic

- Somewhat Generic

- Neutral

- Somewhat Personalised

- Very Personalised

In your opinion, purchasing this type of product requires:

- Very little thought and consideration (Low Involvement)

- Some thought and consideration

- A moderate amount of thought and consideration

- A lot of thought and consideration

- A great deal of thought and consideration (High Involvement)

Section H: Demographics

What is your gender?

- Male

- Female

- Other

- Prefer not to say

What is your age?

- Below 18

- 18–24

- 25–34

- 35–44

- 45 and above

What is your country of residence?

- Lithuania

- India

- Other

Follow-up Question (Lithuania)

Description (optional)

How often do you see personalized online messages from Lithuanian brands?

- Very Rarely

- Rarely

- Sometimes

- Often

- Very Often

Follow-up Question (India)

Do you have any additional feedback about your experience with this message or the survey? (Optional)

Follow-up Question (Other)

Please specify your country of residence: