



**VILNIUS UNIVERSITY
BUSINESS SCHOOL**

DIGITAL MARKETING PROGRAMME

Simona Vaičekauskaitė

MASTER THESIS

<p><i>PSICHOLOGINĖS NUOSAVYBĖS ĮTAKA REKLAMINĖJE ŽINUTĖJE VARTOTOJŲ SUVOKIMUI BEI IMPULSYVIAM KETINIMUI PIRKTI PASLAUGAS INTERNETE</i></p>	<p><i>THE INFLUENCE OF PSYCHOLOGICAL OWNERSHIP IN SPONSORED POST ON CONSUMER PERCEPTIONS ON THE URGE TO BUY IMPULSIVELY SERVICES ONLINE</i></p>
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Name, surname, and scientific
degree of the supervisor

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SUMMARY

VILNIUS UNIVERSITY BUSINESS SCHOOL
DIGITAL MARKETING STUDY PROGRAMME

SIMONA VAIČEKAUSKAITĖ

THE INFLUENCE OF PSYCHOLOGICAL OWNERSHIP IN SPONSORED POST
ON CONSUMER PERCEPTIONS ON THE URGE TO BUY IMPULSIVELY SERVICES
ONLINE

Supervisor – Doc. dr. Elzė Rudienė

Master's thesis was prepared in Vilnius, in 2024

Scope of master's thesis - 173 pages

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Number of bibliography and references – 196

The main purpose of the master's thesis was to explore the effect of psychological ownership inclusion in sponsored post on consumer perceptions on the urge to buy impulsively services online. Psychological ownership was expressed through sponsored post image, text, and promotional offers. In addition, the effect of impulsive buying tendency and hedonic and utilitarian click-through motivation on the urge to buy impulsively and willingness to pay more were also explored.

The master thesis consists of three main parts: theoretical analysis, research methodology, and research data analysis.

The theoretical analysis of the work was conducted on impulsive buying behaviour (urge to buy impulsively), internal and external factors influencing the urge to buy impulsively, social media advertisements (sponsored post), psychological ownership, types of service purchases online, and the S-O-R model and Information adoption model.

In the research methodology of the work, the research model was created based on theoretical analysis and the 12 hypotheses raised. A quantitative method was applied using the survey design of two online questionnaires, where respondents were exposed to different (with or without psychological ownership implementation) sponsored posts.

A total of 231 respondents were collected. The collected data was analysed using SPSS statistics. The results of the research showed that the inclusion of psychological ownership in

a sponsored post influences consumer perceptions (perceived value and perceived enjoyment) on the urge to buy impulsively. The results also revealed that increased positive perceived value can lead to a positive willingness to pay more as well. On the other hand, impulsive buying tendency and hedonic and utilitarian click-through motivation did not influence the relationship between consumer perceptions and the urge to buy impulsively.

Based on the empirical research results, further research on this topic could be continued and obtained results used. Moreover, businesses are recommended to include psychological ownership stimuli in their online advertising messages, as it can encourage the urge to buy impulsively.

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Magistro darbo pagrindinis tikslas buvo ištirti psichologinės nuosavybės įtraukimą į reklaminę žinutę ir daromą įtaką vartotojų suvokimui bei impulsyviam ketinimui pirkti paslaugas internetu. Psichologinė nuosavybė buvo išreikšta per reklaminės žinutės paveikslėlį, tekstą bei reklaminiu pasiūlymu. Taip pat buvo ištirtas impulsyvaus pirkimo polinkis bei hedoninis ir utilitarinis paspaudimo motyvacijos įtaka impulsyviam pirkimo poreikiui, bei ištirtas noras mokėti daugiau.

Magistro darbas susideda iš trijų pagrindinių dalių: teorinės literatūros analizės, tyrimo metodologijos ir tyrimo duomenų analizės.

Teorinėje dalyje literatūros analizė buvo atlikta impulsyvaus pirkimo elgsenos (norui pirkti impulsyviai), vidinių bei išorinių veiksnių įtaka norui pirkti impulsyviai, socialinių tinklų reklamos (reklaminės žinutės), psichologinės nuosavybės, paslaugų, kurios įsigyjamoms internetu ir S-O-R modelio bei Informacijos apdorojimo modelio temomis.

Tyrimo metodologijos dalyje buvo sukurtas tyrimo modelis, remiantis teorine literatūros analize, bei iškelta 12 hipotezių. Buvo pritaikytas kiekybinis metodas, naudojantis klausimyno forma pateikiant du klausimynus, kur respondentams buvo pateiktos skirtingos (su arba be psichologinės nuosavybės įtraukimu) reklaminės žinutės.

Bendras surinktas apklaustųjų skaičius buvo 231. Surinkti duomenys buvo analizuoti naudojantis SPSS statistika. Tyrimo rezultatai parodė, kad psichologinės nuosavybės

įtraukimas į reklaminę žinutę turi įtakos vartotojų suvokimui (suvokiamai vertei bei suvokiamam malonumui) bei impulsyviai ketinimui pirkti. Rezultatai taip pat atskleidė, kad didesnė suvokiama vertė gali lemti teigiamą norą mokėti daugiau. Kita vertus, impulsyvaus pirkimo polinkis bei hedoninis ir utilitarinis paspaudimo motyvacija neturėjo įtakos santykiui tarp vartotojo suvokimo ir impulsyvaus ketinimo pirkti.

Remiantis empirinio tyrimo rezultatais būtų galima tęsti tolimesnius tyrimus šia tema ir naudotis gautais rezultatais. Be to, įmonėms yra rekomenduojama įtraukti psichologinės nuosavybės stimulą į savo internetines reklamų žinutes, nes tai gali skatinti impulsyvų ketinimą pirkti.

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INTRODUCTION

In the European Union, 87% of people aged 16 to 74 use the internet on a daily basis (Digital Economy and Society Index, 2022). With the growing globalisation of the world and markets (Kurt et al., 2022), it has become important for a business to be visible in the online world as well. Online shopping has become the most flexible method of purchasing as it provides customers with the ability to easily compare product characteristics, prices, has user-friendly navigation, and has secure mechanisms to make purchases (Chang and Tseng, 2014; Chetioui et al., 2021). Incorporation of digital elements showcases business innovation, growth, and competitive advantage (Hornungova and Petrova, 2022). The use of digital technologies such as social media by big and small businesses in the European Union alone has doubled since 2020 (Digital Economy and Society Index, 2022), and because of technological advancement, increasing consumer demand, and audiences spending more time online, online global advertising is constantly growing as well (Navarro, 2023).

Since the last decade, online advertising has been the most popular marketing method used, and in 2022, it accounted for 62% of all global advertising spending, which is projected to continue growing even more (Navarro, 2023). Online advertising has the power to drive traffic, increase sales, and raise brand awareness (De Haan et al., 2015; Habib et al., 2021). Paid advertising generates revenue by appealing to customers to start the buying process through different online channels until a product or service is ultimately purchased (De Haan et al., 2015). Various communication channels can be divided into display advertising on websites (Viglia, 2014), social media advertising (Sharifi Asadi Malafe et al., 2022), email marketing (Bowden and Mirzaei, 2021), mobile (in-app) advertising (Abbasi et al., 2020), search advertising (Google) (Chan et al., 2011; Bayer et al., 2020), and influencer marketing (Shamim and Islam, 2022). Every day, new features in each communication channel are being presented that help to attract customers, improve satisfaction and interest (Viglia, 2014), and increase purchasing volumes (Habib et al., 2021). On the contrary, such extensive advertising encourages consumers' impulsive buying behaviour (Habib et al., 2021).

Online impulsive buying behaviour has been increasing in combination with the expansion of online shopping (Bahrah and Fachira, 2021). A survey done by Finder.com found that 88.6% of respondents (in the USA) have encountered buying impulsively online, with 64% admitting to conducting impulse purchases at least once a month (McDermott, 2021). Marketers can create value for consumers and stimulate the urge to buy impulsively online by

using new technologies, communication channels like social media networks, and advertising messages to target consumers and influence their minds (Dharta et al., 2021). Social media is a perfect environment for impulsive buying to occur as it is a channel full of impulsive behaviour-stimulating elements (Abdelsalam et al., 2020); thus, it is a great channel for businesses to advertise (Kurt et al., 2022). Advertising on social media allows for greater consumer engagement (Kurt et al., 2022) and is one of the less costly advertising types (Curran et al., 2011). In addition, Shareef et al. (2017) found that about 60% of consumers visit social media networks not just for entertainment but for informational purposes and engage with the advertisements offered to them. Just like product purchasing has been increasing and becoming more comfortable to purchase online, service purchasing online has been growing too (Kwon and Ahn, 2021). Moreover, social media advertisements can contain many stimulating elements that have been driving conversions for businesses but are not adequately measured in scientific research, like the endowment effect element such as psychological ownership (Kamleitner and Feuchtl, 2015; Morewedge et al., 2021). Psychological ownership through imagery and other elements allows a person to perceive value and feel like they own a product or service, leading to desire and the urge to buy (Pierce et al., 2001; Peck and Shu, 2011; Morewedge et al., 2021).

Impulsive buying behaviour has been shown to become more common in a variety of consumption contexts, including services (Sharma et al., 2014), and even early studies have noted that service promotion and selling are more suitable in an online environment than products (Phau and Poon, 2000). Understanding how the impact of advertising on social media networks (e.g., Facebook) using psychological ownership (endowment effect) evokes the urge to buy impulsively leading to possible purchasing could help businesses stay competitive, improve their online marketing and advertising strategies, and increase sales (Kurt et al., 2022). In addition, analysing implementations of endowment effect elements in one of the forms of online advertisements, like sponsored post, and then selling services on social media networks could help to better understand and advance the online consumer buying process (Khan, 2007), provide better experiences (Kwon and Ahn, 2022), choose the right stimulating elements for advertisements, and increase knowledge for scientific studies.

Using advertisements on social media networks and other online channels, researchers investigated different factors influencing impulsive buying or the urge to buy impulsively online, where products were used as a study factor. Some research focused on advertisements affective and cognitive values influencing impulsive purchasing decisions, taking hedonic and utilitarian browsing into account (Setyani et al., 2019; Sharifi Asadi Malafe et al., 2022). Other researchers included and compared internal and external stimuli (Kimiagari and Malafe, 2021)

or analysed gender differences (Coley and Burgess, 2003). Research was conducted focusing on positive and negative emotional factors such as humour (Deshpande et al., 2022), anxiety (Sharifi Asadi Malafe et al., 2022), regret (Chang and Tseng, 2014), arousal (Guo et al., 2017), and more. Other authors focused on psychological factors of perceived enjoyment, perceived usefulness, attractiveness, trustworthiness, and informativeness (Arviansyah et al., 2018; Setyani et al., 2019; Koay et al., 2021; Shamim and Islam, 2022). Personalised advertisement effects on impulsive purchasing were also studied by incorporating flow experience (Lina and Ahluwalia, 2021) or sustainable decision-making (Zafar et al., 2021). Promotional stimuli in advertising messages using scarcity messages (limited time and limited quantity) were highly studied by researchers on the impulsive buying behaviour topic (Lee et al., 2015; Guo et al., 2017; Bahrah and Fachira, 2021). In addition, the influence of attitude in online marketing advertisements on impulsive purchasing was also greatly incorporated into the research (Mikołajczak-Degrauwe and Brengman, 2013; Chang and Tseng, 2014; Dharta et al., 2021). Moreover, other factors such as neuroimaging (Casado-Aranda et al., 2022), herd behaviour (Ko, 2018), saving and self-control behaviour (Allom et al., 2018), and post-purchase (Chang and Tseng, 2014) were also included in studying advertising messages on consumer behaviour and impulsive buying.

Studies that use services as a study object for impulsive buying are currently very limited (Xiao and Nicholson, 2011; Sharma et al., 2014; Filieri et al., 2018). Nonetheless, some have analysed services and examined perceptions of risk involvement in the consumer buying process (Sharma et al., 2014), hedonistic and utilitarian drivers of services such as positive and negative emotions (Kemp et al., 2013; Kivetz and Zheng, 2017), situational and inner factors of influence (Kwon and Ahn, 2021), external stimulus (Zhang Y., et al., 2022), and motives to purchase through social media (Um et al., 2023). Some studies have also compared tangible and intangible services and the likelihood of impulsive purchasing (Sharma et al., 2014). The services mainly explored on the topic of advertisement and impulsive purchasing online were hospitality and tourism (Kasiri et al., 2017; Tan et al., 2018; Szymkowiak et al., 2021; Kwon and Ahn, 2021; Kwon and Ahn, 2022; Um et al., 2023).

According to a recent literature review, research on impulsive buying is divided due to the shift from a traditional shopping environment to various online shopping environments (Redine et al., 2023). Most past research focused on physical purchasing of products (Sharma et al., 2014; Duong and Khuong, 2019), while studies on online impulsiveness are still relatively new (Chan et al., 2017) and limited (Habib et al., 2021). In addition, from the found literature, there are no studies that would include psychological ownership and other

endowment effect elements in a form of sponsored post on social media networks like Facebook on the urge to buy impulsively. Furthermore, despite the growing purchasing of services online, there is very limited research done on using services as study objects on impulsive buying behaviour (Kwon and Ahn, 2022), and more research using services need to be tested in an online environment (Kasiri et al., 2017). This leaves a gap in literature and knowledge for businesses then implementing impulsive stimulus and advertising services on online channels for the purpose of purchase. It is suggested by researchers that conducting more studies using various stimuli (e.g., psychological ownership) in advertisements on social media networks on the urge to buy impulsively could achieve wider generalizability and validity of past findings (Setyani et al., 2019; Koay et al., 2021; Szymkowiak et al., 2021; Lina and Ahluwalia, 2021; Shamim and Islam, 2022). This could be due to some facts, as results could vary based on the research country (Ali and Raza, 2017; Zafar et al., 2021), the communication channel used when conducting research (Kimiagari and Malafe, 2021; Lina and Ahluwalia, 2021), and the fact that many of the respondents were students (Guo et al., 2017; Setyani et al., 2019; Deshpande et al., 2022). In addition, some studies did not focus on any communications channel before conducting research on online advertisements and impulsive buying, which could lead to incorrect results as the same advertisement could have a different effect on consumers (Tan et al., 2018). Conducting even similar studies while using another country to validate and generalise findings or find new insights is highly recommended for future research (Zafar et al., 2021; Moes et al., 2022). Ittaqullah et al. (2020) have also claimed that using students as respondents to conduct research that focuses on consumer impulsive buying behaviour might provide incorrect results, as students can be described as those who have solid activities but no steady income, and their purchases are mostly based on needs rather than unplanned sudden buying, despite being more prone to impulsive actions. Additionally, it would be beneficial for many service-offering businesses to know if consumers engage in impulsive buying (Xiao and Nicholson, 2011; Kurt et al., 2022).

Due to the limited research on the implementation of psychological ownership elements in online advertisements and their influence on impulsive buying, this could have a significant impact on past research and show more insights on consumer perceptions and the urge to buy impulsively online (Kamleitner and Feuchtl, 2015; Alalwan, 2018; Habib et al., 2021; Casado-Aranda et al., 2022). Alawan (2018) suggests testing more stimulating elements used in various situations on social media networks, as many researchers have analysed similar stimuli as well as how advertising value is perceived. Sharma et al. (2014) suggests exploring the involvement of other individual and situational elements in the development of a more comprehensive

conceptual framework for impulsive buying of services. Researchers are also recommending including and testing in future research such variables as consumer knowledge (Drossos and Fouskas, 2010), time pressure (Zheng et al., 2019; Sharifi Asadi Malafe et al., 2022), mood (Chang and Tseng, 2014), convenience motives (Um et al., 2023), perceived value (Zhang Y., et al., 2022), needs of users (Chen C. D., et al., 2019), eWOM (Koay et al., 2021), perceived trust (Shamim and Islam, 2022), special promotions (Sharifi Asadi Malafe et al., 2022; Um et al., 2023), perceived enjoyment (Parboteeah et al., 2009), and perceived risk on different services (Sharma et al., 2014). Kwon and Ahn (2022) then researched impulsive purchasing of hospitality and tourism products but did not include consumer individual characteristics that could show significant importance in studying impulsive buying behaviour, which is also advised by Lee et al. (2015), Malafe et al. (2022), and Kurt et al. (2022). Moreover, focusing on several elements of advertisements has also been suggested by Lee et al. (2015), Szymkowiak et al. (2021), and Casado-Aranda et al. (2022) for comparison reasons. Finally, while studies on measuring hedonic and utilitarian service elements or consumer hedonic and utilitarian motivations and emotions, have not been broadly explored, and are suggested to incorporate into research by authors (Chang and Tseng, 2014; Zheng et al., 2019; Kimiagari and Malafe, 2021; Bahrah and Fachira, 2021; Sharifi Asadi Malafe et al., 2022).

In this regard, this scientific paper will focus on psychological ownership of endowment effect in sponsored post advertisement on social media on the urge to buy impulsively services.

Research problem: how the urge to buy impulsively (through consumer perceptions) is affected by psychological ownership implementation in sponsored post?

Research aim: empirically to explore the psychological ownership in sponsored post on social media and its effect on consumer perceptions on the urge to buy impulsively services online.

Research goals:

1. Discuss and compare past research findings on the topic of the research.
2. Establish a research conceptual model and research hypotheses.
3. Establish the research data collection method, instrument, creation of stimuli, and sample size.
4. Conduct scientific research using sponsored post advertising on the urge to buy impulsively services.
5. Identify if psychological ownership in sponsored post influences consumer behaviour.
6. Summarise the study findings and provide recommendations for businesses and future research.

Research structure and methods: the research work consists of three main parts: theoretical analysis, research methodology, and research data analysis. The first part of the theoretical analysis is conducted on impulsive buying research with the urge to buy impulsively, internal and external factors influencing the urge to buy impulsively, social media advertisements (sponsored post), psychological ownership of the endowment effect, types of services purchased online impulsively, the S-O-R model, and the Information adoption model. In the second part of the research methodology, the research model, hypothesis, questionnaire, stimulus creation (sponsored post), and sample size calculations were made. In the third part of the research, data analysis was processed and analysed using IBM SPSS statistics and theoretical analysis. Before the main parts of the research, an introduction to the work is presented, and after the main parts, conclusions with theoretical and practical recommendations are given. The methods used in the research were theoretical analysis on the topic of the research and quantitative empirical research using a survey design. The sample size was calculated using comparable researches method and the respondents were collected using nonprobability and convenience sampling methods. The stimuli-sponsored post was created based on theoretical analysis and two small surveys: one for service determination and the second for experts to choose elements of stimuli.

1. IMPULSIVE BUYING, ADVERTISING ON SOCIAL MEDIA, PSYCHOLOGICAL OWNERSHIP IN THE ENDOWMENT EFFECT, AND THE S-O-R MODEL THEORETICAL BACKGROUND

1.1. Understanding impulsive buying and the urge to buy impulsively

For marketing specialists, understanding consumer buying behaviour is of high importance to attract customers, provide the best products and services, create personalised offers, and, with great advertisements, indulge them into buying (Jones et al., 2003; Iyer et al., 2019). One of the ongoing consumer behaviours is impulsive buying. Impulsive buying has been studied globally for over 70 years, and interest in this topic has been growing, especially with its growth in an online environment (Redine et al., 2023), and has been shown to improve sales and revenue for businesses (Lavuri et al., 2023).

To this day, impulsive buying does not have an exact definition (Abdelsalam et al., 2020), with authors describing it in a variety of ways that are similar but not identical and arguable. Some past authors gave broad descriptions of defining impulsive buying, where it was noted that impulsive buying is unplanned (Piron, 1991; Wood, 1998; Beatty and Ferrell, 1998). Piron (1991) used a study of students to describe impulsive buying, leading him to define it as unplanned, an outcome of being exposed to stimuli, and a decision made on the spot. However, the author claimed that for impulsive buying to occur, a customer does not need to experience all these elements (Piron, 1991). Wood (1998) conceptualised impulsive buying as unplanned, with little to no consideration, and followed by intense emotions. Beatty and Ferrell (1998) described impulsive buying as something made without prior planning to buy a specific product category or to complete a specific buying task. This behaviour occurs after experiencing a powerful desire or urge to buy, and it is usually spontaneous and without much thought (Beatty and Ferrell, 1998). On the other hand, authors such as Stern (1962) and Rook (1987) did not agree that impulsive buying is the same as unplanned buying and claimed that it is something that is affected by a variety of stimuli, such as economic, personality, time, location, and culture, is related to ease of buying, and is an occurrence when a consumer has a quick, overwhelming, and persistent urge to buy something. The impulse to buy has a hedonic element that stimulates emotions and is a fast, urgent, and spontaneous experience (Rook, 1987). Stern (1962) has also conceptualised impulsive buying by classifying it into four

identifications: pure (spontaneous purchase made without any prior planning), reminder (purchasing triggered by some sort of realisation or memory), suggestion (purchase made upon seeing a product or service for the first time and perceiving a need for it), and planned (having an intention to buy something with an additional possibility to buy based on certain offers), those purpose is to explain that impulsive buying can occur in different situations and is not as simple as or equal to unplanned purchasing. To this end, past researchers did not fully agree on what exactly impulsive buying is; however, it can be highlighted that while impulsive buying is affected by a variety of stimuli, it primarily consists of two major elements, which are lack of planning and emotional response (Verplanken and Herabadi, 2001).

On the other hand, new research on impulse buying is considering previous research as well as new findings and has defined impulsive buying, providing new insight and more accuracy (Floh and Madlberger, 2013; Chan et al., 2017; Duong and Khuong, 2019; Iyer et al., 2019; Abdelsalam et al., 2020; Yang et al., 2021; Kurt et al., 2022). More recent studies have described "impulse buying as a process-outcome mechanism within the area of an individual psychological approach that arises when a buyer has a sudden, frequently persistent urge to buy something immediately" (Chan et al., 2017). Floh and Madlberger (2013) highlighted that impulsiveness should be viewed in the context of buying situations, such as perceptions of product or service images, advertisements, and price attractiveness. Duong and Khuong (2019) described impulsive buying as characterised by unexpected emotions and hedonic urges that result in an unplanned and quick purchase in response to stimuli. Iyer et al. (2019) described it as a phenomenon that is influenced by external, market-related factors as well as a range of internal psychological elements. Impulsive buying is thought to be a reaction to a marketing stimulus (Yang et al., 2021). Hu et al. (2019) identified impulsive buying behaviour elements that can be used to distinguish them from usual purchases. Impulsive buying behaviour elements include a sudden urge to act, a state of psychological instability, an occurrence of psychological dispute and struggle, a decrease in cognitive evaluation, and a disregard for the consequences of impulse buying (Hu et al., 2019). Kurt et al. (2022) defined it as a sudden, unplanned purchase made by a consumer without considering the consequences. Consumers can buy products or services they do not need or did not intend to buy previously by making spontaneous decisions based on a variety of factors when they go shopping (Kurt et al., 2022). Abdelsalam et al. (2020) combined previous research that characterised impulsive buying behaviour in several ways: intention and planning for the buy; time to make a buying decision; if the decision to buy is driven by strong feelings; considerations on buying; mindful buying; and if the decision to buy is an outcome of or response to stimuli. The author states that

unplanned buying does not have an urgent need to buy or strong buying-related feelings (Abdelsalam et al., 2020). Overall, the current study on impulse buying considers prior research as well as recent discoveries to describe impulse buying more clearly.

Researchers discovered multiple elements and factors influencing impulsive buying behaviour. Some of factors which can affect impulsive buying have been emphasised such as perceived price, need for a product or service, accessibility of product or service, self-service, advertising elements and promotional activities, store display (offline and online), limitations of product or service life (perishable or something else that makes it no longer exist in short period of time), intrinsic factors, consumer traits, situational factors, psychological factors, technology usage and many more (Stern, 1962; Wood, 1998; Mihic and Kursan, 2010; Chen and Wang, 2016; Atulkar and Kesari, 2018; Ko, 2018; Lavuri, 2023; Rodrigues et al., 2021; Chetioui et al., 2021; Zhang Z., et al., 2022; Um et al., 2023). Other researchers emphasised that factors influencing impulsive buying can be primarily divided into two categories: internal factors (which have to do with inner consumer traits and psychological factors such as urge to buy, emotions, and perceptions) and external factors (such as offline and online shop environments and advertising messages) (Dawson and Kim, 2009; Kalla and Arora, 2011; Iyer et al., 2019; Kimiagari and Malafe, 2021). Internal and external factors correlate together during the occurrence of impulsive buying, and it is important to consider both categories when conducting research (Kimiagari and Malafe, 2021). In addition to internal and external factors, Iyer et al. (2019) have combined key stimuli that trigger impulsive buying as “traits (e.g., sensation-seeking, impulse buying tendency), motives (e.g., utilitarian, hedonic), consumer resources (e.g., time, money), and marketing stimuli”. Furthermore, Redine et al. (2023) have highlighted twelve of the most commonly used antecedents in impulsive buying research by grouping them into five sets: consumer-related factors (consumer characteristics, self-control, perceptions), sociodemographic factors (demographics, cultural influence, normative, and interpersonal influence), marketing mix (product-related factors, promotional offers), store-related factors (store environment, e-store design elements), and online peer influence (online reviews, social media influence). Impulsive buying is also influenced by mediating factors of emotional responses such as arousal, enjoyment, pleasantness, affect, value, and flow experiences, which go through the urge to buy impulsively (intention, desire creating) and lead to offline or online impulse buying (Redine et al., 2023). In summary, to understand impulsive buying behaviour, both internal (such as consumer attributes and psychological aspects) and external (such as store environment and advertising messages) factors need to be considered since they interact and contribute to impulsive buying decision-making.

Impulsive buying does not happen without the urge (Paul et al., 2022), whereas, measuring a person's the urge to buy impulsively can show the potential of occurrence of impulsive buying. Abdelsalam et al. (2020) note that unplanned buying, which is in most cases associated with impulsive buying, does not have urgency or strong buying-related emotions. Impulse buying is more of an actual process of product or service buying, while the urge to buy impulsively has to do with inner consumer urges and not necessarily with the buying process (Paul et al., 2022). Beatty and Ferrell (1998) defined the urge to buy as a situation where desire is felt upon witnessing a product or service in some sort of environment. Paul et al. (2022) describes the urge to buy as an indicator for marketers that helps persuade (create the intention) customers into buying. The urge to buy varies from impulsive buying; however, at the same time, it strongly predicts impulsive buying behaviour (Verhagen and Van Dolen, 2011; Badgaiyan and Verma, 2015; Huang, 2016; Wu et al., 2021). In addition, the urge to buy is backed by irrational decision-making as it is unplanned and spontaneous in nature, connecting it with impulsiveness (Beatty and Ferrell, 1998; Badgaiyan and Verma, 2015; Setyani et al., 2019; Paul et al., 2022). The urge to buy, similarly to impulsive buying, can be triggered by high availability of products and services, recommendations, and a simple buying process (Paul et al., 2022). It is of hedonic complexity and results in an emotional positive (satisfaction, pleasure, enjoyment) or negative (guilt, regret) state (Verhagen and Van Dolen, 2011; Badgaiyan and Verma, 2015; Wu et al., 2021; Paul et al., 2022). The urge to buy has been shown to affect consumers in online environments as more stimulants can be applied using digital technology (Paul et al., 2022). Consumers' reactions towards stimuli can be divided into two stages: a sudden desire towards a product or service (urge) and a felt need to have it (impulse buying) (Rook, 1987; Beatty and Ferrell, 1998; Paul et al., 2022). Parboteeah et al. (2009) discovered that when customers engage with online or offline business environments, they are more likely to experience enjoyment, leading to the urge to buy impulsively. Furthermore, the urge to buy impulsively can be stimulated by visual elements (Rook, 1987), social influences (Zheng et al., 2019), hedonic and utilitarian browsing (Badgaiyan and Verma, 2015; Zheng et al., 2019; Zafar et al., 2021a), easy payment options (Badgaiyan and Verma, 2015), and hedonic and utilitarian click-through motivation (Setyani et al., 2019). Finally, the urge to buy impulsively is a significant factor affecting the process of impulsive buying and needs to be further researched in various situations.

With changing consumer lifestyles (Ampadu et al., 2022), online impulsive buying is becoming more common among consumers (Chan et al., 2017; Alam et al., 2019). With the shift towards digitalization, more research focuses on how impulsive buying behaviour and the

urge to buy impulsively occur in an online environment. Vonkeman et al. (2017) have defined online impulsive buying as “an unplanned online purchase that is the result of exposure to a stimulus there; the behaviour is usually accompanied by a strong urge to buy and occurs without much thought”. Various situations have been studied on this matter, and it has been shown to have differences from traditional impulsive buying behaviour (Redine et al., 2023). A major difference between online and offline buying is that in an online environment, consumers are not able to touch, try, taste, or smell the products, leaving online buying at a disadvantage (Vonkeman et al., 2017). However, the online shopping environment is more compatible with impulsive buying behaviour and consumer urges to buy, as it gives freedom to consumers with its convenience of not having to travel to stores, shops being always open, allowing them to order products and services on the go, and provide fast check-out options (Dawson and Kim, 2009; Abdelsalam et al., 2020; Ampadu et al., 2022). A website's features, such as design, visually attractive presentations of products and services, navigation, content richness, image, video, sound, and sales promotions, have a major influence on consumers impulsive buying behaviour (Madhavaram and Laverie, 2004; Floh and Madlberger, 2013; Vonkeman et al., 2017; Koay et al., 2021; Lim and Kim, 2022; Nagar et al., 2022). Perceived utilitarian, hedonic value, materialism, limited quantity, limited time, and enjoyment have also been shown to have a greater effect than buying impulsively online (Lo et al., 2016; Lavuri, 2023; Wu et al., 2021). Online shopping easily provides product or service information, allows one to see its performance in detail prior to buying, and allows one to compare prices (Vonkeman et al., 2017; Ittaqullah et al., 2020). All of this increases the chances of impulsive buying (Chan et al., 2017). As a result, digital marketing has become more important for businesses (Zhang and Shi, 2022), with strategies being adapted to reach their customers online by providing personalised recommendations, optimising their interests, and advertising messages, to ensure an optimal buying experience (Ampadu et al., 2022). One of the ways marketing activities are done is by posting advertisements on social media channels (Chen et al., 2016; Redine et al., 2023). The usage of social media by businesses and consumers, such as Facebook, has been increasing over the years (Chen et al., 2016). This interactive environment is filled with impulse-buying stimuli (Abdelsalam et al., 2020). Social interactions, peer opinions of their buying experiences, and interactivity on social media have been shown to play a significant role in consumers impulsive buying behaviour (Huang, 2016; Alam et al., 2019; Zhang and Shi, 2022). Social media is also a great channel for building relationships with customers and increasing self-awareness (Bowden and Mirzaei, 2021). Advertising on social media has also been proven to allow marketers to learn more about their

customers, learn which elements work the best, target, and reach specific audiences (Boerman et al., 2017; Kempa et al., 2020). Altogether, online shopping is a new market that allows marketers to utilise various digital elements like social media advertising that benefit both businesses and customers, at the same time increase impulsive buying behaviour.

In summary, with growing markets and new markets emerging every year, shopping has evolved as well. The digitalization of businesses has changed the way consumers interact with brands and the way they buy. Buying anything became very convenient and easy for customers, especially online. This increases the chances of impulsive buying. Due to this, impulsive buying has been gaining attention from businesses and researchers. To this day, impulsive buying does not have an exact description; nonetheless, it can be described as a spontaneous, quick action driven by emotional urges. In addition, it can be divided to pure, reminder, suggestion, and planned impulsive buying. Researchers have noted that many factors affecting consumers' impulsive buying can be divided and are driven by internal and external stimuli that need to be always considered and further studied. The urge to buy impulsively is also a crucial element then studying consumer impulsive buying. As the rise of online shopping emerged, marketers started applying digital tools as they allow them to know more about customers, reach target audiences, and increase sales. Social media has been one of the main channels used by marketers to reach those goals. Understanding how consumer behaviour, impulsive buying, and the urge to buy impulsively work on social media using marketing tactics such as advertisements is significant for impulsive buying research and businesses.

1.2. Internal factors influencing impulsive buying

Understanding how impulsive buying happens and all the factors that can cause it is crucial for business marketing activities and research. As impulsive action is taken by customers, it means that it is something that comes from within a person, such as the urge to buy impulsively, and not the product or service (Kalla and Arora, 2011). Such processes are described as internal factors that affect consumers actions and views (Dawson and Kim, 2009; Kalla and Arora, 2011; Destari et al., 2020; Kimiagari and Malafe, 2021; Kurt et al., 2022). Internal factors are psychological and individual elements such as customer characteristics or personality traits (Kimiagari and Malafe, 2021; Kurt et al., 2022), emotions (Iyer et al., 2019), perceptions (Zhang Y. et al., 2022), and motivators (Kalla and Arora, 2011). Internal factors of impulsive buying focus only on consumers inner factors that can determine impulsive buying

tendencies (Dawson and Kim, 2009). Because of this, it is critical to know what inner elements of consumers increase the chances of impulsive buying behaviour.

Emotions play an important role in consumers' impulsive buying behaviour (Iyer et al., 2019). It works as a determinant for consumers before they make a purchase (Destari et al., 2020). Consumers buy products or services due to a need for it (Kurt et al., 2022); however, nowadays, it is also often perceived as a way of life or a recreational activity to meet their psychological needs (Hong et al., 2022) and perceived values (Chen-Yu et al., 2022). Emotional impulsive buying is often performed to increase self-esteem, self-image, or just to try new products (Kalla and Arora, 2011; Darmawan and Gatheru, 2021). At the same time, emotions are not always stable and can change over time (Togawa et al., 2020). Consumers views and impulsivity can be impacted by past experiences (Kalla and Arora, 2011). If experience was positive, impulsive buying increases; if negative, it decreases (Kalla and Arora, 2011). Thus, understanding how internal factors can influence impulsive buying is crucial in impulsive buying research.

Positive emotions have been researched by authors studying impulsive buying. Iyer et al. (2019) found that positive emotional states work as mediators or moderators and increase the chances of impulsive buying online. The author discovered that internal factors such as arousal can make a person buy certain products and services and increase positive emotions such as gratitude, reward, or some sort of compensation (Iyer et al., 2019). Dawson and Kim (2009) established that when a consumer feels happy during an interaction, they are more likely to engage in impulsive buying as it is perceived favourably. According to Zheng et al. (2019), consumers experience pleasure if they get to discuss their buying plans with other people, which ultimately causes them to make impulsive purchases. Darmawan and Gatheru (2021) found that some people just engage in certain activities, such as shopping or spending time on social media, to experience pleasure. Researchers have also found that when consumers are engaged in situations where such emotions as perceived luck, arousal, enjoyment, surprise, excitement, and perceived ownership are heightened, this can escalate the urge to buy impulsively leading to impulsive buying (Gong X. et al., 2020; Destari et al., 2020; Lavuri, 2023; Widagdo and Roz, 2021; Zhang Y. et al., 2022). This shows that when consumers buy impulsively, they can feel positive emotions such as, pleasure, happiness, arousal, ownership, gratitude, excitement, and much more.

One of the positive emotion's consumers experience when exposed to an external stimulus is perceived enjoyment (Parboteeah et al., 2009). Enjoyment is considered an individual character trait of a person that also has a direct connection with experienced urges

(Wadera and Sharma, 2018). Perceived enjoyment can be described as a feeling a person goes through after coming into contact with stimulation (Ulaan et al., 2016). In some research, enjoyment is often associated with shopping enjoyment (Wadera and Sharma, 2018). Which is described as “the pleasure one obtains in the shopping process” (Beatty and Ferrell, 1998; Wadera and Sharma, 2018). People who find such experiences positive are more accepting of the external stimulus being provided by marketers (Wadera and Sharma, 2018). The experience of enjoyment can lead to a change in behaviour, such as impulsive buying (Beatty and Ferrell, 1998; Parboteeah et al., 2009; Alawan et al., 2018). In addition, enjoyment in more recent research is said to be experienced very actively in online environments, which is a benefit for businesses (Alawan et al., 2018). Moreover, customers may engage in impulsive online purchasing if they are positively experiencing the process, or, in other words, perceive the experience as enjoyable (Suki and Suki, 2007). Overall, perceived enjoyment is a positive emotion consumer experience when exposed to external stimuli. This positive experience can lead to a change in behaviour, such as having the urge to buy impulsively.

Negative emotions have been studied by authors in their research on impulsive buying, and in many cases, they were analysed based on post-purchase experiences. Then consumers experience negative situations of impulsive purchasing, and negative emotions are felt (Kalla and Arora, 2011). After impulsive buying, some consumers experience regret (Kalla and Arora, 2011), sometimes even pain, believing they lost money (Togawa et al., 2020). A negative post-purchase experience after impulse buying is felt when the expected benefits of a product or service are not met and can lead to low self-esteem (Spiteri Cornish, 2020). Such situations can also decrease future urges to buy impulsively (Spiteri Cornish, 2020). On the other hand, impulsive buying is used to reduce negative emotions (Iyer et al., 2019) such as fear and uncertainty; however, it also increases the chances of higher impulsive buying behaviour (Chiu et al., 2022; Zhang Y. et al., 2022). Overall, impulsive buying can reduce negative emotions among consumers, but at the same time, it increases the chances of higher impulsivity.

Perceived value is one of the inner consumer stimuli that can trigger the urge to buy impulsively (Tu et al., 2017; Yang et al., 2021). Younus et al. (2015) highlights that perceived value is one of the significant elements that can influence purchase intention. The higher the perceived value, the higher the intention to buy (Younus et al., 2015). Consumer perceived value is defined in different ways by the researchers (Deng et al., 2021). In one way, it is how a customer's perceived value is a comparison between gain and difference of material and spiritual gains during the consumption of a product or service or exposure time to stimulus (Zeithaml, 1998; Deng et al., 2021). In another way, perceived value is divided into four

dimensions: social, emotional, quality, and price values (Fishbein and Venable, 1996; Deng et al., 2021). A higher perceived value can be a lower price, features, additional rewards (discount, something free), something that is convenient, perceived to be good for the person, good quality, a known brand, or something that allows the person to receive the biggest benefit (Zeithaml, 1998; Sweeney and Soutar, 2001). Overall, perceived value is the consumer's overall evaluation of the usefulness of the product or service they are being offered based on what is being supplied and received (Zeithaml, 1998). On the other hand, what is being received can vary depending on the person (Zeithaml, 1998). Then again, if a business manages to deliver the customer's basic needs, the perceived value is reached even before the actual purchase or use of the product or service (Sweeney and Soutar, 2001). In addition, reaching needs and recognising value is positive, which can further lead to impulsive buying behaviour (Tu et al., 2017). All in all, perceived value is a crucial stimulus that can influence consumer purchasing behaviour, such as the urge to buy impulsively. The higher the perceived value, the higher the urge to buy.

Consumer demographics were studied to determine their importance in impulsive buying. When considering consumer demographics, age and gender were the biggest variables found to have a connection with impulsive buying (Wadera and Sharma, 2018). Younger consumers are said to indulge more in activities that can lead to impulsive buying, meaning the older the person is, the lower the likelihood of impulsive purchases (Wadera and Sharma, 2018; Pandey and Bharti, 2019). On the other hand, it is also noted that age is not always a determinant of whether a person will not have an urge to buy impulsively (Iyer et al., 2019). When it comes to gender, many researchers have found that women are keener on impulsive buying behaviour (Muruganatham and Bhakat, 2013; Iyer et al., 2019; Pandey and Bharti, 2019; Chetioui et al., 2021; Widagdo and Roz, 2021; Hong et al., 2022; Kurt et al., 2022). Women have been found to have a higher influence on word of mouth (online and offline) (Chetioui et al., 2021), prefer products that enhance their self-esteem or self-image (Hong et al., 2022), and enjoy online shopping more than men (Widagdo and Roz, 2021). Nonetheless, men can also be impulsive buyers when it comes to entertainment or leisure activities and technology (Muruganatham and Bhakat, 2013; Hong et al., 2022). While income level in most studies did not show significance for impulsive buying, Wood (1998) found that people with low incomes tend to buy more impulsively, whereas Pandey and Bharti's (2019) study showed that consumers with high incomes are more into impulsive purchases as they are more likely to buy without prior planning and can financially allow themselves to buy impulsively. Altogether, in different situations, impulsive buying correlates with consumers age, gender, and

income. Younger consumers and women are more likely to engage in activities that could result in impulsive buying.

Research has shown that consumer characteristics (or tendencies) can determine if a person is more likely to buy impulsively or experience urges to buy impulsively. Overall, online consumers can be divided into two types: those who shop with a certain goal and those who perceive online shopping as a recreational or experiential venture (Zheng et al., 2019). Customers who seek to spend their time and experience more sensations, variety, and novelty are more likely to engage in impulsive buying (Atulkar and Kesari, 2018; Iyer et al., 2019). Impulsive buyers often have a higher trait for shopping enjoyment (Wadera and Sharma, 2018) and possess high impulsive traits (Chen and Wang, 2016; Iyer et al., 2019; Lavuri, 2023), such as lower self-control (Baumeister, 2002; Iyer et al., 2019), being more curious (Zhang Y., et al., 2022), tending to act immediately without planning (Verplanken and Herabadi, 2001), being independent (Muruganantham and Bhakat, 2013), being more extravert (Verplanken and Herabadi, 2001), having a tendency to follow others (herd behaviour) (Ko, 2018), being more materialistic (Fitzmaurice, 2008; Atulkar and Kesari, 2018; Lavuri, 2023), or have poor concentration, awareness, and judgement (Lim and Kim, 2022). Cultural context can also determine consumers impulsivity level, as people living in individualistic countries tend to engage more in impulsive buying behaviour than consumers from collectivistic countries (Muruganantham and Bhakat, 2013). Togawa et al. (2020) found that consumers who have abstract mindsets (psychologically distant from an object) feel pleasure and are more prone to buy impulsively than consumers who have a concrete mindset (based on what a person can see, hear, and experience); however, afterwards such consumers feel guilty about the purchase. These types of consumers are more engaged with elements that are hedonic but at the same time seek utilitarian information levels (Rao and Ko, 2021; Chetioui et al., 2021). People with these characteristics seek to satisfy their instant desires and to feel better (Destari et al., 2020). Consumer characteristics can influence impulsive buying behaviour, especially for those who seek a way to spend and enjoy their time and want to experience more sensations. Cultural factors can also influence impulsive buying behaviour. This gives businesses opportunities to create effective marketing strategies that attract such consumers to buy impulsively.

Consumers' impulsive buying tendencies are also important internal factors to consider. Impulsive buying tendencies, like the urge to buy impulsively, are situations where a person makes an unintended, fast purchase of a product or a service without considering possible consequences (Jones et al., 2003). Impulsive buying tendencies are strongly related to the negative state of consumer (Iyer et al., 2019), there consumer perceptions of impulse buying

become positive (Kalla and Arora, 2011). Some tendencies consumers possess are purchasing in bulk, being first to buy or try new things, impulsivity, spontaneity, viewing products or services being offered as useful, having a high shopping enjoyment, pleasure, and being easily influenced (Verplanken and Herabadi, 2001; Lee and Yi, 2008; Ko, 2018; Atulkar and Kesari, 2018; Wadera and Sharma, 2018; Pandey and Bharti, 2019). Some consumers can take different approaches depending on their impulsive buying tendencies and perceptions on products or services (Rook, 1987; Eatty and Ferrell, 1998; Jones et al., 2003; Wadera and Sharma, 2018). Impulsive buying tendencies, compared to other consumer traits and characteristics, are easier to notice and use to predict impulsive buying (Beatty and Ferrell, 1998; Iyer et al., 2019). Impulsive buying and impulsive buying tendencies are closely related, as they help to predict a person's urge to buy impulsively.

Impulsive buying is an emotional impulse consisting primarily of hedonic and, in other cases, utilitarian motivators (Kalla and Arora, 2011; Wadera and Sharma, 2018; Zheng et al., 2019; Hong et al., 2022). Motivation is the reason that pushes or urges someone to act or behave in a specific way (Widagdo and Roz, 2021). Utilitarian or hedonic motivation allows for the determination of consumers' buying behaviour (Zheng et al., 2019). Hedonic motivations are situational factors that provide entertainment, pleasure, satisfaction, social interactions, and other feelings (Widagdo and Roz, 2021; Rao and Ko, 2021; Nagar et al., 2022). It helps to satisfy the non-functional needs of consumers (Widagdo and Roz, 2021). Utilitarian motivation refers to consumers who are goal-oriented and care about the functionality of shopping (Zheng et al., 2019). Both hedonic and utilitarian motivations can lead some people to buy impulsively, especially in an online environment (Zheng et al., 2019). If a person is having fun and is enjoying their time, it could cause an urge to buy impulsively (Zheng et al., 2019). At the same time, if a person with utilitarian motivation finds necessary details about a product or service, it can also create an urge to buy impulsively (Zheng et al., 2019). Nagar et al. (2022) found that hedonic motivation such as arousal, if experienced, is then impacted by online stimuli of content richness, trust, and sales promotions. Iyer et al. (2019) found that customers who experience positive emotions have stronger hedonic motivations, while customers with utilitarian motivations are less likely to feel positively. Then again, if a customer possesses both high hedonic and utilitarian motives, they will not experience negative emotions (Iyer et al., 2019). Like this, it can be concluded that the motivations of consumers then exposed to stimuli are important, as both hedonic and utilitarian motivations can lead to impulsive buying behaviour; however, for different reasons and situations, and marketers should keep in mind what type of consumers motivations are.

In order to understand how impulsive buying works from a consumer perspective, knowing internal factors such as consumer demographics, characteristics, emotions, tendencies, perceptions of value, enjoyment and motivators is of high importance. Inner elements like value and enjoyment can influence consumers' perceptions, leading to buying impulsively. Then, when examining consumer motivations and tendencies, emotions or perceptions need to be considered. Both negative and positive emotions or perceptions can determine the urge to buy impulsively. Then it comes to demographics: younger people, and in most cases, women, are prone to buying impulsively. Both hedonic and utilitarian motivators can influence impulsive buying behaviour. Finally, consumers who seek enjoyment and entertainment, are easily influenced, and want to increase their self-image or self-esteem are one of the main consumer characteristics to consider when planning marketing strategies to increase the chances of attracting such customers.

1.3. External factors influencing impulsive buying

1.3.1. Social media factors on the urge to buy impulsively

Online impulsive buying is a combination of both internal and external stimuli affecting consumer choices (Muruganatham Bhakat, 2013). External stimuli can exist in multiple channels (Muruganatham Bhakat, 2013) and are primarily related to the shopping environment and the marketing environment (Pandey and Bharti, 2019). In traditional impulsive buying research, it was discovered that there are many elements that stimulate the urge to buy impulsively, with many of them having to do with store environment (store size, design, self-service technology, sounds, colours, employees, shelf space), situational and product-related factors (time available, money available, product type, variety, and placement), and marketing activities (various promotions, sales, discounts, product price) (Piron, 1991; Madhavaram and Laverie, 2004; Kalla and Arora, 2011; Muruganatham Bhakat, 2013; Lim and Kim, 2022). Then a shift towards online impulsive buying happened, many researchers focused on website store environment and found that website quality, ease of use, navigation, design, visual appeal, attractiveness, trustworthiness, availability, convenience, enjoyment, information, product or service offerings, delivery, personalization opportunities, online purchasing risk, purchasing process, security, media format, service, conflict resolution, and responsiveness stimuli has an effect on consumers buying behaviour and the urge to buy

impulsively (Verhagen and Van Dolen, 2011; Kalia et al., 2016; Vonkeman et al., 2017; Wadera and Sharma, 2018; Chen C. D., et al., 2019; Koay et al., 2021; Lim and Kim, 2022). With the growing importance of businesses being present online and having online stores, having a social presence, and implying marketing activities in an online environment became significant (Lim and Kim, 2022). To do this, businesses often use social media (Abdelsalam et al., 2020). Social media marketing is an influential marketing practise used by many global and small businesses, and their external stimuli gather attention from researchers on online impulsive buying research (Abdelsalam et al., 2020).

Social media is an interactive environment that is great for implying marketing practises to stimulate consumers. Social media marketing is defined as a process that uses social media (in many cases in combination with other communication channels) to achieve business goals and to create and maintain relationships and value with stakeholders using interaction, information sharing, personalization, and recommendations about current products, services, and trends (Felix et al., 2017; Koay et al., 2021). In early social media studies, Kaplan and Haenlein (2010) divided social media into six categories: collaborative projects (e.g., Wikipedia), blogs and microblogs (e.g., Twitter), content communities (e.g., Youtube, Tiktok), social media networks (e.g., Facebook, Instagram), virtual game worlds (e.g., Minecraft), and virtual social worlds (e.g., Second Life). Many businesses imply different social media categories in their marketing strategies; however, social media networking sites such as Facebook or Instagram are one of the primarily used media channels (Abdelsalam et al., 2020). Pham and Gammoh (2015) excluded that there are four dimensions of social media marketing strategy: variety (different social media usage), diversity (different marketing activities such as product development or customer relationship management), intensity (how those activities are carried out to reach goals), and connectivity (how well all social media correlate with each other and business). Social media marketing is an effective tool as it allows businesses to build relationships with customers, employees, and other stakeholders (Felix et al., 2017). Like this, social media and marketing in this environment can be described as a process that allows businesses to reach set goals and stakeholders.

Social media is a powerful marketing method (Chang et al., 2015) that possesses a variety of impulsive behaviour-triggering elements (Koay et al., 2021). Abdelsalam et al. (2020) found that social media has four characteristics that differentiate it from other channels: interactivity, collaboration, community, and social aspects that can influence the urge to buy impulsively. Other impulsivity-enabling stimuli existing in social media are the ability for businesses to share content and information regarding products, services, and other activities,

as well as advertise in the forms of posts (text, images, videos), carousel or stories with hashtags or captions (Chang et al., 2015; Chen et al., 2016; Felix et al., 2017; Koay et al., 2021). In addition, social media allows us to collect consumer data and feedback, predict the number of visitors that find businesses through this channel, and learn which marketing tactics work the best (Nasir et al., 2021). Thus, social media have attributes (interactivity, collaboration, community, and social aspects) and forms (posts, text, images, videos, carousel, or stories) that permit businesses to reach more customers, imply better marketing tactics such as advertising, and, for research purposes, allow them to learn more about consumer behaviour and understand how online impulsive buying and the urge to buy impulsively work in such an environment.

Different research had been conducted and discoveries made on social media and impulsive buying behaviour. Nasir et al. (2021) excluded that consumers who use social media and are prone to buy impulsively are more likely to be easily persuaded, possess an impulsive buying tendency, are often users of different social media, and are more accepting of advertisements that are perceived as relevant and informative. If social media is part of a consumer's lifestyle, it has significant chances of impulsive buying behaviour (Ittaquallah et al., 2020), especially when peers' opinions (which can also be relatives and other surrounding people) are shown to influence consumer impulsive buying (Huang, 2016; Pandey and Bharti, 2019). In addition, influencer usage in social media marketing activities has been found to increase consumers impulsive buying behaviour (Koay et al., 2021). However, it was also found that consumer impulsivity in such situations depends on consumers perceptions of influencer attractiveness, expertise, trustworthiness, and source credibility (Koay et al., 2021). If promotional activity is badly presented, it has been shown to negatively impact consumers perceptions of businesses (Koay et al., 2021). Message credibility and media credibility are also considered important factors that influence the urge to buy impulsively as they develop trust for consumers (Shamim and Islam, 2022). Szymkowiak et al. (2021) found that it is crucial for businesses to carefully decide and look at what type of content is being posted on social media to ensure it is consistent with other business marketing activities. Kempa et al. (2020) found that hedonic elements and trend inclusion in social media advertisements increase the possibilities of impulsive buying, and Wu et al. (2021) discovered that scarcity in promotional activities leads to impulse buying as scarcity elements such as creating urgency can increase consumers perceived arousal. Moreover, in social media for impulsive buying prediction, the biggest elements found and observed by most researchers are consumers perceived usefulness, informativeness, enjoyment, motivation, interactivity (two-way communication between companies and customers), business engagement, responsiveness, conversation, and

personalization (De Vries et al., 2012; Yang et al., 2016; Alalwan, 2018; Tan et al., 2018; Arviansyah et al., 2018; Rao and Ko, 2021; Kimiagari and Malafe, 2021; Shamim and Islam, 2022). Therefore, social media and consumer impulsive buying behaviour are primarily connected and influenced by peer or influencer opinions, presentations of promotional activity content, consumer perceptions, and other elements that can impact the urge to buy impulsively on social media. Additionally, it also means that there are many components that can influence consumers on social media to act and buy impulsively.

Some research focused on and compared organic business posts and sponsored posts on social media networks with additional elements such as likes, shares, comments, or click-throughs to analyse consumer impulsive behaviour such as the urge to buy impulsively (De Vries et al., 2012; Chang et al., 2015; Swani et al., 2017; Alalwan, 2018; Ko, 2018; Setyani et al., 2019; Chetioui et al., 2021). Organic post and sponsored post information's usefulness, informativeness, attractiveness, persuasiveness, uniqueness, and emotion determined popularity among consumers and their decision or impulse to interact (De Vries et al., 2012; Chang et al., 2015; Swani et al., 2017; Lee D. et al., 2018). Likes have also been shown to be more of a reflective action, requiring less thinking while encouraging impulsive action (Swani et al., 2017). Additionally, Ko (2018) studied the likes, shares, and comments on sponsored posts on Facebook and found that the presence of those elements can trigger other people to follow and imitate previously done actions by others, as well as increase the chances of an urge to buy impulsively. Electronic word of mouth (eWOM) being present in the comments of sponsored posts has been shown to highly influence positively or negatively consumer attitude, trust, and impulsive buying behaviour depending on the comment (if it is positive or negative) (Chang et al., 2015; Zhang and Mao, 2016; Chetioui et al., 2021). Click-through motivation on advertisements has also been measured on impulsive buying and found to be affected by consumers perceived informativeness and credibility, which are connected with utilitarian motivation, and perceived creativity and entertainment, which relate to hedonic motivation (Setyani et al., 2019). In addition, Alalwan (2018) discovered that hedonic motivation is highly dependent on advertisements interactivity, as consumers find such advertisements useful and entertaining. Personalised advertising on social media has also been shown to influence the urge to buy impulsively (Zafar et al., 2021a), as it creates value for consumers (Setyani et al., 2019). On the other hand, Zhou Y. et al. (2023) discovered that earned media (attention received from consumers that was not paid for by the business) compared to owned media (media created or paid for by the business, such as sponsored post) can trigger higher urges to buy impulsively. However, this does not lower the existence and importance of impulsive buying

in sponsored post advertisement as some of the earned media (likes, comments, and shares) appear on owned media (sponsored posts), making them connected and equal (Arviansyah et al., 2018; Ko, 2018). Overall, according to research, likes, shares, comments, and click-thoughts in sponsored posts advertisements can influence impulsive buying behaviour. Various elements can trigger consumer perceptions and create the urge to act impulsively.

In addition, ensuring that the person who views the social media advertisement clicks on it is a difficult task to achieve for every business (Wang et al., 2013). Then a person is encouraged to interact with the advertisement; it can also cause a click-through that moderates the relationship between perceptions and the urge to buy impulsively (Setyani et al., 2019). In many cases, motivation to click is predicted based on how relevant the given offer is and how a person decided to click (past clicks on advertisements) (Wang et al., 2013). Wang et al. (2013) studied the reasons why people choose to click on advertising messages on social media. It was found that people's reason to click was because advertisements expressed a convincing call-to-action and created psychosocial desire (Wang et al., 2013). This type of desire in advertisements can be expressed using textual content and promotional offers (coupons, discounts), which have an impact on both feelings and thoughts (Wang et al., 2013). In addition, Collier et al. (2021) found that images or the way the advertising is presented visually can also generate more click-throughs. Moreover, motivation to click can be hedonic and utilitarian; it can be influenced by varying the levels of stimulus in the advertising message (Setyani et al., 2019). Hedonic motivation relates to both emotions and perceptions of value, enjoyment, entertainment, or fantasy (Setyani et al., 2019). Utilitarian motivation to click-through is connected with informativeness and perceived value about advertised products or services, and they see advertisements as helpful (Setyani et al., 2019). All in all, it is significant to include and measure a person's interest in clicking on an advertising message, especially when studying the effectiveness of the manipulation of advertisements on consumers perceptions and behaviours.

Perceived value can be formed even in the absence of actual purchase or use of the products or services (Sweeney and Soutar, 2001). Customers make purchases for many different reasons that contain various values (Sheth et al., 1991; Yang et al., 2021). Visual appeal is one of the significant factors that is being valued by marketers to attract consumers (Yang et al., 2021), as visual appeal is what consumers first see and are attracted to in the pre-purchase stage (Zheng et al., 2019). A person's perceived value is connected with the environment it is exposed to, which can lead to impulsive purchasing (Yang et al., 2021). One of the environments is social media (Ajina, 2019). Their interaction with the environment

affects their perceived value, and their perception of the stimuli in the environment plays an important part in triggering their impulsive buying behaviour (Yang et al., 2021). A person's desire to purchase can be increased and determined by advertising's perceived value (Kim and Han, 2014). Consumers perceived advertising value can be influenced by informativeness, credibility, entertainment, irritation, incentives, and visual appeal (Kim and Han, 2014; Yang et al., 2021). At the same time, more various elements presented in the advertisement, like promotion, can have an effect on consumer perceived value (Tu et al., 2017). In addition, some research divides perceived value into hedonic and utilitarian categories, where hedonic perceived value is found to be a strong determinant of consumers urge to buy impulsively (Yang et al., 2021). Overall, perceived value can be influenced prior to purchase, for example, by using advertising messages, which is an important factor to consider when conducting research.

Browsing phenomena often analysed in offline store environment (Beatty and Ferrell, 1998) has also been studied by researchers on social media and its connection with impulsive buying behaviour (Leong et al., 2018; Wadera and Sharma, 2018; Setyani et al., 2019; Zheng et al., 2019; Kimiagari and Malafe, 2021). Similarly, to offline browsing, social media browsing is defined as an activity that a person engages in for recreational, entertainment without a purpose (Wadera and Sharma, 2018; Leong et al., 2018) or for informational purposes to obtain about a product or service (Setyani et al., 2019; Zheng et al., 2019). The difference between offline store browsing and social media (or online) browsing is that in an online environment customers can engage in browsing at any time (Leong et al., 2018). As there are different purposes of browsing, it is classified into two types of browsing: hedonic (recreational, entertainment) and utilitarian (information seeking) (Wadera and Sharma, 2018). The studies have shown that both hedonic and utilitarian browsing can impact a person's urge to buy impulsively in social media (Setyani et al., 2019; Kimiagari and Malafe, 2021; Sharifi Asadi Malafe et al., 2022). This could be as found by Leong et al. (2018) and Wadera and Sharma (2018) that the longer a person browses, the usage of media intensify, increasing chances to click on an advertisement (Setyani et al., 2019), creating the urge to buy impulsively. The elements that most affect a consumer then browsing for both purposes to engage in impulsive activity have been found to be visual appeal, creativity of message, perceived credibility, informativeness, promotional offers, perceived value (Wadera and Sharma, 2018; Zheng et al., 2019; Setyani et al., 2019). Thus, both hedonic and utilitarian browsing and elements that encourage action should be considered then engaging in marketing activities in social media, also, then conducting research on the urge to buy impulsively in social media.

Flow experience, a phenomenon like browsing, is an important factor to consider in social media research and marketing activities such as advertising. Flow experience (flow theory) is a situation where a social media user is in a fully immersed state and is enjoying and interacting with given content (Huang, 2016; Lina and Ahluwalia, 2021). Positive emotions and time distortion keep consumers' focus and prolong their exposure to stimuli, while increasing consumer desires and urges to buy impulsively (Huang, 2016). To this end, marketers take advantage of and use native advertising to have their products or services shown in accordance with consumer preferences (Lina and Ahluwalia, 2021). Kim and Han (2014) found that advertisements in social media and flow correlate when it comes to impulsive buying behaviour. Additionally, Lina and Ahluwalia (2021) discovered that flow experience increases the advertising value of impulsive buying. This means that if a person is highly involved in social media and is exposed to advertisements, they are more likely to engage in impulsive buying behaviour.

Proportional activities can have an influence on consumer impulsive buying behaviour (Badgaiyan and Verma, 2015; Lavuri et al., 2023; Um et al., 2023), as promotion inclusion aims to stimulate an immediate action such as a purchase (Badgaiyan and Verma, 2015). Promotional offers, such as additional rewards presented in advertising messages, can influence consumer triggers to take a desired action, such as impulsive buying (Badgaiyan and Verma, 2015; Jung et al., 2016; Lavuri et al., 2023). Promotional rewards can draw more significant attention than those implemented in social media advertising (Jung et al., 2016). Reward inclusion in social media advertisements can make the advertising message more acceptable to people who see it and can also create more engagement as it can have an effect on perceptions such as value, enjoyment, and similar (Jung et al., 2016). In addition, it can also stimulate sharing and promotion of the advertisement (Jung et al., 2016). Promotional benefits can be rewards such as an additional discount, a free sample, a coupon, a free gift, or a free trial (Badgaiyan and Verma, 2015; Che Omar et al., 2015; Lavuri et al., 2023). Moreover, awareness of promotion inclusion and the way promotional information is presented can have an influence on consumers' perceived value and urge to buy impulsively (Zhang Z. et al., 2022; Um et al., 2023). Additional benefit inclusion can make a person feel like they are saving money and are getting a better value (Zhang Z., et al., 2022), as well as increase interaction and enjoyment of the offer (Wadera and Sharma, 2018). Overall, inclusion of one type of promotional reward in an advertising message can influence the person who views it and can cause a change in perception and behaviour such as impulsive buying.

In conclusion, there are many external factors, especially social media, that can trigger the urge to buy impulsively. Social media attributes (interactivity, collaboration, community, and social aspects) and forms (posts, text, images, videos, or stories) allow businesses to create advertisements that can include impulsivity-stimulating elements. Customers who often use social media can be more easily persuaded and have an impulsive buying tendency. Content, peer or influencer opinions, informativeness, enjoyment, interactivity, and visually attractive presentations of promotional activities can affect consumers hedonic or utilitarian motivation and the urge to buy impulsively. Browsing reasons and flow experiences on social media are also greatly impacting people's urges and impulsive buying behaviour. Overall, it is important to consider that social media has many elements that can affect impulsivity in a person and should be considered when engaging in social media advertising activities.

1.3.2. Advertising message factors on the urge to buy impulsively

Social media is a great channel for conducting advertising activities (Alalwan, 2018) as it has become part of people's everyday lives (Ittaquallah et al., 2020), making it a great way to reach possible consumers. In social media marketing, most businesses incorporate at least one social media networking site, such as Facebook, into their paid marketing campaigns (Chang et al., 2015). The advantage of paid advertising on social media networking sites is that advertisements are in accordance with consumer preferences (native advertising) (Lina and Ahluwalia, 2021), which provide higher chances of interactions and conversions with the advertising message (Koay et al., 2021). Advertising on Facebook is also great for different types and sizes of businesses, as marketing budgets can be low or high and still reach their target audience (Tan et al., 2018). Marketers can advertise messages with different kinds of content that lead to impulsive behaviour (Nasir et al., 2021). Currently, there are many forms of online advertisements on social media and social media networking sites; however, sponsored post advertisement is one of the most used types by businesses because it combines visual (image or video) and text elements (Curran et al., 2011; Dehghani and Tumer, 2015; Krishna et al., 2016; Vangelov, 2019; Schmøkel and Bossetta, 2022). It is also important to understand and emphasise what type of sponsored post elements can influence consumer perceptions, emotion, and motivation that evoke the urge to buy impulsively (Dehghani and Tumer, 2015; Schmøkel and Bossetta, 2022).

To understand what sponsored post advertising aspects can influence the urge to buy impulsively, it is important to know what advertising on social media networks is. Social media network advertising, similarly to social media, is described as an advertising form performed online using various formats (post, image, text, video, carousel and others) designed to persuade social media users to have different perceptions and experiences, and interact (like, share, comment, click) with the advertising message (Taylor et al., 2011; Alhabash et al., 2017; Alalwan, 2018; Bayer et al., 2020). One of the goals of advertising on social media networks is to provide possible and existing customers with information about products or services as well as persuade them to take some desired action (Setyani et al. 2019). Advertising on social media networks allows marketers to target people based on keywords, location, and demographics such as gender, age, likes, interests, birthday, relationship status, language, job title, or education level (Curran et al., 2011). In addition, it provides marketing specialists with a number on how many people with the chosen targeting options could be reached (Curran et al., 2011). Thus, advertising on social media networks is a type of online advertising that helps in various ways to better reach and influence consumers to act in a wanted way.

Sponsored post on social media networks like Facebook is a paid post that businesses use to promote and sell their products or services (Sheiner et al., 2021). One of the biggest advantages of sponsored post is that it is placed on people's news feeds (native advertisement), which helps to avoid banner blindness (Hanson, 2018, Vangelov, 2019). Sponsored posts appear like regular posts (possessing the ability to like, share, and comment) but also include a "sponsored" label as well as a logo, link, image of a product or service, call to action (CTA) text, and/or button (Curran et al., 2011; Dehghani and Tumer, 2015; Chang et al., 2015; Zhang and Mao, 2016; Vangelov, 2019; Nasir et al., 2021, Sheiner et al., 2021, Tanković et al., 2022). Generally, sponsored posts consist of an eye-catching visual (image, video) and text parts (information), with the goal of creating some sort of conversion (Chang et al., 2015; Zhang and Mao, 2016). More commonly used visuals of sponsored posts are of image format (Krishna et al., 2016, Vangelov, 2019, Schmøkel and Bossetta, 2022). Visual part of sponsored post is more persuasive and convey non-verbal information and stimuli (Schmøkel and Bossetta, 2022) as images are the first element a person sees, thus, making a visual appeal a very important stimulus. Text part (text message of the post presenting information about the product or service) is what trigger a person to act (Vangelov, 2019). The textual part of the sponsored post usually consists of a title, slogan, main body text, and additional call to action (CTA) text at the bottom of the advertisement (Vangelov, 2019). Such advertisement format is good for a business with a small budget, as such advertisements are one of the less costly advertising

forms (Curran et al., 2011), at the same time reaching many new possible customers (Sheiner et al., 2021). Different types of sponsored posts can be distributed to different target audiences (Sheiner et al., 2021). It is also a good option if the goal is to appear as organic posts (posts made by other users) and urge people to imitate actions (like, share, comment) (Ko, 2018). Additionally, it is good if you want a person to click on sponsored post and be taken to the business website to buy or interact in some other way there (Zhang and Mao, 2016; Nasir et al., 2021). Finally, the goal of sponsored post is to provide exposed user with some value or enjoyment based on its created content (Sheiner et al., 2021). Therefore, sponsored post is a great advertising form to be used by businesses and should be implicated in marketing strategies as it allows to be seen by users of social media networks and provide a bigger reach of new customers using lower costs.

Visual image factors have been studied to influence consumers' the urge to buy impulsively. Visual elements were tested that influenced people to act impulsively. Authors have found that visual aesthetics, colours, and clarity of the image play a significant role as it is the first thing a person sees (Che Omar et al., 2015; Krishna et al., 2016; Casado-Aranda et al., 2022). It was also noted that it is important that the visual elements are in the same style as the business (Che Omar et al., 2015). Images that can generate a dynamic imaginary (a static image conveying movement without moving) in a person were found to be highly influential (Che Omar et al., 2015). Placing a logo in the image of sponsored post has been found to increase longer gazes at the advertisement (Krishna et al., 2016; Casado-Aranda et al., 2022). In addition, placement, or position (more towards left or right), and presentation style of products or services greatly affect the performance of post advertisement, as they impact consumers' imaginations when engaging with the advertised products or services (Krishna et al., 2016). Finally, including a touch element (e.g., a button) was shown to trigger a sense of ownership, which makes the advertising message more persuasive (Krishna et al., 2016). Thus, the overall product or service presentation in the image of sponsored post influences consumer actions and perceptions.

Text part (information) of sponsored post was analysed by researchers to measure effect on impulsive buying. First, content, style, and other additional attributes were identified to influence impulsivity (Kemp et al., 2013; Kim and Han, 2014; Che Omar et al., 2015; Roy and Sharma, 2015; Lee D. et al., 2018; Wibisurya, 2018; Iyer et al., 2019; Deshpande et al., 2022; Moes et al., 2022). Textual content needs to consist of powerful words in a simple, clear, and consistent style (Che Omar et al., 2015). Presented information needs to be informative by giving out information about product or service characteristics, availability, price, and

distribution (Kemp et al., 2013; Che Omar et al., 2015; Lee D. et al., 2018; Wibisurya, 2018). Messages that contain positive emotions such as happiness, humour, enjoyment, and empathy or negative emotions such as sadness, fear, and anxiety have been shown to stimulate people to engage in impulsive buying (Kemp et al., 2013; Che Omar et al., 2015; Lee D. et al., 2018; Wibisurya, 2018). Including identifiers such as slogans, taglines, additional facts, benefits, and promotional rewards (discounts, free gifts, and free trials) influences consumer choices (Che Omar et al., 2015; Jung et al., 2016; Iyer et al., 2019; Lee D. et al., 2018; Moes et al., 2022). Sponsored posts containing style and personality matching the business and products or services seem more entertaining and unique, while being perceived as more favourable (Lee D. et al. 2018). Additionally, sponsored posts that include scarcity limitations such as limited-time or limited-quantity have been shown to drive advertising click-through and impulsive purchasing (Roy and Sharma, 2015; Deshpande et al., 2022). On the other hand, researchers have also noted that there can be more impulsive buying behaviour-triggering elements in sponsored posts that still need to be researched (Che Omar et al., 2015; Iyer et al., 2019; Lee D. et al., 2018). Altogether, it is important to include all necessary information about the product or service in sponsored post advertisement, including additional benefactors being promoted, as well as present it in an emotional way or include emotional positive or negative elements, giving it more uniqueness and an interesting appeal once consumers pursue reading the text part of sponsored post.

In addition to the image and text elements included in sponsored post on impulsive buying, some additional factors influencing these findings can be given. Then researchers analysed consumer perceptions of value and motivation (hedonic and utilitarian) to click-through on sponsored post (Knoll, 2016; Zhang and Mao, 2016; Alalwan, 2018; Setyani et al., 2019; Nasir et al., 2021). It showed that both text (informativeness) and image (visual appeal) in the advertisement need to be connected and present the product or service in an informative, creative, attractive, and entertaining way (Knoll, 2016; Zhang and Mao, 2016; Alalwan, 2018; Setyani et al., 2019; Nasir et al., 2021). This way, all sponsored post elements would portray the same goal without any additional call to action (CTA) (Knoll, 2016; Zhang and Mao, 2016; Alalwan, 2018; Setyani et al., 2019; Nasir et al., 2021). Lee D. et al. (2018) found that sponsored posts that contain brand personality (e.g., humour) can create higher engagement and conversions. Casado-Aranda et al. (2022) found that hedonic advertising messages that emphasise experiential, personal, and emotional benefits of buying a product or service can lead to more impulsive buying compared to utilitarian advertising messages that contain only informational, functional information. Then again, it was also concluded that when a sponsored

post is made of both hedonic and utilitarian elements, it experiences just as much engagement as hedonic advertising messages, meaning that utilitarian elements are not as effective on impulsivity-possessed people (Casado-Aranda et al., 2022). It was discovered that consumers are more likely to accept and perceive sponsored posts positively if they are in accordance with a person's interests and are viewed as enjoyable and valuable (Bayer et al., 2020; Lina and Ahluwalia, 2021; Zafar et al., 2021a). On the other hand, some consumers perceive such advertising as an invasion of personal information (Boerman et al., 2017). In addition, Iyer et al. (2019) found that often advertisement of the same product or service can lead to negative emotions (anger, frustration) and be perceived as less unique. Overall, researchers found that visual (visual appeal) and textual (information presentation) elements in sponsored post can lead to impulsive buying; however, it is important to focus on such advertising elements that do not just provide information but are hedonically driven and are in accordance with a person's interests. This could mean that a product or a service could also influence a person's motivation to click-through and perceptions of a sponsored post.

With social media being part of many people's everyday lives, big and small businesses have been implementing these channels into their marketing activities as well, with networking sites being the most popular. Sponsored posts are one of the most commonly used online advertising formats by businesses on social networking sites, making them an important advertising type to analyse, especially when trying to understand how they can influence the urge in a person to buy impulsively. Researchers have analysed some of the elements of sponsored posts and found that both image and text elements can influence consumer impulsiveness. Visual aesthetics, colours, dynamics, and placement can create consumer interest to look at an advertised product or service and indulge in reading textual information. The textual part of sponsored post needs to be informative, but at the same time include some sort of hedonic element such as entertainment, emotion, promotion, or something that would motivate to clicking on an advertisement, leading to a possible conversion. It was also noted that more elements in sponsored posts can instigate the urge to buy impulsively which leads to impulsive buying and should be analysed.

1.4. Understanding psychological ownership in the endowment effect

Businesses' advertising messages have been implementing various elements that stimulate consumers' urges to buy impulsively. While there are many elements, not everything has been tested and analysed to understand their effectiveness in advertisements (Kamleitner and Feuchtl, 2015). Endowment effect elements such as ownership, loss aversion, and attachment have been included in advertisements that could potentially influence consumer buying behaviour; however, their effect using sponsored posts on social media networks on the urge to buy impulsively requires more research (Kamleitner and Feuchtl, 2015; Morewedge et al., 2021). The endowment effect is described to be a situation where consumers perceive the higher value of products or services after they own them (Thaler, 1980; Peck and Shu, 2009; Peck et al., 2013; Hartzmark et al., 2021). On the other hand, many authors have argued that this effect is not limited to actual ownership, but psychological (or perceived) ownership can also be identified as feeling that something (a product or service) belongs to the person; therefore, is "theirs" which creates the endowment effect (Pierce et al., 2001; Peck and Shu, 2011; Peck et al., 2013; Hurland et al., 2015; Morewedge et al., 2021). Thus, understanding the effect of psychological ownership in sponsored posts on social media networks on the urge to buy impulsively is significant for both research and implementation in marketing activities.

Loss aversion and psychological ownership have been studied by researchers in people's felt emotions and behaviour. In the past, loss aversion was thought to be the only driver of the endowment effect, where a person who owns the product or service and is trying to sell it experiences emotional attachment and cognitive thinking by placing a greater value on a loss than a gain in comparison to a buyer (Peck and Shu, 2011; Hurland et al., 2015). Loss aversion is moderated by affective variables such as mood or hedonic content that determine the perception of value (Peck and Shu, 2011) by increasing attention on the positive features of products or services (Morewedge et al., 2021). On the other hand, ownership has become the equivalent of loss aversion, as loss cannot be experienced without owning a product or service (Baer and Brown, 2012). Furthermore, most studies now focus on psychological ownership as it is applied to marketing activities such as advertising and sales promotions (Morewedge et al., 2021). Psychological ownership is both cognitive and affective, meaning that it perceives a person's awareness, thoughts and motives on a desired product or service and connection with emotions and affect (Jussila et al., 2015). Peck and Shu (2011) found that increasing loss aversion when selling products can draw more customer attention towards the additional benefits or rewards of the product or service, making people feel sad about possible

losses (fear of missing out), which benefits businesses as it increases consumer decision-making and impulsiveness. In addition, Baer and Brown (2012) researched and discovered that induced feelings of ownership can make people experience psychological attachment or change in perceptions when provided with promotional rewards such as joining a reward programme or buy-one-get-one-free (BOGO) options. On the other hand, it also showed that customers who already owned promoted products or services experienced negative emotions towards promotions as they lowered the value of the advertised product or service (Baer and Brown, 2012). Thus, it means that inducing ownership and loss aversion into advertising messages can be beneficial, leading to possible sales; however, it needs to be done with caution and look at who it is aimed at.

Researchers have also studied the importance of psychological ownership in relation to perceived value and willingness to pay more. In numerous ways, psychological ownership is a significant asset as it satisfies consumer needs and motivations (Morewedge et al., 2021). As psychological ownership is attained through the feeling of having something (Hartzmark et al., 2021), it also possesses a value-enchanting effect (Morewedge et al., 2021), so the perceived value of a product or service is higher (Peck et al., 2013). The increase of perceived value in psychological ownership is affected using external various stimulus (Peck and Shu, 2011; Zhao et al., 2016). The stimulus can be additional or unique benefits or rewards by focusing on the person's cognitive attention (Peck and Shu, 2011). Furthermore, Kamleitner and Feuchtl (2015) noted that psychological ownership has a strong effect on consumer behaviour then are presented through expressive information and visual display in advertising messages like possibility to personalize the product or service. Moreover, Morewedge et al. (2021) discovered that connection between a consumer and a business—psychological ownership for a product or service—is positively connected with customer enjoyment, satisfaction, demand, word of mouth, relationships, competitive resistance, and willingness to pay more. Willingness to pay more refers to the degree to which a customer is willing to pay for a specific product or service (Asatryan and Oh, 2008; Hartzmark et al., 2021). It is also related to additional stimuli such as the hedonic or utilitarian nature of products or services and financial risk (Lessard-Bonaventure and Chebat, 2015). If products or services are perceived as having greater value, then willingness to pay more increases and is positively acceptable (Lessard-Bonaventure and Chebat, 2015). Also, if customers find business more valuable, they are also willing to pay higher prices for products or services (Asatryan and Oh, 2008). However, Folse et al. (2012) found that the willingness to pay more presented in advertisements received negative feedback, especially from women compared to men. Thus, willingness to pay more should not be

highlighted and should be presented only subtly as benefits and elements of a product or service (Hartzmark et al., 2021). In summary, psychological ownership, perceived value, and willingness to pay more are highly connected and affective towards customer perceptions, needs, and motivations. Then psychological ownership is expressed through various stimulus on products and services, it could possibly influence consumer behaviour, such as the urge to buy impulsively.

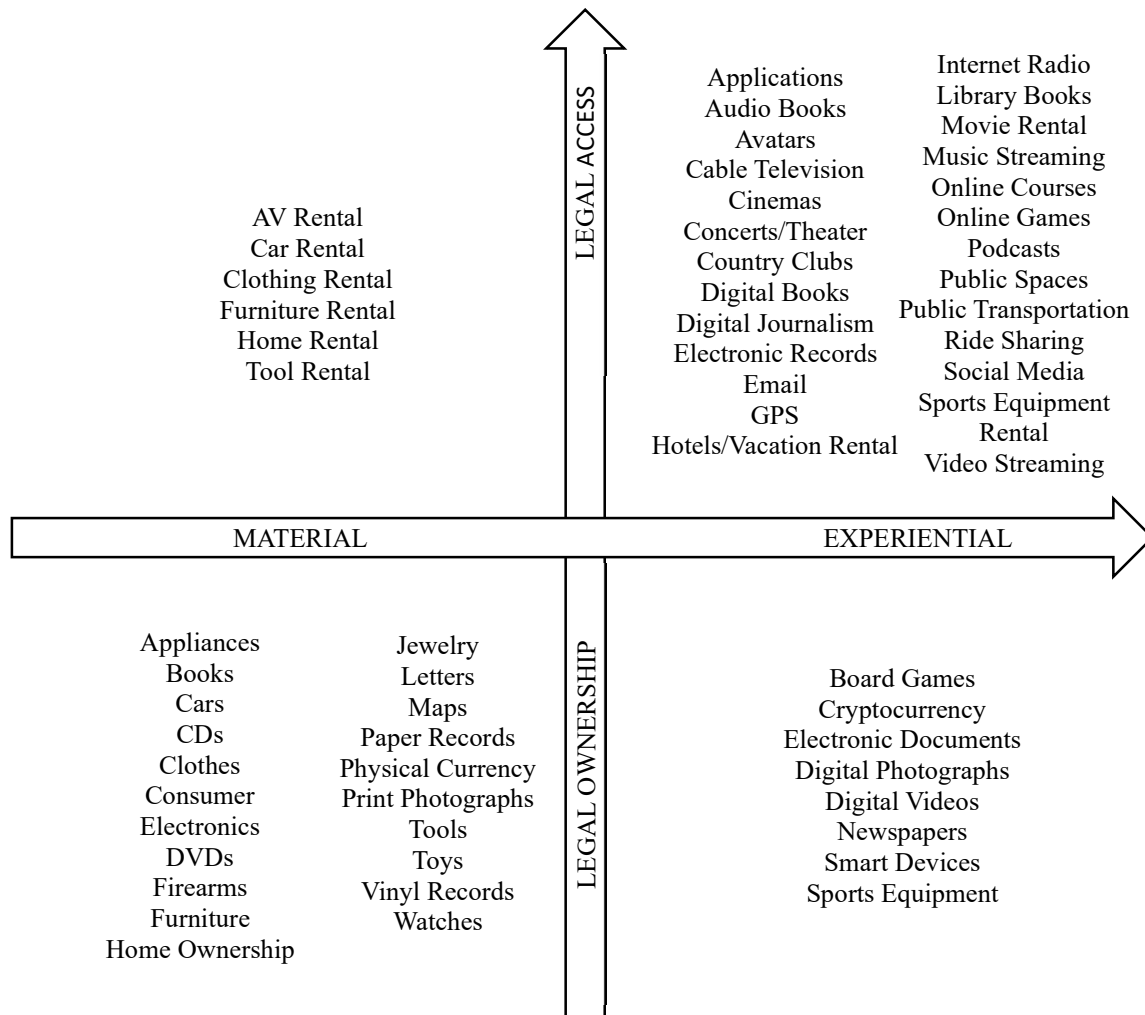
The psychological ownership effect was researched using touch and imagery elements in marketing activities. One element of psychological ownership is the ability to control a product by touching it (Peck et al., 2013). Touching a product works as a stimulus and gives a higher sense of ownership and value towards it (Peck and Shu, 2009; Peck et al., 2013; Krishna et al., 2016). Customers who could touch a product experienced a higher positive attitude towards marketing activities (Krishna et al., 2016). It also increased consumer willingness to pay more (Lessard-Bonaventure and Chebat, 2015). In addition, researchers found that imagined touch (haptic imagery) can increase customer product evaluation in a similar way as physical touch (Peck and Shu, 2009; Peck et al., 2013; Krishna et al., 2016). It could be accomplished by a person simply imagining touching the product or using a service (Peck et al., 2013; Krishna et al., 2016). “Imagery is a type of processing that differs from verbal or analytical processing in the way information is represented mentally” (Kamleitner and Feuchtl, 2015). Imagery possesses the vividness of envisaged images, stored information about a product or service in a memory, and the number of various images envisaged (Kamleitner and Feuchtl, 2015). Then consumers use imagination to live through an experience that is considered a very powerful stimulus (Kamleitner and Feuchtl, 2015) and can be applied to service selling or advertising (Morewedge et al., 2021). For example, car renting could be both an imagined touch prior to purchasing online or seeing it in an advertisement and an actual touch that a person physically could touch or even experience (sit in a car, get a free trial) (Morewedge et al., 2021). This could make a person feel like an owner, linking psychological ownership (Kamleitner and Feuchtl, 2015). Providing imagination-enhancing visuals or telling a person to imagine touching a product or a situation where a service is provided could work, especially in online marketing situations (Krishna et al., 2016). Finally, it is suggested that social media is the best place to implement this as it assists in the development of psychological ownership (Karahanna et al., 2015; Kamleitner and Feuchtl, 2015; Zhao et al., 2016; Kim and Beehr, 2017). Social influence, self-identity, and perceived control (controlling the content a person receives) in social media also drive psychological ownership (Hulland et al., 2015; Zhao et al., 2016; Kim and Beehr, 2017; Gong X., et al., 2020), which could affect the relationship

with impulsive buying (Gong X., et al., 2020). Overall, touch and imagery are big predictors and stimulants of psychological ownership, where touch is usually applied in physical situations of touching a product; on the other hand, imagination helps to experience touch when it is not possible to do so or when it comes to services. Implying these stimuli in online marketing situations can provide stronger experiences, thus making it more impactful.

Types of products and services promoted that provide psychological ownership to consumers have been studied by Lessard-Bonaventure and Chebat (2015), Kamleitner and Feuchtl (2015), Li and Atkinson (2020), and Morewedge et al. (2021). Lessard-Bonaventure and Chebat (2015) focused on providing information about the hedonic or utilitarian nature of products to customers and found that psychological ownership appears to increase when using hedonic products or services because their perceived value is higher. Kamleitner and Feuchtl (2015) researched imagery and ownership in advertisements of high-priced products (steam shower, coffee maker, and a car) and found that there is a connection to increased consumer responses (but only to those who were originally interested in these types of products). Li and Atkinson (2020) studied customization or personalization availability in products before buying and found that these types of products give greater psychological ownership experience and happiness. Morewedge et al. (2021) studied the evolution of consumption and psychological ownership with the development and usage of technological advancement and found that currently there is a tendency to move from actual ownership of a product to having temporal legal access, thus experiencing a product or service in a concept where many could use it, access it, or experience it, therefore psychologically owning it. Products and services have been excluded and divided (see Figure 1) according to their materialistic form to their experiential form and from legal ownership to legal access (Morewedge et al., 2021). Research showed that products and services that possess legal access and are more experientially described as “liquid” experiential goods are part of the current shift in consumerism (Morewedge et al., 2021). Such products and services as excluded in Figure 1 are applications, audio and digital books, concerts, cinemas, email, rentals, video streaming, online games, and more. This gives businesses various opportunities. In addition, it is also not clear how this type of product and service impact consumer impulsive buying behaviour and urges to buy, which are then displayed in advertisements with psychological ownership elements.

Figure 1

Evolution of consumption: dimensions of change and examples



Source: Morewedge et al. (2021).

Overall, the endowment effect using psychological ownership is being used in marketing activities; however, the research on this topic is still limited. Psychological ownership could be a significant asset in satisfying consumer needs, perceptions, and motivations. Including various stimulus such as additional reward in advertisements could attract customers attention. Imagination how the touch or experience of a product or service could lead to an ownership feeling and influence impulsive actions. Additionally, products and services that are less materialistic and more experiential are becoming more popular and common; thus, conducting research and analysing findings using this type of product or service is noteworthy.

1.5. Type of services purchased impulsively online

Online environments like social media networks allow people to not only spend their time communicating but also learn about products and services (Setyani et al., 2019). At the same time, on such channels, businesses can imply sponsored post advertisements that are in accordance with a person's personal preferences and interests (Alalwan, 2018), using rich presentation types (Vonkeman et al., 2017) and a variety of information (Ittaqullah et al., 2020). Many people browse through social media for utilitarian or hedonic reasons; however, regardless of motivations, they still get exposed to advertisements (Setyani et al., 2019). This way, social media provides higher consumer engagement with advertisements (Kurt et al., 2022). In addition, it could also imply greater chances of impulsive buying (Kurt et al., 2022). Understanding what kinds of products and services are bought online and through social media advertising on an impulse is highly beneficial to businesses (Xiao and Nicholson, 2011), especially to service providers, as there is a lack of research conducted on this matter (Sharma et al., 2014). Thus, the types of services purchased impulsively and online have been explored by researchers.

Hedonic and utilitarian purchases in impulsive buying studies have been analysed by researchers (Kemp et al., 2013; Kivetz and Zheng, 2017). Hedonic purchases (e.g., chocolates, clothes) are motivated by desire for positive emotions such as enjoyment, excitement, gratification, and sensual pleasure (Kivetz and Zheng, 2017; Deshpande et al., 2022). Sometimes hedonic purchases are made due to negative emotions (sadness, fear, or anxiety) (Kemp et al., 2013). Utilitarian purchases (e.g., salads, office supplies, and medicine) involve practical elements that are motivated by typical need fulfilment (Kivetz and Zheng, 2017; Deshpande et al., 2022). Most research has found that hedonic purchases are more typically made impulsively than utilitarian purchases (Kemp et al., 2013; Kivetz and Zheng, 2017; Szymkowiak et al., 2021). Some researchers have argued that only higher-involvement and less expensive hedonic products can be bought impulsively (Phau and Poon, 2000); however, other researchers conducted research on such products (jewellery, cars) and found that impulsive behaviour can occur too (Kemp et al., 2013; Rao and Ko, 2021). Moreover, some researchers noted that hedonically driven services can also be bought impulsively (Rook, 1987; Sharma et al., 2014; Deshpande et al., 2022), especially in an online environment (Phau and Poon, 2000; Sharma et al., 2014; Szymkowiak et al., 2021). Then again, services at the same time can contain both hedonic and utilitarian drivers (e.g., wellness-related services, rentals), but it is the hedonic drivers of enjoyment and pleasure that can influence impulsive buying (Kemp et

al., 2013; Kivetz and Zheng, 2017). Similarly, sponsored posts on social media can contain utilitarian and hedonic elements by first emphasising emotional stimuli and, at the same time, including informational benefits (Casado-Aranda et al., 2022; Kurt et al., 2022). Additionally, online channels such as social media contain many impulsivity-driving stimulants (Paul et al., 2022); therefore, services that contain hedonic elements can also be bought impulsively and in an online context.

Some researchers focused on understanding what types of services can be bought impulsively based on their tangibility or intangibility. Tangibility refers to the physical presence of touchable attributes of a product or service; intangibility is the lack of physical presence of touchable elements of a product or service (Phau and Poon, 2000; Sharma et al., 2014; Szymkowiak et al., 2021). Similarly, to hedonic and utilitarian service descriptions, most services possess a combination of tangible and intangible attributes (Berry, 1980, cit in. Sharma et al., 2014). On the other hand, “some services (e.g., a retail store, restaurant, or hospital) have highly tangible attributes such as colours, lighting, scent, and music, whereas others (e.g., education, consulting, or financial services) have relatively more intangible attributes such as knowledge, expertise, and trust” (Shostack, 1977, cit. in Sharma et al., 2014). Sharma et al. (2014) found that the likelihood of impulsive buying of services is higher for services that possess tangible attributes in comparison to intangible ones. For example, Tan et al. (2018) discovered that advertising tourism products and services (e.g., travel agencies, transportation, accommodation, tour reservations, festivals, and event ticket buying) on social media is received positively and is effective for increasing sales and other call to actions (CTAs). However, it has also been noted that consumers sometimes perceive services to have a higher risk level (due to a lack of tangibility), lowering the likelihood of impulsive buying and a lack of research (Sharma et al., 2014). Nonetheless, consumers can have different levels of perceived risk, and impulsive buying of services can vary depending on the possession of tangible or intangible elements (Sharma et al., 2014). Alternatively, as researched by Morewedge et. al. (2021) on the current growth of purchasing of products and services online where psychological ownership could be felt are the types that provide temporary legal access to such products and services, as well as provide consumers with the experience, are not physically owned. This means that intangible services can be bought on impulse equally to services with tangible attributes, especially on online channels like social media. Overall, for services, the possession of tangible and/or intangible attributes is an important determinant that could affect consumer decision-making, impulsiveness level, and the urge to buy impulsively; however, at the same time, it is not a crucial element.

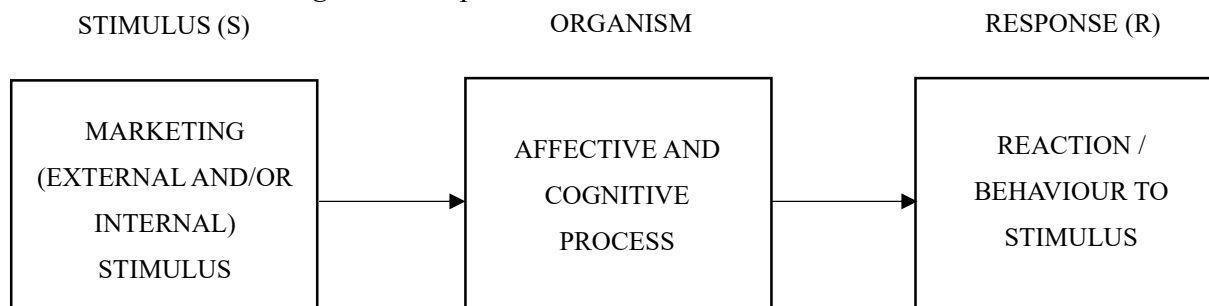
All things considered, services are complex purchases that can possess hedonistic, utilitarian, tangible, or intangible elements. However, different services can have them on various levels, and those that acquire, similarly to products, more hedonic attributes can influence the urge to buy impulsively. At the same time, services that possess more tangible attributes can be bought more impulsively by consumers. Then again, as there is a growth in purchases of products and services that do not possess tangible elements, suggesting that services that are intangible can be purchased on impulse too.

1.6. Understanding the S-O-R model and Information adoption model

To study customers' decision-making on the urge to buy impulsively, it is important to know the factors that influence such behaviour (Sharifi Asadi Malafe et al., 2022). The Stimulus-Organism-Response (S-O-R) model is a great model to use for such purposes (Redine et al., 2023). The S-O-R model is used to analyse customers' responses to consuming environments, enabling a better understanding for researchers of the complicated structure that drives customers' responses and decisions (Chen and Yao, 2018). It shows how stimuli affect people's understanding and response to them (Sharifi Asadi Malafe et al., 2022). The S-O-R model is one of the most applied frameworks in online impulsive buying research (Redine et al., 2023), as it gives a foundation for analysing consumer behaviour as well as a variety of external factors (Chan et al., 2017). It also has the ability to be easily adapted due to the wide range and choice of elements used in each of the model's components, which can vary depending on the research aim (Kimiagari and Malafe, 2021; Zhang Z., et al., 2022). Thus, it is a suitable model to use when conducting research on impulsive buying in an online environment such as social media.

The stimulus-organization-response model (see Figure 2) was first proposed by Mehrabian and Russell (1974). The model explains how various external factors can be stimuli (S) that affect a person's emotional state (O) and then trigger a response (R) in a person (Djafarova and Bowes, 2021; Zhang Y. et al., 2022; Zhang Z. et al., 2022). In Figure 2, the S-O-R model is divided into three steps, which are stimulus, organism, and response (Djafarova and Bowes, 2021). Stimulus (S) are external environmental, situational, or specific cues (Chang, 2017; Arviansyah et al., 2018; Zheng et al., 2019; Zafar et al., 2021a; Lavuri et al., 2023) that attract customers attention and cause a change in their psychological feelings (Zhang Z. et al., 2022) or internal cognition (Lavuri et al., 2023), triggering them to take action (Huang,

2016) in an impulsive purchase (Arviansyah et al., 2018). Such stimuli can come from physical or online shops (Zhang Z. et al., 2022), products (Lavuri et al., 2023), variety of selection (Chan et al., 2017), and marketing activities such as advertising (Zafar et al., 2021a). Chan et al. (2017) have also excluded the possibility that in some cases, internal stimuli such as consumption needs, mood, instant gratification, entertainment, and social influence can also work as triggers. Organism (O) is an internal state (Huang, 2016; Chang, 2017; Zheng et al., 2019; Zhang Z. et al., 2022), referred to as an analysis of the stimuli (Lavuri et al., 2023). It is represented by affective (emotions, feelings) and cognitive (thinking) states (Arviansyah et al., 2018; Zheng et al., 2019; Zafar et al., 2021a; Lavuri et al., 2023). A cognitive state is rational thinking (Arviansyah et al., 2018) or a process of coping with current information (Zheng et al., 2019). It is also described as a situation where a customer has to evaluate themselves, their finances, and possible risks (Zhang Z. et al., 2022). Affective state is the emotional reaction that reflects a person's current feelings (Arviansyah et al., 2018; Zheng et al., 2019). Such emotional states can be moods, hedonic and utilitarian browsing, motivation, urges, satisfaction, happiness, pleasure, and perceptions (Chan et al., 2017; Arviansyah et al., 2018; Zheng et al., 2019; Zafar et al., 2021a). It is also considered as transitional situation between stimulus and reaction (Zheng et al., 2019). Response (R) is a person's behaviour (Chang, 2017) and response (Lavuri et al., 2023) to stimuli. It is a response to perceptions based on various situations and factors (Zheng et al., 2019; Sharifi Asadi Malafe et al., 2022). It can also be considered a final consequence (Zafar et al., 2021a) or a decision made once processing of the information is finished (Zhang Z. et al., 2022; Zhang Y. et al., 2022). A response could be to avoid or approach (Arviansyah et al., 2018), to have an urge to buy or not to buy, to communicate (WOM, Ewom), to look for more information, or to have other positive or negative reactions (Chan et al., 2017; Arviansyah et al., 2018; Lavuri et al., 2023). In the process of impulsive buying, it can have two outcomes: an urge or desire to buy impulsively upon encountering a stimulus or actual impulsive buying, which happens after experiencing the urge to buy impulsively (Rook, 1987; Beatty and Ferrell, 1998; Zheng et al., 2019). Some research focuses on one or the other type of consumer behaviour (Zheng et al., 2019). Finally, Chen and Yao (2018) excluded that this model's goal is to "integrate individual responses to explain people's perceptions and emotions regarding external stimuli and the positive or negative behaviours that are generated subsequently". All in all, the stimulus-organism-response model can act as a great basis for studying consumer responses (the urge to buy impulsively) to external stimuli (sponsored post on social media networks) through affective and cognitive states such as perceptions.

Figure 2*The Stimulus-Organism-Response model*

Source: compiled by the author, based on Chan et al. (2017), Arviansyah et al. (2018), Koay et al. (2021), and Nagar et al. (2022).

Many researchers used the S-O-R model to study various situations and marketing activities related to impulsive buying online. Djafarova and Bowes (2021) used the S-O-R model to study Generation Z's impulsive purchases of fashion products through Instagram advertisements of opinion leaders and user-generated content. Koay et al. (2021) also studied Instagram influencer marketing activities impact on perceived social media marketing activities, source credibility, and impulsive buying. Zhang Z. et al. (2022) researched how external stimuli elements (anchor characteristics, online comments, logistics service quality, promotion incentive information, and promotional time limit) influenced customers' impulsive buying behaviour in the context of internal factors (perceived trust and perceived value). Customer perceptions of website features and the urge to buy impulsively online were also studied (Liu et al., 2013). Zhang Y. et al. (2022) studied how customers respond to uncertain rewards on impulsive buying intentions of blind box products. A comparison between impulsive urges and sustainable purchasing decisions was made using personalised suggestions in social media (Zafar et al., 2021a), as well as how personalised recommendations of product quality were analysed in online impulsive buying (Ampadu et al., 2022). Kimiagari and Malafe (2021) used the S-O-R model and TAM1 theory combination to study cognitive and emotional reactions in the connection of internal and external factors on impulsive buying behaviour. Arviansyah et al. (2018) researched how vlogging (vlog content) can stimulate impulsive buying. Luxury brand loyalty and impulsive buying in the Chinese WeChat messaging programme were measured by Rao and Ko (2021). Hedonic motivation of customers can impact a connection between website stimuli and emotional state, as researched by Nagar et al. (2022). Setyani et al. (2019) investigated the psychological factors behind personalised advertisements and the urge to buy impulsively on social media. Advertising values and impulsive and compulsive buying were studied by Sharifi Asadi Malafe et al. (2022). Media

multitasking (Chang, 2017), flow and social capital theory (Huang, 2016), mobile auctions (Chen and Yao, 2018), hedonic and utilitarian browsing (Zheng et al., 2019), and panic buying during the pandemic (Lavuri et al., 2023) were also researched by different authors. This shows that researchers have used the S-O-R model in many ways while conducting research on online impulsive buying and that it can be adapted in different ways.

With the growth of online channels, understanding how consumers react to and follow online information has become an important topic in consumer behaviour research (Wang, 2016). The same advertising message can be perceived in various ways by different people (Cheung et al., 2008). In addition, another way to measure the effectiveness of how manipulation of various stimuli (information presentation) in the advertising messages can lead to change in behaviour is the Information adoption model (IAM) (Wang, 2016).

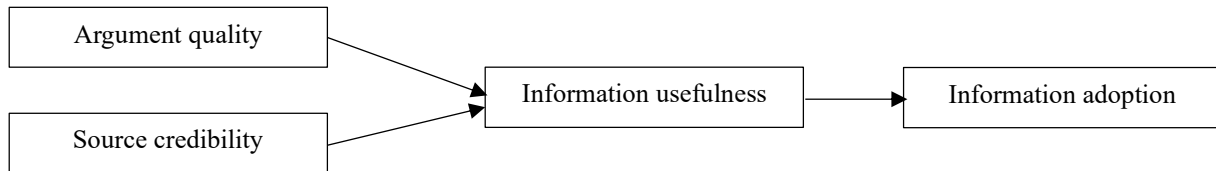
The Information adoption model is a relatively new model that was created using the Elaboration likelihood model (ELM) and the Technology acceptance model (TAM) (Sussman and Siegal, 2003; Wang, 2016). The TAM is used to study reasons that lead a person to accept instigated actions, and the ELM posts show that a given message can affect a person's behaviour based on the information given (Sussman and Siegal, 2003). The Information adoption model (see Figure 3) based on Sussman and Siegal (2003) studies the singular relationships between argument quality, source credulity, information usefulness, and information adoption. Argument quality, or information quality, is then in a person's decision-making process that products or services are dependent on given information, relevance, and perceived quality (Cheung et al., 2008). Source credibility refers to consumers perceived trust and acceptance of given information and the business (Sussman and Siegal, 2003). Information usefulness can be viewed as a person's perception that interaction will provide some sort of improvement or benefit (Cheung et al., 2008). And information adoption is a process where individuals choose to apply given information (Cheung et al., 2008). Altogether, the model gives a new approach; it examines the relationship between argument quality, source credibility, information usefulness, and information adoption.

The Information adoption model is used to understand the online influential factors affecting people's choices and understanding of information (Sussman and Siegal, 2003; Wang, 2016). Knowing how information is perceived and processed allows businesses to promote their products or services online in an effective way (Wang, 2016). The IAM puts focus on a singular person's usage of technology and information systems (Wang, 2016). Just as a person adopts certain behaviours or technologies, they can also adopt ideas they are exposed to

(Sussman and Siegal, 2003). Like this, the IAM gives a new approach to studying the relationship between information adoption and behaviour in online environments.

Figure 3

The Information adoption model (IAM)



Source: Sussman and Siegal (2003).

As the model is relatively new, there have not been many studies that have applied it; however, some researchers have applied the Information adoption model in their studies. Sussman and Siegal (2003) used the Information adoption model to study work environments and how workers are affected by given recommendations or advice to follow; the results supported the proposed IAM. Cheung et al. (2008) applied the IAM to study elements that affect the acceptance of electronic word-of-mouth (eWOM) in online communities; relevance and clear argument quality showed impact. Wang (2016) studied how the IAM was applied in scientific research and how this model was applied in its original form, adding variables to the model (perceived risk attitude, purchase intention), and adopting the model in a complex way (perceived eWOM review credibility, user satisfaction, confirmation with prior belief, recommendation consistency, social interaction). In addition, the IAM in past research was used to study situations in social media (Wang, 2016), making it an important model to consider when conducting research in social media cases.

In conclusion, the S-O-R model is an excellent framework to use for analysing customers' reactions to purchasing settings. It serves as a basis for analysing people's behaviour and external and internal influences. It can also be easily adapted, as many studies by past authors were conducted on impulsive buying. It is also suitable for online studies of impulsive buying in various environments, such as social media, and marketing activities as sponsored posts. In addition, implementing the Information Adoption Model to study how a person could perceive or have a change in behaviour based on changes in information provided in online situations could be useful in this research, as the study will focus on consumer perceptions and urge to buy impulsively using stimuli in sponsored post.

Overall, this section of literature analysis allowed to understand that consumers' actions can be influenced by marketers, like making a purchase or creating an impulsive urge to buy, using various internal and external factors. Consumer shift towards online environments made

businesses move as well, allowing them to be discovered by consumers more quickly and apply numerous marketing activities that could achieve desired goals, such as the urge to buy impulsively. The urge to buy impulsively is an important element in the field of impulsive buying behaviour research, as it is something that occurs right before actual impulsive buying. Furthermore, even if it does not lead to impulsive buying of a desired product or service, it can still cause impulsive buying of other products or services. Researchers have argued that online environments such as social media, especially networks, are perfect for the occurrence of impulsive buying as social media possesses many stimulating elements. A person who uses social media more often was described as someone who can be more persuaded, possesses an impulsive buying tendency, seeks enjoyment, informativeness, and a visually attractive presentation of promotional activities. One of the ways businesses reach their customers online is through advertising on social media using various forms of advertising. Sponsored posts are one of the most used types of advertising as they appear in accordance with usual content posted by peers, friends, and family members, are easy to implement, and are less costly in comparison to other advertising formats. In addition, sponsored posts consist of two sections: visual and textual, allowing for more stimulating elements. Psychological ownership usage in marketing activities has been applied by businesses; however, there are limitations to the research when it comes to online advertising and impulsive buying. Psychological ownership has been shown to have a significant effect on consumers using manipulation of emotional stimulation such as imagination, the view of someone else using the product or a service, and the offering of additional benefits. In sponsored posts, psychological ownership can be expressed by manipulation of image (visual), text (informational), and promotional offer (promotional rewards). Moreover, it has also been noted that customers are now more interested in online purchases that are less materialistic and more experiential, making services a suitable purchase made online. Based on literature analysis, conducting research to understand how psychological ownership implementation in sponsored post advertising could influence consumer perceptions, leading to the urge to buy impulsively using services would be an additional benefit for businesses and future research. Furthermore, the stimulus-organism-response model is applied to the creation of conceptual model as it is one of the most used models as well as an excellent framework for analysing consumer behaviour under internal and external influences. Moreover, the Information adoption model was also implemented as it can be used to study how consumers reaction towards presented information in online marketing activities. In the next section, the methodological part of the research is presented, providing

the research aim, conceptual model, hypothesis, measurements of variables, data collection methods, and other necessary parts of the research.

2. RESEARCH METHODOLOGY

2.1. Research aim, conceptual model, and hypothesis

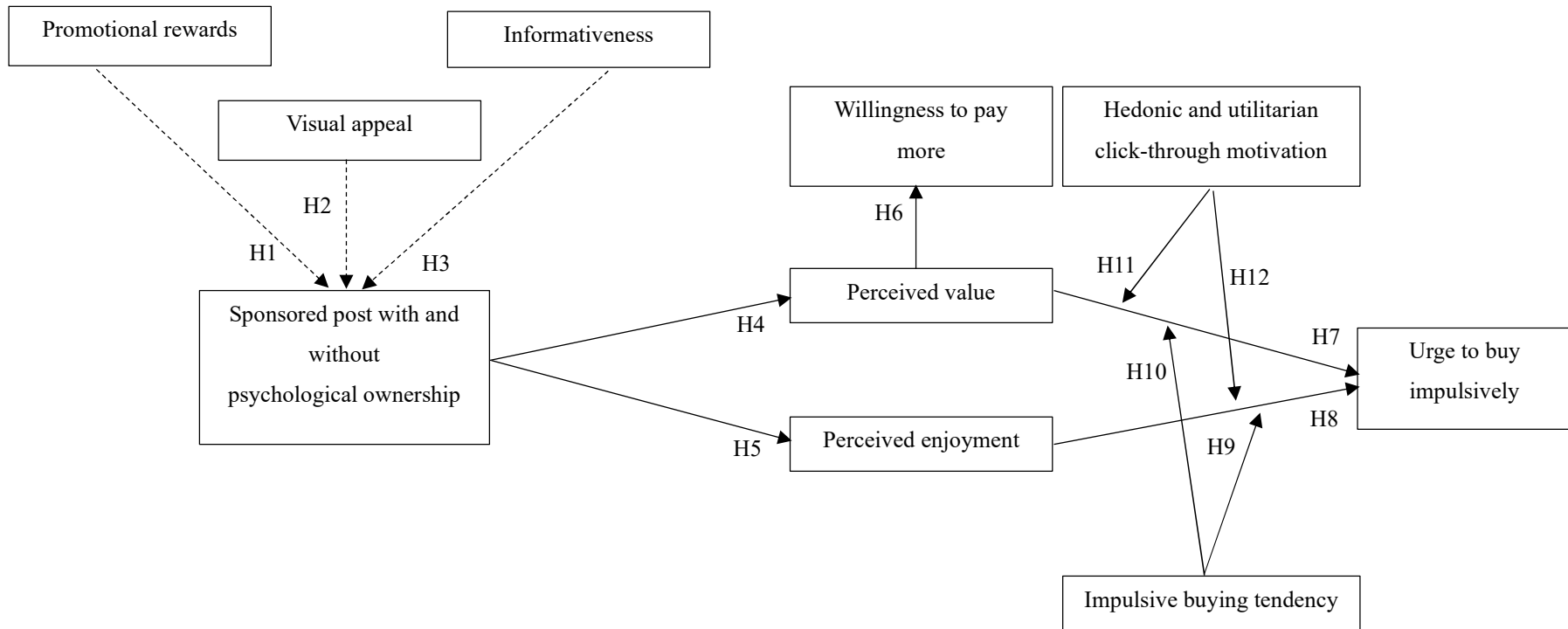
In the following section, research methodology is presented in separate parts based on the literature analysis carried out in the first part of the research. In the research methodology section, research aim, research model, how variables were chosen, and hypotheses are presented and explained. Additionally, research data collection methods, study design, measurement of variables (constructs), selection of service, respondents, and size are provided, as well as presentation of used data analysis tool and the instrument used for the reliability of measurements calculation.

In previously analysed literature, scientists have claimed that there is an impact on consumer decision-making when exposed to psychological ownership of the endowment effect stimulus (Pierce et al., 2001; Peck and Shu, 2011). However, its connection and effect with impulsive buying through advertising on social media are lacking (Amleitner and Feuchtl, 2015; Morewedge et al., 2021). Karahanna et al. (2015) claimed that social media is a great way to study psychological ownership element implementation, and Paul et al. (2022) to analyse the urge to buy impulsively effect. Scientists stated that as social media possesses impulsivity-encouraging elements, psychological ownership implicated in various advertising messages and manipulating its elements (image, text, and promotional offer) can create different kinds of changes in perceptions that could lead to impulsive buying or created urge to buy impulsively (Zhao et al., 2016; Wang, 2016; Gong X. et al., 2020).

Research aim: empirically to explore the psychological ownership implementation in sponsored post (with and without) through promotional offer (promotional rewards), image (visual appeal), and text (informativeness) on the effect on consumer perceptions (perceived value and perceived enjoyment) on the urge to buy impulsively services online.

To achieve the research aim, a research model (see Figure 4) was composed based on completed literature analysis, previous authors research models, methods, and suggested study variables. Doing this allowed to find the most suitable and needed variables to create the research model and find a way to measure the effect of psychological ownership implementation in sponsored post, leading to the urge to buy impulsively. The research model (see Figure 4) was created based on the S-O-R model and the Information adoption model. This model (see Figure 4), as stated by Redine et al. (2023) review paper on impulsive buying

research, the S-O-R model is one of the most applied models in this topic. In addition, the S-O-R model is a great framework to apply as it is adaptable and allows for the analysis of how external factors influence a person's behaviour (Chan et al., 2017; Kimiagari and Malafe, 2021; Zhang Z. et al., 2022), which is what the aim of the research is. The IAM is a new model that is good to use, then trying to understand how stimuli in online environments affect persons understanding and actions (Sussaman and Siegal, 2003). The variables based on Bhattacharjee (2012) can be classified and divided into independent, dependent, moderating, and mediating variables. The main independent variable is the sponsored posts with and without psychological ownership that is being used as a stimulus. In addition, the sponsored post is affected by indirect independent variables (broken-line arrows): promotional rewards, visual appeal, and informativeness. While these variables seem like independent variables, they are elements where psychological ownership is expressed through, showing indirect relation. This is because sponsored posts consist of image and text parts that, in addition, usually possess some sort of promotion as well (Chang et al., 2015; Jung et al., 2016; Zhang and Mao, 2016). This way, through these variables (or constructs), psychological ownership of sponsored posts will be stimulated (indirectly). The mediating variables are perceived value and perceived enjoyment. Based on past literature, when a person is exposed to an advertising message with psychological ownership, a person's perceptions, such as increased perceived value of the offer and higher enjoyment, should be experienced before any of action is taken by a person (Peck and Shu, 2009; Peck and Shu, 2011; Hulland et al., 2015; Wadera and Sharma, 2018; Hartzmark et al., 2021; Morewedge et al., 2021). The main dependent variable is the urge to buy impulsively, which is influenced by increased positive perceptions of value and enjoyment after being exposed to psychological ownership stimuli. Another dependent variable is willingness to pay more; similar to the urge to buy impulsively, it is expected to be influenced by increased positive perceived value after viewing the sponsored post with psychological ownership. The moderating variables are hedonic or utilitarian click-through motivation and impulsive buying tendencies. Hedonic or utilitarian click-through motivation and impulsive buying tendency are expected to moderate the relationship between perceptions (value and enjoyment) and the dependent variable of the urge to buy impulsively. While some of the presented variables could be claimed as concepts (ex., perceptions) and not as variables, Kumar (2019) has mentioned that concepts can be variables if they are given measurement, are used as connections between variables, and the goal is to see a difference or effect.

Figure 4*The Research model*

Source: compiled by the author, based on the S-O-R model, Information adoption model, and literature analysis.

The research model (see Figure 4) was created using a combination of adapted variables from Asatryan and Oh (2008), Parboteeah et al. (2009), Peck and Shu (2011), Kim and Han (2014), Jung et al. (2016), Setyani et al. (2019), and Kwon and Ahn (2021). In the model (see Figure 4), connections between constructs can be seen. The compiled research model was used as a guide to conduct the research and to create the research hypotheses that explain connections between variables, allow to study, and find answers to research problem and aim.

To attract more customers and increase sales, many businesses create advertising messages that possess promotional rewards benefits or some sort of additional benefit (discount, a gift, a free trial, and similar) (Wadera and Sharma, 2018; Zhang et al., 2022). Advertisements in social media that provide promotional rewards are more acceptable and receive more engagement by people compared to advertisements without promotional rewards (Pallas et al., 2014; Jung et al., 2016). Promotional rewards are viewed as additional benefits by consumers, which increases their perceived value (Jung et al., 2016; Wadera and Sharma, 2018). In addition, promotional rewards increase a person's positive view of the business, which leads to increased enjoyment (Pallas et al., 2014; Lyons, 2015). Moreover, advertisements with promotional rewards can attract reward-seeking people who are more willing to take a risk and can experience psychological ownership towards advertisements (Baer and Brown, 2012; Morewedge et al., 2021). Based on this, the following hypothesis was proposed:

H1: The inclusion of promotional rewards in sponsored post with psychological ownership has a stronger effect on consumer response than in sponsored post without psychological ownership.

The attractive visualisation of an advertisement in online marketing is one of the most important elements to consider (Chang et al., 2015). The visual appeal (or visual elements) of a sponsored post is the first thing a person sees, which provides non-verbal or verbal information in a more appealing way (Schmøkel and Bossetta, 2022). Visual appeal is compiled of many elements, like colours, aesthetics, clarity of the image, and a showcased product or service in an attractive way (Che Omar et al., 2015; Krishna et al., 2016; Casado-Aranda et al., 2022), which can increase a person's perceived value and perceived enjoyment (Parboteeah et al., 2009; Yang et al., 2021). In addition, showcasing the usage of a service in an advertisement can create a higher visual appeal, which can stimulate an imagination in a person to make him or her imagine using the service prior to purchase (Kamleitner and Feuchtl, 2015; Morewedge et al., 2021). All of this, through visual appeal stimuli, can lead to increased psychological

ownership (Kamleitner and Feuchtl, 2015; Morewedge et al., 2021). Therefore, the following hypothesis was proposed:

H2: Stronger inclusion of visual appeal in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.

The informativeness of an advertised product or service on sponsored posts determines if a person becomes interested in the offer and interacts (acts in a way the message is asking to) with the advertisement (Alalwan, 2018; Setyani et al., 2019; Vangelov, 2019; Koay et al., 2021). Informativeness increases value to a customer by providing information about an offer and additional needed information to make a purchase and giving credibility (Che Omar et al., 2015; Lee D. et al., 2018; Koay et al., 2021). Additionally, delivering information in a textual format and applying other stimulants as psychological ownership elements is possible (Peck and Shu, 2011; Morewedge et al., 2021). It can be implicated by using emotional, powerful, and engaging sentence phrasing, imagination asking, and mention of benefits (Peck and Shu, 2011; Che Omar et al., 2015; Hartzmark et al., 2021; Morewedge et al., 2021). Based on this, the following hypothesis was proposed:

H3: Stronger inclusion of informativeness in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.

Inclusion of psychological ownership in marketing activities like sponsored post can influence a person's perceptions, such as perceived greater value and perceived enjoyment (Peck and Shu, 2011; Zhao et al., 2016; Morewedge et al., 2021), and increase one's desire to buy (Deng et al., 2021). Incorporation of psychological ownership elements in advertising messages can stimulate a person's motivational triggers and reach needs, where an increase in perceived enjoyment can happen (Zhao et al., 2016; Kovacheva and Lamberton, 2018; Morewedge et al., 2021). Psychological ownership inclusion in various business situations can have better reactions such as perceived enjoyment from the person who is experiencing psychological ownership, which can increase chances of purchase intentions (Tan and Yang, 2022). Peck and Shu (2009) discovered that merely including the ability to touch increases the feeling of psychological ownership. In social media advertisements, it can be achieved by including touchable elements like "buttons" or showcasing a person using the product or service (Kamleitner and Feuchtl, 2015; Krishna et al., 2016; Morewedge et al., 2021). Adaptation of psychological ownership can lead to an increase in purchases of advertised products or services (Peck and Shu, 2009). In addition, psychological ownership is also closely

connected with customers perceived value (Kim and Han, 2014; Kamleitner and Feuchtl, 2015; Deng et al., 2021). It is believed that a greater level of psychological ownership of the product or service by the customer would lead to an increased need for it (Deng et al., 2021). This is done by guiding customers attention towards rewards and manipulating their emotions (Peck and Shu, 2011; Baer and Brown, 2012). Based on this, the following hypotheses were proposed:

H4: Sponsored post with psychological ownership has a higher perceived value than sponsored post without psychological ownership.

H5: Sponsored post with psychological ownership has a higher perceived enjoyment than sponsored post without psychological ownership.

Incorporation of psychological ownership in marketing practices can cause stronger feelings and a change in perception making a person experience psychological ownership (Asatryan and Oh, 2008; Morewedge et al., 2021). As psychological ownership is experienced, it influences customer and increases perceived value, making a person place a greater value for the same product or service (Asatryan and Oh, 2008; Lessard-Bonaventure and Chebat, 2015; Hartzmark et al., 2021). Perceived value can be experienced with greater psychological ownership through manipulation of the additional benefits, informativeness, and visual representation of a product or service in an advertisement (Lessard-Bonaventure and Chebat, 2015; Hartzmark et al., 2021). Then a greater value is perceived by the person, it can lead to willingness to pay more (Asatryan and Oh, 2008; Lessard-Bonaventure and Chebat, 2015; Hartzmark et al., 2021). Based on this, the following hypothesis was proposed:

H6: Perceived value has a positive influence on willingness to pay more.

Yang et al. (2021) highlighted that in marketing activities, consumer perceived value is often focused on consumer hedonic (enjoyment seeking) and utilitarian (basic needs) values to measure buying behaviour. Kim and Han (2014) found that consumer perceived value (advertising) is one of the main determinants of making a purchase. Then, when a person perceives the advertisement to be useful and important, perceived value increases (Kim and Han, 2014). When perceived value is positive, consumers tend to engage in impulsive buying, or an urge to buy impulsively is experienced (Yang et al., 2021; Um et al., 2023). Based on this, the following hypothesis was proposed:

H7: Perceived value has a positive influence on the urge to buy impulsively.

In online situations, perceived enjoyment is presented as a behaviour that is pleasant on its own and excludes positive emotions, then interacts with external stimulants (Parboteeah et al., 2009). When a person is experiencing positive emotions, such as enjoyment, there is a higher likelihood of impulsive buying happening (Beatty and Ferrell, 1998; Parboteeah et al.,

2009). In addition to this, Alalwan et al. (2018) found that perceived enjoyment can influence a person's behavioural intentions, and Rao and Ko (2021) discovered a positive connection between perceived enjoyment and impulsive purchasing. Moreover, when a person is experiencing enjoyment, the urge to buy impulsively is also experienced (Parboteeah et al., 2009). Based on this, the following hypothesis was proposed:

H8: Perceived enjoyment has a positive influence on the urge to buy impulsively.

Consumers who possess an impulsive buying tendency are drawn to positive experiences that provide value and enjoyment (Parsad et al., 2021). Customers can also be influenced by internal stimulus, such as impulsive buying tendency possession, which can create an urge to engage in impulsive buying (Kwon and Ahn, 2021). In addition, in service offerings, businesses often focus on providing enjoyable experiences that can trigger customer impulsive buying tendencies (Jones et al., 2003; Kwon and Ahn, 2021). A triggered impulsive buying tendency can influence other consumers inner perceptions (Saad and Metawie, 2015; Kwon and Ahn, 2021). In online situations, the way the content (advertisements) is provided raises an impulsive buying tendency that increases perceived enjoyment, leading to the urge to buy impulsively (Beatty and Ferrell, 1998; Saad and Metawie, 2015; Wadera and Sharma, 2018; Kwon and Ahn, 2021). Then, when consumers who possess an impulsive buying tendency are exposed to promotional activities that possess a lot of stimulating elements, the customer's perceived value is high (Parsad et al., 2021). Therefore, the following hypotheses were proposed:

H9: Impulsive buying tendency moderates the relationship between perceived enjoyment and the urge to buy impulsively.

H10: Impulsive buying tendency moderates the relationship between perceived value and the urge to buy impulsively.

The urge to buy impulsively is an emotional outcome that is often stimulated by hedonic and utilitarian motivators (Kalla and Arora, 2011; Wadera and Sharma, 2018; Zheng et al., 2019; Hong et al., 2022). Then, when a person is exposed to an advertisement where their needs are met and enjoyment is experienced, they become motivated, which can lead to the urge to buy impulsively (Zheng et al., 2019), and clicking of the advertisement (Setyani et al., 2019). In social media, motivation is also often additionally stimulated by experienced browsing, and with higher motivation, greater perceived enjoyment is also felt (Wadera and Sharma, 2018; Setyani et al., 2019). The given information in the advertisement can also increase motivation and value, leading to the urge to buy impulsively (Setyani et al., 2019). In social media, an advertisement that influences hedonic and utilitarian click-through motivation can affect

consumer perceptions and the urge to buy impulsively (Karahanna et al., 2015; Wadera and Sharma, 2018; Setyani et al., 2019). Based on this, the following hypotheses were proposed:

H11: Hedonic and utilitarian click-through motivation moderates the relationship between perceived value and the urge to buy impulsively.

H12: Hedonic and utilitarian click-through motivation moderates the relationship between perceived enjoyment and the urge to buy impulsively.

To conclude this section, the research aim is to empirically explore and measure the possibility that psychological ownership stimulation in a sponsored post can have an influence on consumer perceptions, leading to the urge to buy impulsively. The research model is composed of variables: sponsored posts with and without psychological ownership, promotional rewards, visual appeal, informativeness, willingness to pay more, perceived value, perceived enjoyment, impulsive buying tendency, hedonic and utilitarian click-through motivation, and the urge to buy impulsively. Based on research hypotheses and the research model, sponsored post with psychological ownership has a greater effect on consumer perceptions such as value and enjoyment, which leads to the urge to buy impulsively. The person is influenced by promotional rewards, visual appeal, and the informativeness presented in sponsored post, there psychological ownership is presented or not through indirect independent variables. Moreover, the path is also affected by impulsive buying tendency, and hedonic and utilitarian click-through motivation. In addition, then a person sees sponsored post with psychological ownership and perceived higher value, it leads to higher willingness to pay more. Testing the hypotheses and variables will provide new knowledge for the marketing field and businesses on how psychological ownership implementation in advertising messages can alter consumer perceptions and the urge to buy impulsively. In the next section of the research methodology part, data collection methods, study design, measurement of variables, and the selection of service, respondents, and size are provided.

2.1. Research data collection method, instrument, creation of sponsored posts, sample size, reliability, and process

In order to test and explore the proposed research model and hypotheses, a quantitative research method was applied. Redine et al. (2023) conducted a systematic literature review on impulsive buying research and found that most researchers applied a quantitative research method. In addition, when trying to understand and measure the effectiveness of how inclusion

of certain elements in marketing activities can influence a change in consumers' behaviour leading to impulsive buying, using surveys (or questionnaire) or performing an experiment is most often done by researchers (Moez L., 2013; Kim and Han, 2014; Jung et al., 2016; Guo et al., 2017; Setyani et al., 2019; Kwon and Ahn, 2021; Wu et al., 2021; Ampadu et al., 2022; Redine et al., 2023). Survey design is a method that is used to collect information from target audiences using structured questionnaires, these questions can be related to a person's behaviour, intentions, attitudes, awareness, motivations, demographics, and other necessary questions (Malhotra et al., 2017). An experiment is a method in which a manipulation of one or more independent variables is done and a measurement of its influence on one or more dependent variables is tracked, while at the same time considering extraneous variables (Malhotra et al., 2017). Based on the research conceptual model and aim, a survey design based on an experimental design of 1 (sponsored post with psychological ownership) x 1 (sponsored post without psychological ownership) was implemented. Therefore, a survey design was used in which one independent factor with two levels (with and without) was measured.

The way data collection instrument is chosen determines the quality of collected data and further research analysis. As more research is being conducted and recommended to study online situations, especially on social media (Redine et al., 2023), this research was taken in an online format as well. The survey design method was applied in this research and was the most used data collection instrument for studies conducted online too (Redine et al., 2023); a questionnaire was used in this study. Questionnaires are very convenient to use as they are simple to administer, given questions are all the same, collected data is consistent as the respondents can only answer to provided answers, and interviewer bias is eliminated (Malhotra et al., 2017). Moreover, using questionnaires, especially online allow to reach more respondents, keep respondent anonymity, giving more comfort to answer the questions, no to low cost, and respondents can choose the time and place to take the questionnaire, which can motivate the respondent to put more focus on the questionnaire (Malhotra et al., 2017). For this research, two online questionnaires (Q1 and Q2) were created using google forms. Both questionnaires (see Annex 3 and Annex 4) had the same introductory part, a screening question, a situation with a stimulus – sponsored post (with or without psychological ownership elements), followed by closed questions about analysed variables, and, at the end, demographic questions were provided. Likert scales were used for data collection of the main questions (measuring variables). For demographic questions, nominal (gender, status) and ordinal (age, income) scales were applied (Malhotra et al., 2017). All the questions were translated in Lithuanian language and stimulus – sponsored posts were created in Lithuanian language. The

English translation can be seen in Annex 5. Both questionnaires were shared on various Lithuanian Facebook groups (accouchement groups, different city groups, etc.). This was done to ensure that only the participants who understood Lithuanian and used Lithuania-based Facebook groups were most likely Lithuanian nationality participants or participants living in Lithuania.

In this research, the stimulus was presented in a sponsored post form of Facebook. This type of advertising message was chosen as it is one of the most used types of social media advertising used by businesses, allowing them to fully provide visual and textual information to users (Curran et al., 2011; Dehghani and Tumer, 2015; Krishna et al., 2016; Vangelov, 2019; Schmøkel and Bossetta, 2022). In addition, Facebook is the most used social media channel of all ages (Ortiz-Ospina, 2019), making it a suitable medium to use in the study, which should allow it to reach adults of different ages. In addition, based on Lithuania's statistical data (Oficialiosios statistikos portalas, 2020a), 74 % of Lithuanians use the internet daily, and 51% use it to use social media. Moreover, 54 % of Lithuanians ages 16–74 used the internet to buy products or services, with social media being one of the channels used to achieve this (Oficialiosios statistikos portalas, 2020b).

The service used in sponsored posts was a holiday trip (travel package). This service was chosen by conducting a small, one-question survey in Facebook groups (see Annex 6). People who participated were asked to choose one of the provided services that, in their opinion, would be suitable to buy online. The list of services was created based on Sharma et al. (2014), Tan et al. (2018), Morewedge et al. (2021), Szymkowiak et al. (2021), and Deshpande et al. (2022) research. In total, 7 services were provided for participants to choose from: concert tickets, holiday trips/sightseeing tours, spa/massage, gym membership, online TV/movie subscriptions, car rentals, and online courses (see Annex 6). In total, 29 participants voted, and 55.2 % chose a holiday trip/sightseeing tour service (see Annex 6). As the sponsored posts should be represented by a business, it was decided to simulate a travel agency to avoid past biases (Keliaukime Visur). For a better representation of the service, based on Lithuania's statistical data (Oficialiosios statistikos portalas, 2023, September 21st), in the 2023 second quarter, most people bought trips and travelled to Turkey. Considering everything, the service displayed in the sponsored post was a holiday trip (travel package) to Turkey.

In this research, two sponsored posts were created and used for the analysis (see Annex 1 and Annex 2). One sponsored post (see Annex 1) was created using the elements of psychological ownership expressed through parts of sponsored post of text, image, and promotional offer. Another sponsored post (see Annex 2) was created without the elements of

psychological ownership. Deciding which element implementation in the sponsored post should be considered as psychological ownership is not easily accomplished. For the correct inclusion, an expert online survey was conducted (see Annex 7). Based on a literature analysis of the endowment effect, psychological ownership, and advertising message factors on impulsive buying, a total of 42 elements were presented to the experts. For the experts, the purpose of the questionnaire was presented, and they were asked to choose all suitable elements that should be included in the sponsored post with psychological ownership. Sponsored post without psychological ownership will not possess chosen elements, or they will be presented at a low level, as not all elements in sponsored posts are possible to exclude. The questionnaire was taken by three experts: Co-owner at Unconditional agency and Evolverio with more than 15 years of experience in digital marketing, Project director at Mindshare with 19 years of experience in project management and communication strategies, and department manager at L'oreal Baltics Luxury with 20 years of experience. In total, 25 elements were chosen by the experts, which were divided (see Annex 7 and Annex 8) to represent the text (informativeness), image (visual appeal), and promotional offer (promotional reward), and through them, psychological ownership is expressed. The most picked elements by all three experts were: showcasing usage of the service; additional benefit (free trial); additional benefit (gift); and showcasing hedonism. The elements that were chosen by 2 experts were: image presented with bright colours; benefit (offer) representation; showcasing a person using the service as happy; text should be strong, emotional, and expressive; an expression of happiness; imagination (imagery) encouragement; a time limit (until then the service is available); the possibility of finding out more (URL); and a clear call-to-action (CTA). And elements who were chosen by only one of the experts were: logo; availability; additional benefit – discount; ability to touch (ex. Button “order/order now“); empathy expression; sense of loss; attachment; the text should be showcased using various styles; the text should be showcased using only one style; hashtag inclusion; personalisation; option to react (like, share, comment). Both sponsored posts were created taking into consideration all the chosen elements by the experts, especially the elements that were chosen by all three experts. However, some chosen elements were contradictory, such as “one text style”, and “various text styles” received one vote each. It was decided that in the sponsored post with psychological ownership, “text style with various styles” will be used as it can help showcase other elements such as expressive, powerful words and emotions (Che Omar et al., 2015). In addition, based by Curran et al. (2011), Chang et al. (2015), Dehghani and Tumer (2015), Roy and Sharma (2015), Knoll (2016), Krishna et al. (2016), Zhang and Mao (2016), Alalwan (2018), Setyani et al. (2019), Vangelov (2019), Sheiner et al. (2021),

Casado-Aranda et al. (2022), and Deshpande et al. (2022) both messages will contain some of the chosen elements by experts as these elements cannot be excluded out of the sponsored post, it cannot be easily expressed or assigned to one of the categories, or it is something any business in any type of advertising message would include. Such elements are option to reach (like, share, comment), actual button on sponsored post to click “order/ order now”, logo, time limit (until then the service is available), possibility for finding out more (URL), call-to-action (CTA) (see Annex 8). Based on all of this, psychological ownership in sponsored post was expressed by providing a benefit (a gift - free excursion), a showcase of usage of the service by having a girl enjoy her time next to a pool with a drink in hand, additional button inclusion in the image, and giving expressive text with an encouragement to imagine using the service, as well as considering other elements selected by experts (see Annex 7 and Annex 8).

In the first questionnaire (Q1), sponsored post text (with inclusion of promotional reward) was (see Annex 1): “Get your spring paradise in Turkey NOW! Run away to your dream world with our exclusive autumn offer. Your spring vacation in Turkey is waiting for you! The offer includes luxurious relaxation at the Relax Premium Resort & Spa hotel, both-way flights, hassle-free transportation to and from the airport, and a GIFT – FREE EXCURSION with a guide of your choice! Close your eyes and imagine how the warm rays of the sun touch your skin, the taste of the exotic drink, and the laughter of shared memories. This is YOUR chance to create memories that will last forever. Reassure your spring paradise today. Act fast - this offer is only available for trips during the months of April and May. Learn more: (Imitated link about the offer.) Have you prepared to make your spring a paradise? Click “Order” and make your dreams a reality!” In the image, presented text was showing the logo of the business, price, website, button “Order” on the image, information for which month the offer is for, an additional mention of the gift, and the catchy phrase “Run to Turkey’s Paradise”. In the second questionnaire (Q2), sponsored post text was (see Annex 2): “Get a special autumn offer for your spring vacation to Turkey. The offer includes relaxation at the Relax Premium Resort & Spa hotel, both-way flights, and transportation to and from the airport. Order your spring vacation now. This offer is available for purchases made until the end of November for trips from April to May”. In the image presented, the text was showing the price and the phrase “Buy a trip for spring vacation”.

Moreover, the used image was from the free stock image website Pexels (Roa R., 2022, May 26th). To ensure that the image used for the sponsored posts would not differ, apart from having a presence and usage of the service (a girl sitting next to a pool and enjoying her drink), an AI tool (PhotoRoom, 2023) was used to remove the girl from the image for the sponsored

post without psychological ownership (Q2). For the rest of the creation of the sponsored posts, Canva (2023) and Mediamodifier (2023) mock-up generator was used.

As the price of the service on its own is not a study variable but willingness to pay more, the price of sponsored posts was decided based on Lithuania's tourists' average expenditure per trip data (Oficialiosios statistikos portalas, 2023, September 21st) being 507,1 euros. To make it more appealing, and from presented data a constant increase in spendings on trips is happening (Oficialiosios statistikos portalas, 2023, September 21st), the price presented in the sponsored posts was 499 euros. Additionally, this price was also set with an ending of 99, as established by research, consumers perceive product or service price as lower and more appealing when the price ends with an odd number (charm pricing) (Thomas and Morwitz, 2005; Khedkar and Khedkar, 2021; Aparicio and Rigobon, 2023).

For the research, two questionnaires (Q1 and Q2) were created (see Annex 3 and Annex 4). Both questionnaires consisted of the same questions (see Annex 5). The difference was the presented stimulus—sponsored posts. At the beginning, a screening question was given: “Have you ever bought services online?”. In addition, examples of services were also provided from the suggestions received from the pretest. A screening question was used to control participants, and only those who had previously bought services online (answered “yes”) were able to take the questionnaire. The use of screening questions has been quite often applied by researchers, as it is a great way to separate not-suitable respondents (Jung et al., 2016; Setyani et al., 2019; Danilova et al., 2021; Kwon and Ahn, 2021). Moreover, at the beginning, respondents were assured of their anonymity, and the collected data will only be used for research purposes. Both questionnaires were shared in different Facebook groups, and the respondent sizes were controlled to ensure a similar level of participation. Questionnaires were completed by different respondent groups.

The questions were formed using the constructs of previous authors after a theoretical analysis. All constructs were first adapted in English to match the research, then translated into Lithuanian. All main construct data was collected and measured using the 7-point Likert's scale in accordance with past research (Asatryan and Oh, 2008; Parboteeah et al., 2009; Peck and Shu, 2011; Kim and Han, 2014; Jung et al., 2016; Setyani et al., 2019; and Kwon and Ahn, 2021). The 7-point Likert's scale was measured from 1 (strongly disagree) to 7 (strongly agree), and respondents had to choose how much they agreed or disagreed with the given statement. The questions were provided in a similar order as the research model (see Annex 5):

1. The promotional rewards variable was adjusted and measured based on Jung et al. (2016) adapted scale from Ducofee (1995, 1996) (Ducofee, 1995, 1996, cit. in Jung et al.,

2016). The scale consisted of three statements. For example, the statement “ads provide benefit” was adapted to “sponsored post provide benefit”. The statement “ads offer premiums (free gifts)” was adapted to “sponsored post offer free premiums (gifts)”. The statement “ads give rewards” was adapted to “sponsored post gives additional rewards” (Jung et al., 2016).

2. The visual appeal variable was adjusted and measured based on Parboteeah et al. (2009) scale adapted from Loiacono et al. (2007) (Loiacono et al., 2007, cit. in Parboteeah et al., 2009). The scale consisted of three statements: “the website is visually pleasing” was adapted to “sponsored post is visually pleasing”, “the website displays visually pleasing design” was adapted to “sponsored post has visually pleasing design”, and “the website is visually appealing” was adapted to “sponsored post is visually appealing” (Parboteeah et al., 2009).

3. The informativeness variable was adjusted and measured based on Setyani et al. (2019) adapted scale from Hsu et al. (2015) and Kim and Han (2014) (Hsu et al., 2015; Kim and Han, 2014, cit. in Setyani et al., 2019). The scale consisted of five statements: “the ad on my social media supplies relevant information on products or services” was adapted to “sponsored post supplies relevant information on given services”, “the ad on my social media provides timely information on products or services” was adapted to “sponsored post provides timely information on services”, “the ad on my social media provides accurate product information” was adapted to “sponsored post provides accurate information about the service”, “the ad on my social media is a good source of information” was adapted to “sponsored post is a good source of information”, and “the ad on my social media is a good source of up to date products or services” was adapted to “sponsored post is a good source of up to date services” (Setyani et al., 2019).

4. The psychological ownership variable was adjusted and measured based on Peck and Shu (2011) scale adapted from Pierce et al. (2001) (Pierce et al., 2001, cit. in Peck and Shu, 2011). The scale consisted of three statements: “I feel like I own [the item]” was adapted to “I feel like I own this advertised service”, “I feel a very high degree of personal ownership of [the item]” was adapted to “I feel a very high degree of personal ownership of this advertised service”, and “I feel like this is my [item]” was adapted to “I feel like this advertised service is mine” (Peck and Shu, 2011).

5. Perceived value was adjusted and measured based on Kim and Han (2014) adapted scale from Ducoffe (1995) and Liu et al. (2012) (Ducoffe, 1995; Liu et al., 2012, cit. in Kim and Han, 2014). The scale consisted of three statements: “I feel that smartphone advertising is useful” was adapted to “I feel that sponsored post is useful”, “I feel that smartphone advertising

is valuable” was adapted to “I feel that sponsored post is valuable”, and “I feel that smartphone advertising is important” was adapted to “I feel that sponsored post is important” (Kim and Han, 2014).

6. The willingness to pay more variable was adjusted and measured based on Asatryan and Oh's (2008) adapted scale from Zeithaml et al. (1996) and Baker and Crompton (2000) (Zeithaml et al., 1996; Baker and Crompton, 2000, cit. in Asatryan and Oh, 2008). The scale consisted of four statements: “I will continue to dine in even if there may be some price increases” was adapted to “I will continue to be interested in sponsored post offers even if there may be some price increases”, and statements “price increases will not deter”, “I am willing to pay more”, and “rather pay a higher price” were used as adopted by Asatryan and Oh (2008).

7. The perceived enjoyment variable was adjusted and measured based on Parboteeah et al. (2009) adapted scale from Chang and Cheung (2001) (Chang and Cheung, 2001, cit. in Parboteeah et al., 2009). The scale consisted of three statements: “my interaction with this website was disgusting/enjoyable” was adapted to “my interaction with this sponsored post was disgusting/enjoyable”, “my interaction with this website was dull/exiting” was adapted to “my interaction with this sponsored post was dull/exciting”, and “my interaction with this website was unpleasant/pleasant” was adapted to “my interaction with this sponsored post was unpleasant/pleasant” (Parboteeah et al., 2009). The measurement of these statements on the 7-point Likert's scale was changed from „strongly disgusting, dull, or unpleasant“ to “strongly enjoyable, exciting, or pleasant”.

8. The hedonic and utilitarian click-through motivation variable was adjusted and measured based on Setyani et al. (2019) adapted scale from Mikalef et al. (2013) (Mikalef et al., 2013, cit. in Setyani et al., 2019). The scale consisted of six statements: “clicking through the ad to browse products on my social media is functional(to find product/services)” was adapted to “clicking through the sponsored post to buy the service is functional”, “clicking through the ad to browse products on my social media is practical (to find product/services)” was adapted to “clicking through the sponsored post to buy the service is practical”, “clicking through the ad to browse products on my social media is necessary (to find product/services)” was adapted to “clicking through the sponsored post to buy the service is necessary”, “clicking through the ad to browse products on my social media is delightful” was adapted to “clicking through the sponsored post to buy the service is delightful”, “clicking through the ad to browse products on my social media is fun” was adapted to “clicking through the sponsored post to buy the service is fun”, and “clicking through the ad to browse products on my social media is

thrilling” was adapted to “clicking through the sponsored post to buy the service is thrilling” (Setyani et al., 2019).

9. The impulse buying tendency variable was adjusted and measured based on Kwon and Ahn (2021). The scale consisted of five statements: “I often buy things without thinking” was adapted to “I often buy products /services without thinking”, “sometimes I feel like buying things on the spur-of-the-moment” was adapted to “sometimes I feel like buying products / services on the spur-of-the-moment”, “buy now, think about it later, describes me” was adapted to “buy now, think about it later, describes me well”, “I have bought things I had not intended to purchase” was adapted to “I have bought products /services I had not intended to purchase”, and “I make unplanned purchases” was adapted to “I often make unplanned purchases” (Kwon and Ahn, 2021).

10. The urge to buy impulsively variable was adjusted and measured based on Setyani et al. (2019) adapted scale from Huang (2015) (Huang, 2015, cit. in Setyani et al., 2019). The scale consisted of five statements: “I felt a sudden urge to buy something after viewing the ad on my social media” was adapted to “I felt a sudden urge to buy something after viewing sponsored post”, “I want to buy things in the ad on my social media even though I had not planned to purchase” was adapted to “I want to buy the service from sponsored post even though I had not planned to purchase”, and “I want to buy things in the ad on my social media even though I do not really need it” was adapted to “I want to buy the service from sponsored post even though I do not really need it” (Setyani et al., 2019).

In the second part of the questionnaire, demographic questions were given to get some information about the respondents. The respondents were asked to give information about their gender, status, age, and income. The questions were adopted based on past research (Asatryan and Oh, 2008; Jung et al., 2016; Setyani et al., 2019; Kwon and Ahn, 2021). Nominal (gender, status) and ordinal (age, income) scales were applied.

Determining a suitable sample size is highly significant for research to be representative and help to avoid bias (Bartlett et al., 2001; Kumar, 2019). Then a survey is used to acquire data; a higher number of respondents is usually required (VanVoorhis and Morgan, 2007). To calculate the sample size, comparable researches method was applied (see Table 1) using authors who were used to create the research model. Based on past research, the required minimum sample size is $n = 190$. Considering that in this study two questionnaires were used, the sample size was divided by two, making a total of 95 minimum sample size needed for each survey.

Table 1*Sample size calculation*

No.	Author, date	Type of methods applied	No. of respondents
1	Jung et al. (2016)	Questionnaire (experimental design)	217
2	Parboteeah et al. (2009)	Study 1 - Experimental design and questionnaire	264
		Study 2 - Scenario-based, controlled experiment designed and questionnaire	216
3	Setyani et al. (2019)	Questionnaire (first viewed Facebook advertisement)	862
4	Shu and Peck (2011)	Study 1 - Experimental design and questionnaire	67
		Study 2 - Experimental design and questionnaire	71
		Study 3 - Experimental design and questionnaire	58
		Study 4 - Experimental design and questionnaire	125
		Study 5 - Experimental design and questionnaire	59
		Study 6 - Experimental design and questionnaire	186
		Study 7 - Experimental design and questionnaire	138
		Study 8 - Experimental design and questionnaire	60
		Study 9 - Experimental design and questionnaire	129
5	Kim and Han (2014)	Questionnaire	256
6	Kwon and Ahn (2021)	Questionnaire	143
Total			190

Source: compiled by the author.

To collect the respondents, in this research, nonprobability, convenience sampling was applied (Kumar, 2019). This type of sampling was used due to the limited time available and to reach respondents who use social media (Facebook, Lithuanian groups). In addition, the respondents in this study were selected based on the screening question, which indicated their financial ability to buy services and have done it in an online environment, were of adult age, and understood Lithuanian, which indicated that they are of Lithuanian nationality or were foreigners who live in Lithuania and understand the language.

Data analysis was collected using Google Forms with two questionnaires (Q1 and Q2). The data was downloaded in an Excel file, and respondents who answered “no” to the screening question and those who did not finish the questionnaire were eliminated. The reliability of the constructs (using Cronbach’s alpha), data analysis, and calculations were done using the IBM SPSS statistical programme.

Overall, in the second part of the methodology section, data collection methods, study design, measurement of variables, selection of services, respondents, and sample size were provided. The research was conducted using a quantitative method, a survey design was applied. The data was collected using two online questionnaires using the same questions but different stimuli—sponsored posts with or without psychological ownership. The constructs data were collected using Likert's scales. The sample size was calculated based on past research, with a total average of 190 respondents. Convenience sampling was applied to collect respondents by sharing the questionnaires through various Lithuanian Facebook groups. In the result section, data analysis will be conducted, as well as the reliability of constructs provided by calculating Cronbach's alpha for all variables in each survey.

3. RESEARCH DATA ANALYSIS AND RESULTS

3.1. The reliability of the constructs and demographic data analysis

The research data analysis starts with calculating the reliability of the construct's variables. Reliability is needed in order to ensure that the scale will create valid and similar results when it is measured again (Malhotra et al., 2017). One of the methods to measure the reliability of the constructs is to calculate the coefficient alpha, or Cronbach's alpha. Cronbach's alpha is a measurement of internal consistency reliability, calculated as the mean of all split-half coefficients that can be obtained by dividing the scale items in various ways (Malhotra et al., 2017). In Table 2, Cronbach's alpha calculations of constructs from both questionnaires are presented.

Table 2

Reliability of constructs: Cronbach's alpha

Construct	Cronbach's alpha Q1	Cronbach's alpha Q2
Promotional rewards (PR)	0.850	0.610
Visual appeal (VA)	0.963	0.941
Informativeness (I)	0.922	0.902
Psychological ownership (PO)	0.857	0.960
Perceived value (PV)	0.907	0.875
Willingness to pay more (WTPM)	0.871	0.923
Perceived enjoyment (PE)	0.886	0.891
Hedonic and utilitarian click-through motivation (HUCTM)	0.910	0.894
Impulse buying tendency (IBT)	0.865	0.821
Urge to buy impulsively (UTBI)	0.910	0.917

Source: compiled by the author using SPSS statistics.

Cronbach's alpha coefficient can range from 0 to 1, and a coefficient with a value of 0.6 or higher is considered suitable and reliable (Malhotra et al., 2017). Then, if the coefficient value is less than 0.6, it can suggest that the internal consistency is inadequate and not reliable (Malhotra et al., 2017). As presented in Table 2, all of the constructs Cronbach's alpha calculations were above 0.6, meaning that all constructs are reliable. Cronbach's alpha coefficients for questionnaire 1 (Q1) ranged from 0.850 to 0.963, indicating high reliability. In questionnaire 2 (Q2), Cronbach's alpha coefficients ranged from 0.610 to 0.960. The lowest coefficient in Q2 was promotional rewards (PR), with a coefficient of 0.610 that was due to

one of the items “sponsored post provide benefit”, and if deleted, Cronbach’s alpha coefficient would change to 0.805 (see Annex 9). However, all items were considered when conducting research, and coefficients above 0.6 are considered acceptable and reliable for the research. Other coefficients in Q2 were above 0.8, indicating high reliability of the constructs.

The collection of data happened between late October and early December. Both questionnaires were shared on Lithuanian Facebook social media, where respondents were invited to take one of the questionnaires. First, the respondents had to answer screening question that allow to determine that only respondents who have in the past bought services online would be participating.

As previously calculated, the minimum sample size needed was $n = 190$; for each questionnaire, $n = 95$ respondents were needed. In total, 244 respondents participated in the survey. Respondents who answered „no“ to the screening question and those who did not complete the survey were eliminated. The first questionnaire collected 124 participants in total, and the second questionnaire collected 120 participants. After the elimination of not-suitable participants, Q1 collected 118 responses and Q2 collected 113 responses, making a total sample size of $n = 231$, with the elimination of 13 responses.

To ensure that comparison of the results between both questionnaires is suitable, during the data collection period, consumer demographics were monitored. In addition, similar respondent participation in both surveys can allow for more accurate comparisons of the results. For this, in the questionnaires, respondents had to answer four demographic questions: gender, age group, status, and income per month. These questions allow for a more detailed respondent comparison as well as understanding if the people who participated were suitable respondents who could represent the target audience of respondents.

The target audience of respondents for this research, as previously stated, were of Lithuanian nationality or reside in Lithuania, understand the language (as the questionnaires were in Lithuanian to minimise foreign participation from other countries), were of adult age, working, and have a monthly income. Moreover, based on past theoretical analysis on impulsive buying, it was found that women were more prone to impulsive buying behaviour (Muruganatham and Bhakat, 2013; Iyer et al., 2019; Pandey and Bharti, 2019; Chetioui et al., 2021; Widagdo and Roz, 2021; Hong et al., 2022; Kurt et al., 2022). Then again, it was also found that men can also engage in impulsive buying behaviour associated with leisure activities (Muruganatham and Bhakat, 2013; Hong et al., 2022). It was found that younger consumers should be more prone to impulsive buying in comparison to older people (Wadera and Sharma, 2018; Pandey and Bharti, 2019). However, it was also stated that having only students as

respondents in impulsive buying research could lead to inaccurate results as students may not have a steady income and their buying habits are more based on needs (Ittaquallah et al., 2020). Considering this, when collecting respondents, it was tried to attract more adult working respondents, which would indicate a steady income and be fewer student status participants.

Then, evaluating respondent distribution according to gender (see Table 3) between both questionnaires (Q1 and Q2), no significant differences were found. The majority of respondents in both questionnaires were women, whereas in Q1 a total of 82.2% were women and in Q2 a total of 80.5% were women, making a suitable comparison possibility of research data between questionnaires. In addition, having more women as participants in the questionnaire can result in a higher possibility of the urge to buy impulsively, as women in previous studies were found to engage more in impulsive buying activities (Muruganatham and Bhakat, 2013; Iyer et al., 2019; Pandey and Bharti, 2019; Chetioui et al., 2021; Widagdo and Roz, 2021; Hong et al., 2022; Kurt et al., 2022). Furthermore, women are said to take more action in participating in online activities, especially on social media (Chetioui et al., 2021; Widagdo and Roz, 2021; Hong et al., 2022), which could explain higher women's participation in questionnaires in comparison to men.

Table 3

Respondent distribution according to gender

Gender	Q1	Q2
Women	82.2 % (97)	80.5 % (91)
Men	17.8 % (21)	19.5 % (22)

Source: compiled by the author using SPSS statistics.

Then, analysing the respondent distribution according to age category (see Table 4) between both questionnaires (Q1 and Q2), no significant differences were discovered. The majority of respondents were between the ages of 18 and 40. The biggest age group of participants in both questionnaires were respondents ages between 25 and 32 years; in Q1, it accounted for 36.4%, and in Q2, it accounted for 36.3%. The second biggest group of participants was aged 33 to 40 years; in Q1, it accounted for 27.1%, and in Q2, it accounted for 27.4%. The third largest group of respondents were of age 18 to 24 years; in Q1, it accounted for 21.2%, and in Q2, it accounted for 18.6%. The smallest groups of respondents were aged 49 and older; in Q1, it accounted for 5.1%, and in Q2, it accounted for 8%, slightly more in comparison to Q1. Based on past research, younger consumers could show a higher urge to buy impulsively (Wadera and Sharma, 2018; Pandey and Bharti, 2019); on the other hand, as the target audience of respondents are considered adult working people and fewer students,

having more respondents of higher age above 25 years was considered suitable. In addition, Iyer et al. (2019) noted in their research that age is not a primary determinant of whether a person is more or less likely to have an urge to buy impulsively.

Table 4

Respondent distribution according to age category.

Age category	Q1	Q2
18 – 24	21.2 % (25)	18.6 % (21)
25 – 32	36.4 % (43)	36.3 % (41)
33 – 40	27.1 % (32)	27.4 % (31)
41 – 48	10.2 % (12)	9.7 (11)
49 and more	5.1 % (6)	8 % (9)

Source: compiled by the author using SPSS statistics.

Then, analysing the respondent distribution according to the respondent's status (see Table 5) between questionnaires (Q1 and Q2), no significant differences were discovered. The majority of respondents were of working status; in Q1, it accounted for 68.6%, and in Q2, it accounted for 61.9% of all respondents. The second biggest group of respondents in both questionnaires were working students; in Q1, it accounted for 20.3%, and in Q2, it accounted for 18.6% of respondents. The third group were students; in Q1, it accounted for 6.8%, and in Q2, it accounted for 11.5% of respondents. Before conducting the research, it was decided to have a category for working students, as there can be students who are also working, have their own income, and make themselves more suitable respondents for the research. In addition, no respondents belong to the categories of "not working" or "other". The status in this research was primarily used to know that the majority of respondents who are participating are working people and not students or just students, which, as shown in Table 5, is as pursued.

Table 5

Respondent distribution according to status

Status	Q1	Q2
Student	6.8 % (8)	11.5 % (13)
Working students	20.3 % (24)	18.6 % (21)
Working	68.6 % (81)	61.9 % (70)
Working for myself	4.2 % (5)	8 % (9)

Source: compiled by the author using SPSS statistics.

Then, analysing the respondent distribution according to the respondent's income (see Table 6) between questionnaires (Q1 and Q2), there are no significant differences discovered. However, in comparison to other demographics, in this demographic, there have been

respondents who preferred not to disclose their income, and their preference was excluded from the calculations of overall respondent income percentages. In total, in Q1, percentages were calculated based on 112 responses, and in Q2, 106 responses. The majority of the respondent's income ranged between 701 to 1500 euros. The biggest group of respondents' incomes for both questionnaires was between 901 to 1200 euros; in Q1, it accounted for 28.6%, and in Q2, it accounted for 28.3%. The second-biggest group of respondents' incomes varied between Q1 and Q2. In Q1, it was between 1201 to 1500 euros, and it accounted for 32.1%. For Q2, the second-biggest group of respondents' incomes were between 701 to 900 euros, and it accounted for 25.5%. The third biggest respondent group in incomes for Q1 was between 701 to 900 euros, and it accounted for 21.4%; while for Q2, it was respondent group income between 1201 to 1500 euros, and it accounted for 18.9%. This showed a small difference in income groups between respondents; in Q1, there were more respondents with slightly higher earnings in comparison with respondents in Q2. On the other hand, there has been research that has claimed that people with low incomes have a higher tendency to engage in impulsive buying (Wood, 1998), and there has also been research that has claimed that people with higher incomes are more into impulsive buying behaviour (Pandey and Bharti's, 2019). Additionally, it was also stated that income level may not have any significance for impulsive buying at all (Wood, 1998; Pandey and Bharti's, 2019). In this research, income was used to determine the type of income level of respondents participating and to ensure that the majority of respondents between questionnaires were similar. And, as the results show in Table 6, the majority of respondents' income were between 701 to 1500 euros, and this type of income demographic of people was represented in the research.

Table 6

Respondent distribution according to income

Income per month (in Euros)	Q1 (total of 112)	Q2 (total of 106)
Up to 500 €	3.6 % (4)	4.7 % (5)
501-700 €	5.4 % (6)	11.3 % (12)
701-900 €	21.4 % (24)	25.5 % (27)
901-1200 €	28.6 % (32)	28.3 % (30)
1201-1500 €	32.1 % (36)	18.9 (20)
1501-2000 €	6.3 % (7)	8.5 (9)
2001 € and more	2.7 % (3)	2.8 (3)
Missing (prefer not to say)	6	7

Source: compiled by the author using SPSS statistics.

In conclusion, a total of 231 respondents' data were collected in both questionnaires, making it above the needed sample size. After analysing the demographic data of questionnaires Q1 and Q2, there are no highly significant differences that would not allow for data comparison and analysis or the results, and they are representative of the targeted respondent description mentioned in the methodology and analysis parts. In both questionnaires, the majority of participants were women. The biggest age groups of respondents were between the ages of 18 to 40. The majority of respondents were working people with monthly income levels between 701 to 1500 euros. In addition, the reliability of the constructs was calculated using Cronbach's alpha, which showed that all constructs are reliable and suitable for data analysis.

3.2. The research data results analysis and hypotheses testing

After calculating and confirming the reliability of the constructs, analysis of the collected data and hypothesis testing were conducted. In total, 12 hypotheses were raised and presented in the methodology section. Hypotheses were tested using data processing methods in the SPSS statistics of different calculations using independent samples t tests, Pearson's correlation analysis, regression analysis, and moderation analysis using the PROCESS model.

H1: The inclusion of promotional rewards in sponsored post with psychological ownership has a stronger effect on consumer response than in sponsored post without psychological ownership.

For hypothesis testing, an independent sample t-test (see Table 7 and Annex 10) was conducted to compare the differences in means based on promotional reward inclusion in sponsored post. This allowed to determine whether it had a greater effect on consumer response with psychological ownership inclusion. Based on the results (see Table 7), **hypothesis H1 is accepted**. Criteria inclusion of promotional rewards has a greater effect on sponsored post with psychological ownership ($M=5.9576$) than on sponsored post without psychological ownership ($M=3.3333$). In addition, the test reveals that $p<0.001$ and Cohen's $d=2.710$ indicate high significance and a strong effect of the results.

Table 7*PR independent samples t-test*

		N	Mean	Levene's test p	t	p	Cohen's d
Promotional rewards (PR)	Q1	118	5.9576	0.344	20.587	<0,001	2.710
	Q2	113	3,3333				

Source: compiled by the author using SPSS statistics.

H2: Stronger inclusion of visual appeal in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.

For hypothesis testing, an independent sample t-test (see Table 8 and Annex 11) was conducted to compare the differences in means based on stronger visual appeal inclusion in sponsored post. This allowed to determine whether it had a greater effect on consumer response with psychological ownership inclusion. Based on the results (see Table 8), **hypothesis H2 is accepted**. Criteria inclusion of stronger visual appeal has a greater effect on sponsored post with psychological ownership (M=6.0085) than on sponsored post without psychological ownership (M=4.4897). In addition, the test reveals that $p < 0.001$ and Cohen's $d = 1.403$ indicate high significance and a medium effect of the results.

Table 8*VA independent samples t-test*

		N	Mean	Levene's test p	t	p	Cohen's d
Visual appeal (VA)	Q1	118	6.0085	0.660	10.660	<0,001	1.403
	Q2	113	4.4897				

Source: compiled by the author using SPSS statistics.

H3: Stronger inclusion of informativeness in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.

For hypothesis testing, an independent sample t-test (see Table 9 and Annex 12) was conducted to compare the differences in means based on stronger informativeness inclusion in sponsored post. This allowed to determine whether it had a greater effect on consumer response with psychological ownership inclusion. Based on the results (see Table 9), **hypothesis H3 is accepted**. Criteria inclusion of stronger informativeness has a greater effect on sponsored post with psychological ownership (M=6.0034) than on sponsored post without psychological

ownership ($M=4.4265$). In addition, the test reveals that $p<0.001$ and Cohen's $d=1.671$ indicate high significance and a medium effect of the results.

Table 9

I independent samples t-test

		N	Mean	Levene's test p	t	p	Cohen's d
Informativeness (I)	Q1	118	6.0034	0.996	12.697	<0,001	1.671
	Q2	113	4.4265				

Source: compiled by the author using SPSS statistics.

H4: Sponsored post with psychological ownership has a higher perceived value than sponsored post without psychological ownership.

For hypothesis testing, an independent sample t-test (see Table 10 and Annex 13) was conducted to compare the differences in means based on inclusion of psychological ownership in sponsored post and determine whether it had a greater effect on consumer response in perceiving higher value. Based on the results (see Table 10), **hypothesis H4 is accepted**. Criteria inclusion of psychological ownership has a greater effect on consumer perception of value ($M=5.7429$) than on sponsored post without psychological ownership ($M=4.0000$). In addition, the test reveals that $p<0.001$ and Cohen's $d=1.586$ indicate high significance and a medium effect of the results.

Table 10

PV Independent samples t-test

		N	Mean	Levene's test p	t	p	Cohen's d
Perceived value (PV)	Q1	118	5.7429	0.551	12.050	<0,001	1.586
	Q2	113	4.0000				

Source: compiled by the author using SPSS statistics.

H5: Sponsored post with psychological ownership has a higher perceived enjoyment than sponsored post without psychological ownership.

For hypothesis testing, an independent sample t-test (see Table 11 and Annex 14) was conducted to compare the differences in means based on inclusion of psychological ownership in sponsored post and determine whether it had a greater effect on consumer response in perceiving higher enjoyment. Based on the results (see Table 11), **hypothesis H5 is accepted**. Criteria inclusion of psychological ownership has a greater effect on consumer perception of enjoyment ($M=6.0000$) than on sponsored post without psychological ownership ($M=4.1091$).

In addition, the test reveals that $p < 0.001$ and Cohen's $d = 1.700$ indicate high significance and a strong effect of the results.

Table 11

PE independent samples t-test

		N	Mean	Levene's test p	t	p	Cohen's d
Perceived enjoyment (PE)	Q1	118	6.0000	0.391	12.918	<0,001	1.700
	Q2	113	4.1091				

Source: compiled by the author using SPSS statistics.

H6: Perceived value has a positive influence on willingness to pay more.

For hypothesis testing, a Pearson correlation analysis (see Table 12 and Annex 15) was conducted to test if there was a relationship and significance of perceived value (PV) on willingness to pay more (WTPM). Based on the test results, **hypothesis H6 is accepted**. In questionnaire 1 (Q1), $R^2 = 0.578$ and $p < 0.001$. In questionnaire 2 (Q2), $R^2 = 0.527$ and $p < 0.001$. Correlation analysis shows that there is a relationship and significance of perceived value on willingness to pay more.

Table 12

Correlation of PV on WTPM

Questionnaire	Constructs	Name	Perceived value (PV)	Willingness to pay more (WTPM)
Q1 sponsored post with PO stimulus	Perceived value (PV)	Pearson correlation	1	0.578
		Sig. (1-tailed)		$p < 0.001$
	Willingness to pay more (WTPM)	Pearson correlation	0.578	1
		Sig. (1-tailed)	$p < 0.001$	
Q2 sponsored post without PO stimulus	Perceived value (PV)	Pearson correlation	1	0.527
		Sig. (1-tailed)		$p < 0.001$
	Willingness to pay more (WTPM)	Pearson correlation	0.527	1
		Sig. (1-tailed)	$p < 0.001$	

Source: compiled by the author using SPSS statistics.

In addition, to support the correlation analysis of perceived value on willingness to pay more, a linear regression analysis was conducted (see Annex 18 and Annex 19). Based on the results of questionnaire 1, perceived value has values of $t = 7.631$, $p < 0.001$, and standardised coefficients $\beta = 0.578$, showing positive significance on willingness to pay more, there $R^2 = 0.334$, $F(1) = 58.225$, and ANOVA = $p < 0.001$. In questionnaire 2, perceived value has values of $t = 6.532$, $p < 0.001$, and standardised coefficient $\beta = 0.527$, showing significance

on willingness to pay more, with $R^2=0.278$, $F(1)=42.672$, and ANOVA $p<0.001$. The results add to correlation analysis, provide additional information, and confirm hypothesis.

H7: Perceived value has a positive influence on the urge to buy impulsively.

For hypothesis testing, a Pearson correlation analysis (see Table 13 and Annex 16) was conducted to test if there was a relationship and significance of perceived value (PV) on the urge to buy impulsively (UTBI). Based on the test results, **hypothesis H7 is accepted**. In questionnaire 1 (Q1), $R^2=0.564$ and $p<0.001$. In questionnaire 2 (Q2), $R^2=0.533$ and $p<0.001$. Correlation analysis shows that there is a relationship and significance of perceived value on the urge to buy impulsively.

Table 13

Correlation of PV on UTBI

Questionnaire	Constructs	Name	Perceived value (PV)	Urge to buy impulsively (UTBI)
Q1 sponsored post with PO stimulus	Perceived value (PV)	Pearson correlation	1	0.564
		Sig. (1-tailed)		$p<0.001$
	Urge to buy impulsively (UTBI)	Pearson correlation	0.564	1
		Sig. (1-tailed)	$p<0.001$	
Q2 sponsored post without PO stimulus	Perceived value (PV)	Pearson correlation	1	0.533
		Sig. (1-tailed)		$p<0.001$
	Urge to buy impulsively (UTBI)	Pearson correlation		1
		Sig. (1-tailed)	$p<0.001$	

Source: compiled by the author using SPSS statistics.

In addition, to support a correlation analysis of perceived value on the urge to buy impulsively, a linear regression analysis was conducted (see Annex 20 and Annex 21). Based on the results of questionnaire 1, perceived value has values of $t=7.364$, $p<0.001$, and standardised coefficients $\beta=0.564$, showing positive significance on the urge to buy impulsively, with $R^2=0.319$, $F(1)=54.227$, and ANOVA $p<0.001$. In questionnaire 2, perceived value has values of $t=6.645$, $p<0.001$, and standardised coefficients $\beta=0.533$, showing significance on the urge to buy impulsively, there $R^2=0.285$, $F(1)=44.150$, and ANOVA = $p<0.001$. The results add to correlation analysis, provide additional information, and confirm hypotheses.

H8: Perceived enjoyment has a positive influence on the urge to buy impulsively.

For hypothesis testing, a Pearson correlation analysis (see Table 14 and Annex 17) was conducted to test if there was a relationship and significance of perceived enjoyment (PE) on

the urge to buy impulsively (UTBI). Based on the test results, **hypothesis H8 is accepted**. In questionnaire 1 (Q1), $R^2=0.495$ and $p<0.001$. In questionnaire 2 (Q2), $R^2=0.594$ and $p<0.001$. Correlation analysis shows that there is a relationship and significance of perceived enjoyment on the urge to buy impulsively.

Table 14

Correlation of PE on UTBI

Questionnaire	Constructs	Name	Perceived enjoyment (PE)	Urge to buy impulsively (UTBI)
Q1 sponsored post with PO stimulus	Perceived enjoyment (PE)	Pearson correlation	1	0.495
		Sig. (1-tailed)		$p<0.001$
	Urge to buy impulsively (UTBI)	Pearson correlation	0.495	1
		Sig. (1-tailed)	$p<0.001$	
Q2 sponsored post without PO stimulus	Perceived enjoyment (PE)	Pearson correlation	1	0.594
		Sig. (1-tailed)		$p<0.001$
	Urge to buy impulsively (UTBI)	Pearson correlation	0.594	1
		Sig. (1-tailed)	$p<0.001$	

Source: compiled by the author using SPSS statistics.

In addition, to further study the correlation analysis of perceived enjoyment on the urge to buy impulsively, a linear regression analysis was conducted (see Annex 22 and Annex 23). Based on the results of questionnaire 1, perceived enjoyment has values of $t=6.143$, $p<0.001$, and standardised coefficients $\beta=0.495$, showing significance on the urge to buy impulsively, there $R^2=0.245$, $F(1)=37.735$, and ANOVA = $p<0.001$. In questionnaire 2, perceived enjoyment has values of $t=7.785$, $p<0.001$, and standardised coefficients $\beta=0.594$, showing significance on the urge to buy impulsively, there $R^2=0.353$, $F(1)=60.605$, and ANOVA = $p<0.001$. The results add to correlation analysis, provide additional information, and further confirm the hypothesis, as questionnaire 1 display significance, the effect of perceived enjoyment on the urge to buy impulsively exists.

Moreover, a deeper analysis of multiple regression was conducted on questionnaire 2 (Q2) construct relationship between perceived enjoyment and the urge to buy impulsively (see Annex 24). The multiple regression analysis was conducted using separate statements of perceived enjoyment to understand which statement or statements had highest significance on the urge to buy impulsively. The results showed that $R^2=0.384$, ANOVA = $p<0.001$, and $F=22.644$. In addition, looking at the coefficients of statements, only one statement, “My interaction with this sponsored post was unpleasant or pleasant”, showed high significance,

with $p < 0.001$, $t = 3.686$, and standardised coefficients $\beta = 0.477$. Other statements did not reach the necessary p value. Due to this statement, a higher correlation and significance were calculated.

H9: Impulsive buying tendency moderates the relationship between perceived enjoyment and the urge to buy impulsively.

For hypothesis testing, a moderation analysis was conducted (see Table 15, Annex 25, and Annex 26) using the PROCESS procedure to test the significance of the impulsive buying tendency (IBT) effect on the relationship between perceived enjoyment (PE) and the urge to buy impulsively (UTBI). In questionnaire 1, the overall model showed significance, there $R^2 = 0.4401$, $F = 29.8874$, and $p < 0.001$. Next, the relationship ($X * W$) between perceived enjoyment and impulsive buying tendency was measured, and the interaction (Int_1) showing small $t = -0.6341$ and high $p = 0.5273$ values. In questionnaire 2, the overall model showed significance, there $R^2 = 0.5002$, $F = 36.3687$, and $p < 0.001$. Then, the relationship ($X * W$) between perceived enjoyment and impulsive buying tendency was measured, and the interaction (Int_1) showing small $t = 1.9071$ and high $p = 0.0591$ values. The p value are higher than 0.05, which indicates a lack of statistical significance; therefore, **hypothesis H9 is rejected**. While the calculations showed the significance of the models, the small t value and high p value revealed that the impulsive buying tendency did not moderate the relationship between perceived enjoyment and the urge to buy impulsively. Moreover, based on previous calculations on H8, the relationship (effect) between perceived enjoyment and the urge to buy impulsively exist, only moderation has no effect on this relationship.

Table 15

Moderation (PROCESS) of IMT on the relationship of PE and UTBI

	Questionnaire	R Square	F	t (Int_1)	p (Int_1)
Impulsive buying tendency	Q1	0.4401	29.8874	-0.6341	0.5273
	Q2	0.5002	36.3687	1.9071	0.0591

Source: compiled by the author using SPSS statistics.

H10: Impulsive buying tendency moderates the relationship between perceived value and the urge to buy impulsively.

For hypothesis testing, a moderation analysis was conducted (see Table 16, Annex 27, and Annex 28) using the PROCESS procedure to test the significance of the impulsive buying tendency (IBT) effect on the relationship between perceived value (PV) and the urge to buy impulsively (UTBI). In questionnaire 1, the overall model showed significance, there $R^2 = 0.4363$, $F = 29.4100$, and $p < 0.001$. Next, the relationship ($X * W$) between perceived value

and impulsive buying tendency was measured, and the interaction (Int_1) showing small $t=0.0673$ and high $p=0.9465$ values. In questionnaire 2, the overall model showed significance, there $R^2=0.3842$, $F=22.6705$, and $p<0.001$. Then, the relationship ($X*W$) between perceived value and impulsive buying tendency was measured, and the interaction (Int_1) showing small $t=0.1884$ and high $p=0.8509$ values. The p values are higher than 0.05, which indicates a lack of statistical significance; therefore, **hypothesis H10 is rejected**. While the calculations showed the significance of the models, the small t value and high p value revealed that the impulsive buying tendency did not moderate the relationship between perceived value and the urge to buy impulsively. Moreover, based on previous calculations on H7, the relationship (effect) between perceived value and the urge to buy impulsively exist, only moderation has no effect on this relationship.

Table 16

Moderation (PROCESS) of IMT on the relationship of PV and UTBI

	Questionnaire	R Square	F	t (Int_1)	p (Int_1)
Impulsive buying tendency	Q1	0.4363	29.4100	0.0673	0.9465
	Q2	0.3842	22.6705	0.1884	0.8509

Source: compiled by the author using SPSS statistics.

H11: Hedonic and utilitarian click-through motivation moderates the relationship between perceived value and the urge to buy impulsively.

For hypothesis testing, a moderation analysis was conducted (see Table 17, Annex 29, and Annex 30) using the PROCESS procedure to test the significance of hedonic and utilitarian click-through motivation (HUCTM) effect on the relationship between perceived value (PV) and the urge to buy impulsively (UTBI). In questionnaire 1, the overall model showed significance, there $R^2=0.3869$, $F=23.9826$, and $p<0.001$. Next, the relationship ($X*W$) between perceived value and hedonic and utilitarian click-through motivation was measured, and the interaction (Int_1) showing small $t=0.8202$ and high $p=0.4138$. values. In questionnaire 2, the overall model showed significance, there $R^2=0.4064$, $F=24.8728$, and $p<0.001$. Then, the relationship ($X*W$) between perceived value and hedonic and utilitarian click-through motivation was measured, and the interaction (Int_1) showing small $t=1.1126$ and high $p=0.2683$. values. The p values are higher than 0.05, which indicates a lack of statistical significance; therefore, **hypothesis H11 is rejected**. While the calculations showed the significance of the models, the small t value and high p value revealed that hedonic and utilitarian click-through motivation did not moderate the relationship between perceived value and the urge to buy impulsively. Moreover, based on previous calculations on H7, the

relationship (effect) between perceived value and the urge to buy impulsively exist, only moderation has no effect on this relationship.

Table 17

Moderation (PROCESS) of HUCTM on the relationship of PV and UTBI

	Questionnaire	R Square	F	t (Int_1)	p (Int_1)
Hedonic and utilitarian click-through motivation	Q1	0.3869	23.9826	0.8202	0.4138
	Q2	0.4064	24.8728	1.1126	0.2683

Source: compiled by the author using SPSS statistics.

H12: Hedonic and utilitarian click-through motivation moderates the relationship between perceived enjoyment and the urge to buy impulsively.

For hypothesis testing, a moderation analysis was conducted (see Table 18, Annex 31, and Annex 32) using the PROCESS procedure to test the significance of hedonic and utilitarian click-through motivation (HUCTM) effect on the relationship between perceived enjoyment (PE) and the urge to buy impulsively (UTBI). In questionnaire 1, the overall model showed significance, there $R^2=0.3589$, $F=21.2742$, and $p<0.001$. Next, the relationship ($X*W$) between perceived enjoyment and hedonic and utilitarian click-through motivation was measured, and the interaction (Int_1) showing small $t=-0.0862$ and high $p=0.9314$. values. In questionnaire 2, the overall model showed significance, there $R^2=0.4416$, $F=28.7317$, and $p<0.001$. Then, the relationship ($X*W$) between perceived enjoyment and hedonic and utilitarian click-through motivation was measured, and the interaction (Int_1) showing small $t=1.9522$ and high $p=0.0535$. values. The p values are higher than 0.05, which indicates a lack of statistical significance; therefore, **hypothesis H12 is rejected**. While the calculations showed the significance of the models, the small t value and high p value revealed that hedonic and utilitarian click-through motivation did not moderate the relationship between perceived enjoyment and the urge to buy impulsively. Moreover, based on previous calculations on H8, the relationship (effect) between perceived enjoyment and the urge to buy impulsively exist, only moderation has no effect on this relationship.

Table 18

Moderation (PROCESS) of HUCTM on the relationship of PE and UTBI

	Questionnaire	R Square	F	t (Int_1)	p (Int_1)
Hedonic and utilitarian click-through motivation	Q1	0.3589	21.2742	-0.0862	0.9314
	Q2	0.4416	28.7317	1.9522	0.0535

Source: compiled by the author using SPSS statistics.

Overall, the research data results were analysed, and hypotheses tested. The hypotheses were tested using SPSS statistics. Calculations of independent samples t-test, correlation analysis, regression analysis, and moderation were conducted. Out of the 12 hypotheses, 8 were accepted and 4 were rejected. Further analysis and comparison with the past research were conducted in the following section: discussion of the research analysis.

3.3. Discussion of the research results

The problem of the research was how the urge to buy impulsively (through consumer perceptions) is affected by psychological ownership implementation in sponsored post. The aim of this research was to empirically explore how inclusion of psychological ownership in sponsored post through text (informativeness), image (visual appeal), and promotional offer (promotional rewards) can influence consumers perceptions (perceived value and perceived enjoyment) on the urge to buy impulsively. In addition, based on past research, the effect on willingness to pay more was also measured. To test the problem, the aim, and created research model, 12 hypotheses were raised using promotional rewards, informativeness, visual appeal, psychological ownership, perceived value, perceived enjoyment, willingness to pay more, the urge to buy impulsively, impulsive buying tendency, and hedonic and utilitarian click-through motivation. The hypotheses were tested using various measurements using SPSS statistics of independent samples t-test, correlation analysis, regression analysis, and moderation analysis using the PROCESS procedure. Based on the tests conducted, 8 out of 12 hypotheses (see Table 19) were accepted. As most of the hypotheses were accepted, it showed that there was a relationship between the majority of the variables; thus, the model was found to be acceptable.

Table 19

Hypotheses overall evaluation

No.	Hypothesis	Result
H1	The inclusion of promotional rewards in sponsored post with psychological ownership has a stronger effect on consumer response than in sponsored post without psychological ownership.	Accepted
H2	Stronger inclusion of visual appeal in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.	Accepted
H3	Stronger inclusion of informativeness in sponsored post with psychological ownership has a greater effect on consumer response compared to sponsored post without psychological ownership.	Accepted

Continuation of Table 19

H4	Sponsored post with psychological ownership has a higher perceived value than sponsored post without psychological ownership.	Accepted
H5	Sponsored post with psychological ownership has a higher perceived enjoyment than sponsored post without psychological ownership.	Accepted
H6	Perceived value has a positive influence on willingness to pay more.	Accepted
H7	Perceived value has a positive influence on the urge to buy impulsively.	Accepted
H8	Perceived enjoyment has a positive influence on the urge to buy impulsively.	Accepted
H9	Impulsive buying tendency moderates the relationship between perceived enjoyment and the urge to buy impulsively.	Rejected
H10	Impulsive buying tendency moderates the relationship between perceived value and the urge to buy impulsively.	Rejected
H11	Hedonic and utilitarian click-through motivation moderates the relationship between perceived value and the urge to buy impulsively.	Rejected
H12	Hedonic and utilitarian click-through motivation moderates the relationship between perceived enjoyment and the urge to buy impulsively.	Rejected

Source: compiled by the author.

Inclusion of promotional rewards in advertising messages has a stronger effect on consumer response in a positive way. Jung et al. (2016) conducted research by testing different advertising values (one being reward inclusion) on consumer behaviour towards different types of Facebook advertisements (homepage, paid, and organic). The researchers discovered that reward inclusion can be a significant predictor of more positive behaviour towards the advertisement (Jung et al., 2016). In addition, notice of a special promotion can also have a positive influence on a person's value perception, as the researcher Um et al. (2023) discovered in their research on the urge to buy impulsively. Moreover, inclusion of a free reward can have a more positive view towards the promotional offer, and a person can experience psychological ownership (Baer and Brown, 2012; Morewedge et al., 2021). In this research, the results are in accordance with past research and showed that the inclusion of promotional rewards (using psychological ownership stimuli) in sponsored posts has a stronger positive effect from a person (H1).

The inclusion of stronger visual appeal in advertising messages leads to a stronger positive effect on consumer response. Parboteeah et al. (2009) conducted research on how website characteristics such as visual appeal can have an influence on the urge to buy impulsively and found it to have significance on the consumer's inner responses. In addition, through visual appeal, inclusion, and manipulation of additional stimulants such as showcasing the usage of the service or product, the vividness of colours can stimulate an experience of

psychological ownership (Kamleitner and Feuchtl, 2015; Morewedge et al., 2021). Based on the research results, they are in accordance with past research, and a conclusion can be drawn that a stronger inclusion of visual appeal (using psychological ownership stimuli) in a sponsored post has a stronger positive response from a person (H2). Moreover, when looking at the results, visual appeal showed to be the most significant construct. This could mean that sponsored post image and visual presentation should be the most considered then including stimuli.

Inclusion of stronger informativeness in advertising messages leads to a stronger positive effect on consumer response. Setyani et al. (2019) studied how different psychological mechanisms in personalised advertising messages on social media can lead to the urge to buy impulsively and found that informativeness was the most significant for the consumer. The way the information is presented can have an effect on consumer response (Setyani et al., 2019). Being able to present information in text form allows for manipulation, inclusion of various stimuli such as emotional, powerful, engaging phrasings, and imagination-creating that can stimulate psychological ownership experience (Peck and Shu, 2009; Che Omar et al., 2015; Kamleitner and Feuchtl, 2015; Hartzmark et al., 2021; Morewedge et al., 2021). Based on the research results, they are in accordance with past research, and a conclusion can be drawn that stronger inclusion of informativeness (using psychological ownership stimuli) in a sponsored post has a stronger positive response from a person (H3).

Inclusion of psychological ownership in a sponsored post has a stronger effect on consumer response in a positive way. Changing a person's cognitive perspective can lead to emotional or sudden reactions, such as an experience of psychological ownership, that can change their perceptions (Peck and Shu, 2011). Changing consumer perceptions by focusing on the product or service's benefits and imagery enchantment can increase valuation, as found by past research (Peck and Shu, 2009). Deng et al. (2021) studied the effect of tourist value co-creation and psychological ownership on perceived value and discovered that psychological ownership has a positive effect on tourists' perceived value. The research results are in accordance with past research. The research showed that the inclusion of psychological ownership in a sponsored post increases consumer perceived value (H4). Moreover, the inclusion of psychological ownership can lead to more positive consumer behaviour, such as perceived enjoyment (Tan and Yang, 2022). An increase in positive perceived enjoyment has been found by researchers to improve purchase decision-making (Tan and Yang, 2022). The results are in accordance with past research; thus, inclusion of psychological ownership in sponsored posts increases consumer perceived enjoyment (H5).

Stronger perceived value influences consumers' willingness to pay more. When a greater value is perceived by a customer for a product or service, an increase in price may seem acceptable and justified (Asatryan and Oh, 2008). Asatryan and Oh (2008) found that when consumers are exposed to a feeling of "mine", they experience attachment and perceive higher value, which leads to a higher willingness to pay more. Similar findings were made by Lessard-Bonaventure and Chebat (2015), Zhao et al. (2016), and Hartzmark et al. (2021), who also found that psychological ownership, besides other feelings, and perceptions, can increase the value of the product or service, leading to a willingness to pay more. Based on the research results, they are in accordance with past author statements, and a conclusion can be drawn that a stronger perceived value of the service increases in a positive way consumer willingness to pay more (H6) if a change in price were to occur.

When customers experience stronger perceptions of value and enjoyment, a stronger urge to buy impulsively occurs. Yang et al. (2021) divided and studied hedonic and utilitarian perceived values that can lead to the urge to buy impulsively in mobile commerce and discovered that both values showed significance for the urge to buy impulsively. Kim and Han (2014) discovered that when consumers perceive the advertisement as valuable, their purchase intention increases. In addition, Um et al. (2023) found that perceived value has a direct effect on consumer impulsive buying behaviour and then analysed factors affecting consumers' impulsive buying behaviour in mobile commerce. Similar findings were also made by Zhang Z. et al. (2022), who studied the mode of hunger and discovered that perceived value had a significant positive effect on consumers impulsive buying behaviour. Based on the research results, they are in accordance with those of past researchers. Then a person experiences a higher perceived value when exposed to an advertisement, which leads to the urge to buy impulsively (H7). Furthermore, Parboteeah et al. (2009) studied the influence of website characteristics on consumers' urges to buy impulsively, and perceived enjoyment was used as a mediating factor leading to the urge to buy impulsively. The study found that perceived enjoyment has a significant impact on the urge to buy impulsively (Parboteeah et al., 2009). In addition, Rao and Ko (2021) have similar findings about the significance of perceived enjoyment on the urge to buy impulsively when studying luxury brand purchasing. The results of this study are similar to those of past researchers; therefore, experiencing perceived enjoyment in an advertisement leads to the urge to buy impulsively (H8). Moreover, Parboteeah et al. (2009) also found that different types (task-relevant and mood-relevant) and levels (high and low) of presented stimulus on the website all had a significant effect on the urge to buy impulsively through perceived enjoyment, regardless of the stimulus level. This can also allow

to conclude and find similarity in the research results. An advertising message can be with or without a stimulus; however, through perceived enjoyment, the urge to buy impulsively can be experienced on a high level. This could depend on many reasons, such as a person's current goals, mood, and emotional state, especially as the urge to buy impulsively is an emotional reaction and different situations can stimulate a reaction (Parboteeah et al., 2009; Setyani et al., 2019). Overall, the findings show that inclusion of psychological ownership in sponsored post influenced consumer perceptions leading to the urge to buy impulsively.

A person with a high impulsive buying tendency is more likely to engage in impulsive buying (Lavuri et al., 2023). People who possess more impulsive buying attributes are found to experience more enjoyment and higher value (Parsad et al., 2021). Impulsive buying tendencies have been studied by researchers and found to have an influence on impulsive buying behaviours such as the urge to buy impulsively (Kwon and Ahn, 2021; Um et al., 2023). Um et al. (2023) discovered that impulsiveness has a positive effect on the urge to buy impulsively. Kwon and Ahn (2021) found that impulsive buying tendency does show an effect on impulsive buying behaviour; however, it did not show high significance. Moreover, Atulkar and Kesari (2018) studied consumer traits and situational factors in impulsive buying, and their results showed that impulsive buying tendency do show a relationship between the constructs, but the connection was low. Chen-Yu et al. (2022) found that different types of perceived values can lead to online impulsive buying of apparel, with impulsive buying tendency being a mediator and a strong predictor. On the contrary, the research findings are opposite to past research and do not show that impulsive buying tendency can moderate the relationship between perceptions of value and enjoyment towards the urge to buy impulsively (H9, H10). This could be since previous research placed and studied impulsive buying tendency as a mediator or a separate independent factor. Additionally, some past research results did show that even when measuring the direct effect of impulsive buying tendency, only a low effect was found (Atulkar and Kesari, 2018; Kwon and Ahn, 2021). Further, a study by Lee and Yi (2008) used buying impulsiveness traits as a moderating factor and studied if they influenced the relationships between consumer shopping emotions, pleasure, and arousal on impulsive buying. They only found significance between the relationship of pleasure and impulsive buying, and not with other variables (Lee and Yi, 2008). Moreover, the results of H7 and H8 showed the relationships (effect) of both perceived value and perceived enjoyment with the urge to buy impulsively exists, and only moderation showed no significance. Based on all of this, a conclusion could be drawn that if the impulsive buying tendency is placed as a

moderating factor, it does not show high enough significance and the relationships can exist without it.

Then, if a person is exposed to hedonic or utilitarian stimulus implementations in various online marketing situations, it can lead to a hedonic and utilitarian click-through motivation (Setyani et al., 2019). Such motivation usually exists in online environments where the final goal for a consumer is to take some sort of desired call-to-action (Wang et al., 2013). Social media advertising that has an impact on hedonic and utilitarian click-through motivation influences consumers' perceptions and the urge to buy impulsively (Karahanna et al., 2015; Wadera and Sharma, 2018; Setyani et al., 2019). Wang et al. (2013) researched consumer reasons to click on an advertising message and discovered that persuasive call-to-action and created emotional urge were the prime reasons for click-through motivation. In addition, Setyani et al. (2019) researched psychological mechanisms from personalised advertisements on the urge to buy impulsively and analysed the influence of hedonic and utilitarian click-through motivation. The researchers found that both utilitarian and hedonic click-through motivation enhance the impulsive urge to buy (Setyani et al., 2019). However, based on the research results, hedonic and utilitarian click-through motivation does not moderate the relationships between perception of value and enjoyment with the urge to buy impulsively (H11, H12); thus, they are not in accordance with past research. On the other hand, the results of H7 and H8 showed that the relationships (effect) exists of both perceived value and perceived enjoyment with the urge to buy impulsively and only the moderation showed no significance. Similarly to impulsive buying tendency moderation results, hedonic and utilitarian click-through motivation was used as a moderating factor and not as a direct or mediating factor, which could have influenced the results. To conclude, the relationships between perceived value and perceived enjoyment towards the urge to buy impulsively exist without additional effect made by hedonic and utilitarian click-through motivation.

All in all, the problem of the study was to understand if the urge to buy impulsively through change in consumer perceptions is affected by psychological ownership inclusion in a sponsored post. Moreover, the aim of the research was to test how inclusion of psychological ownership in sponsored post can have an effect on consumers perceptions on the urge to buy impulsively. The research results showed that relationships exist, and that psychological ownership can influence a change in consumer perceptions (perceived value and perceived enjoyment), which leads to the urge to buy impulsively. In addition, the findings also showed that positive perceived value can increase willingness to pay more. The results were in accordance with past research. On the other hand, moderating factors such as impulsive buying

tendency and hedonic and utilitarian click-through motivation did not show significance or influence and were opposite to past findings. Overall, the model is found to be important as significance is discovered in the psychological ownership inclusion in a sponsored post on consumer perceptions on the urge to buy impulsively.

CONCLUSIONS AND RECOMMENDATIONS

This research empirically explored how psychological ownership implementation through sponsored post elements (text, image, and promotional offer) can lead to changes in consumer perceptions on the urge to buy impulsively. A literature analysis was first conducted, followed by methodology on the topic, leading to research implementation and analysis of the collected data. Based on all the information and the research results, the following conclusions were made:

1. Impulsive buying is an unexpected reaction to inner psychological changes in the person that can happen when exposed to external stimuli such as social media advertisements. Before a person proceeds to buy impulsively an inner desire or the urge to buy impulsively is experienced. Social media advertisements, such as sponsored post is one way the urge to buy impulsively can be triggered. Sponsored post is one of the most used online advertisement formats by businesses, allowing them to promote products and services using visual, textual, and promotional offers. As sponsored post give various ways to attract customers, a stimuli inclusion in these elements allow for an effect on consumer perceptions such as perceived value and enjoyment. Then the consumer is attracted to the advertising message and experiences positive emotions; a stronger perceived enjoyment can be experienced by the person. In addition, when a person feels like the advertising message meets their needs and wants and sees it as beneficial, a higher perceived value is experienced. Then, when consumer perceptions (value and enjoyment) are changed positively, an urge to buy impulsively can occur. In addition, consumer inner characteristics like impulsive buying tendency and hedonic and utilitarian motivation based on past research can affect the urge to buy impulsively as well.
2. More studies are exploring how different stimuli can create a change in consumer, leading to impulsive buying behaviour. Psychological ownership is still a novel variable to consider, especially its adaptation to online situations. On the other hand, psychological ownership has been applied by businesses and can be experienced online. Psychological ownership can be expressed by using touch elements (button “Order” on image), imagination encouragement, a showcase of usage of the product or service, and additional benefit inclusions (a free gift, BOGO, free trial, etc.). Moreover, services that provide consumers with an experience are becoming a current desired purchase and are

suitable to be advertised using online advertising the most. However, most of the past research only focused on conducting research using products and not services. Additionally, if psychological ownership is experienced, it can affect consumer perceptions, such as perceived stronger value and enjoyment, which later can lead to a person taking various actions, such as having the willingness to pay more and the urge to buy impulsively.

3. The most used model to research impulsive buying behaviour was the S-O-R model. The S-O-R model allows for the analysis of consumers' inner responses to external stimuli. In addition, to study consumers' reactions to online situations and how given information is perceived, an information adoption model is used. A combination of both models was applied in this research to create the research model. Moreover, based on the created model, 12 research hypotheses were raised.
4. Based on past research, a quantitative research method using survey design was applied in the research. The instruments used to collect the data were two online surveys compiled with the same questions but a different sponsored posts were presented (with and without stimuli). Sponsored posts were created based on past research on psychological ownership, social media advertising, and impulsive buying behaviour. Moreover, the service was chosen using a separate, one-question survey, and the respondent had to choose one of the services. The chosen service was a holiday trip (travel package). The stimulus of psychological ownership was created using expert survey results, who chose 25 elements to be present in a sponsored post with psychological ownership. Using these elements as consideration, psychological ownership was presented by incorporating in the sponsored post a free gift, encouraging oneself to imagine using the service, showing a person enjoying and using the service, and an additional button on the image. Moreover, that message was presented by being informative, using bright colours, and using expressive writing. The other sponsored post was created without psychological ownership-encouraging elements; however, not every element selected by the experts could be eliminated in a without stimulus sponsored post. Actual button exclusion from the sponsored post, logo, limitation, possibility for finding out more (URL), and call-to-action (CTA) were not possible, which could have influenced the results. Furthermore, the sample size was calculated using a comparable research method, where a minimum sample size of 190 respondents was needed. Choosing this type of sample size calculation might not represent the needed number to represent the total population.

5. The empirical research was conducted using two questionnaires with different sponsored posts on the urge to buy impulsively. The questionnaires were shared on various Facebook groups between late October and early December. A total of 231 suitable responses were collected and used for the analysis. Most of the respondents were working women, with most ages between 18 to 40 years old and an income between levels of 701 to 1500 euros per month. Based on past research, women were more likely to engage in impulsive buying behaviour, and as the majority of the respondents were women, the collected data is more representative of Lithuanian women between the ages of 18 to 40 years and not the overall Lithuanian population.
6. The research results revealed that inclusion of psychological ownership in sponsored post elements (text, image, given offer) have an effect on consumer behaviour. The results showed that the inclusion of additional reward (promotional rewards), stronger visual appeal (showcase of usage; additional button inclusion in the image), and informativeness (imagination encouraging, expressive writing, and giving detailed information about the service) using psychological ownership stimuli has more positive reaction and an experience of psychological ownership occurs. In addition to this, the results revealed that visual appeal has been the most important construct for psychological ownership and should be prioritised when including psychological ownership stimuli in sponsored posts. Furthermore, inclusion of psychological ownership through sponsored post elements showed that stronger positive perceived value and perceived enjoyment are experienced. Then, when a stronger positive perceived value and enjoyment of the presented service is perceived by the person, the results showed it can encourage the urge to buy impulsively; therefore, the urge to buy impulsively is affected by psychological ownership. In addition, psychological ownership presented through advertising message elements can increase consumer willingness to pay more if the consumer sees the advertisement as beneficial, or, in other words, valuable.
7. In this research, the moderating variables of impulsive buying tendency with hedonic and utilitarian click-through motivation did not show to influence or strengthen a person's behaviour (perceptions of value and enjoyment) on the urge to buy impulsively. This could be because these elements in past research were used as separate independent or mediating factors and not as moderating factors. On the other hand, it also showed that the relationship between perceived value and perceived

enjoyment with the urge to buy impulsively exist without additional influence of these moderating constructs.

Based on past research and study findings, further theoretical recommendations are given:

1. The results showed that the inclusion of psychological ownership in sponsored post has an effect on consumer perceptions, leading to the urge to buy impulsively. For future studies, testing other perceptions or other feelings could be worth it. Such perceptions could be perceived usefulness, perceived attachment, or a perceived sense of loss. In addition, testing actual impulsive buying behaviour could also be beneficial for future research, as in this study, the urge to buy impulsively was measured, which is experienced before impulsive buying.
2. This research used a survey design. Future research could apply an actual experimental design, such as a factorial design. It could be achieved by comparing different types of sponsored post visuals; image and video formats could be used. Another way could be to test different types of social media advertisements or use different social media channels, such as YouTube, TikTok, Instagram, or Pinterest.
3. In future research, testing other types of services or even comparing more hedonistic versus more utilitarian services could be done. For example, online courses, gym memberships, concert ticket buying, TV/movie subscriptions, spa/massage, or car renting.
4. Future research could go deeper into demographics and compare the differences between genders to see if women or men living in Lithuania are affected by psychological ownership inclusion. In this research, most respondents were women, so the results are more representative of the female demographic in Lithuania. Collecting and comparing similar sample sizes of men and women in the new study could add to this research and either show that only women are affected by psychological ownership inclusion or show that men can be affected as well.

Based on past research and study findings, further practical recommendations are given for marketing practitioners and businesses selling services:

1. The results showed that the inclusion of psychological ownership in sponsored post does encourage a positive change in consumer response. It is recommended that then selling services include visuals that showcase the usage of the service in an enjoyable way. In addition, adding the most important details and the additional button “Order or order now” to the image of the sponsored post is recommended.

2. It is also recommended to include imagination-encouraging, expressive text, as it can stimulate the consumer to imagine having the service.
3. For businesses, it is recommended to provide clear, informative text about the advertised service, as well as add additional benefits, such as free gifts, that can encourage a higher positive value perception and lead to possible increased purchases.

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ANNEXES

Annex 1

Sponsored post with psychological ownership

 **Keliaukime Visur**
Remiama

👁️ Įsigyk savo pavasario rojų Turkijoje jau DABAR! 🌞🍹

Pabėk į savo svajonių pasaulį su mūsų išskirtiniu rudens pasiūlymu. Tavo pavasario atostogos Turkijoje jau laukia! 🌴🌍

Pasiūlymui priklauso:

- 🏠 Prabangus poilsis Relax Premium Resort & Spa viešbutyje
- ✈️ Skrydžiai į abi puses
- 🚗 Be rūpesčių pervežimai į ir iš oro uosto
- 🎁 Bei DOVANA – pasirinkta NEMOKAMA EKSKURSIJA su gidu! 🌞

Užmerk akis ir įsivaizduok, kaip šilti saulės spinduliai liečia tavo odą, egzotinių kokteilių skonį bei bendrų akimirų juoką. 🍹

Tai yra TAVO galimybė susikurti prisiminimus, kurie išliks visam gyvenimui.

Užtikrink savo pavasario rojų jau šiandien. Veik greitai – šis pasiūlymas galioja kelionėms balandžio-gegužės mėnesiais.

Sužinoti daugiau galite: <https://www.keliaukimevisur.lt/rudenspasiulymas>

Ar pasiruošei paversti savo pavasarį rojumi? 😊 Spausk „Užsakyti“ ir paverks savo svajones tikrove! 🌴🍹

#turkijosrojus #rudenspasiulymas #pavasarioatostogos #atostogoturkijoje



KELIAUKIMEVISUR.LT

Įsigyk savo pavasario rojų Turkijoje jau DABAR!
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UŽSAKYTI

👍 25 8 Komentarai

👍 Like 💬 Comment ➦ Share

Annex 2

Sponsored post without psychological ownership


Keliaukime Visur
Remiama

Įsigyk specialų rudens pasiūlymą savo pavasario atostogoms Turkijoje. ✈️

Pasiūlymui priklauso:

- 🏠 Poilsis Relax Premium Resort & Spa viešbutyje
- ✈️ Skrydžiai į abi puses
- 🚗 Pervežimai į ir iš oro uosto

Užsisakyk pavasario atostogas jau dabar! Galioja kelionėms balandžio-gegužės mėnesiais įsigijus iki lapkričio mėnesio pabaigos.



KELIAUKIMEVISUR.LT
Rudens pasiūlymas pavasario atostogoms
<https://www.keliaukimevisur.lt/rudenspasiulymas>

UŽSAKYTI

👍 25 8 Komentarai

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Annex 3

Questionnaire 1 (Q1) in Lithuanian

Laba diena,

Esu Vilniaus universiteto verslo mokyklos skaitmeninės rinkodaros krypties magistro studentė. Šiuo metu vykdau mokslinio darbo tyrimą apie tai, kaip psichologinės nuosavybės elementų buvimas reklaminėje žinutėje veikia kliento suvokimą ir skatina norą pirkti impulsyviai.

Jūsų dalyvavimas ir atsakymai labai prisidėtų prie šio tyrimo įgyvendinimo ir būtų be galo vertingi ateities moksliniams tyrimams.

Apklausa yra anoniminė. Surinkti duomenys bus panaudoti tik moksliniam tyrimui atlikti.

Šios apklausos atlikimas Jums užtruks apie 10 minučių.

Jei turėtumėte klausimų dėl tyrimo ar anketos galite kreiptis el. paštu: simona.vaicekauskaite@vm.stud.vu.lt.

Dėkoju už Jūsų dalyvavimą ir pagalbą prisidedant prie tyrimo.

Kontrolinis klausimas

Ar Jums yra tekę pirkti paslaugas internetu? Pavyzdys: poilsinė/pažintinė kelionė, spa, masažas, koncerto bilietas, internetiniai kursai, automobilio nuoma, sportavimo narystė, internetinės televizijos/kino prenumeratos ir panašiai. Pažymėkite vieną Jums tinkamą atsakymo variantą – taip arba ne.

Taip
Ne

Pirma dalis

Įsivaizduokite, kad naršote po savo Facebook paskyrą ir pamatote šią reklaminę žinutę. Atidžiai peržiūrėkite bei įvertinkite reklaminę žinutę (paveikslėlį, tekstą, pasiūlymą, kitus elementus).

Toliau anketoje pasirinkite Jums tinkamiausius atsakymus į pateiktus klausimus.

Keliaukime Visur
Remiama

Įsigyk savo pavasario rojų Turkijoje jau DABAR! 🌞🌴

Pabėk į savo svajonių pasaulį su mūsų išskirtiniu rudens pasiūlymu. Tavo pavasario atostogos Turkijoje jau laukia! 🌴🌞

Pasiūlymui priklauso:

- Prabangus poilsis Relax Premium Resort & Spa viešbutyje
- Skrydžiai į abi puses
- Be rūpesčių pervedimai į ir iš oro uosto
- Bei DOVANA – pasirinkta NEMOKAMA EKSKURSIJA su gidu! 🌴

Užmerk akis ir įsivaizduok, kaip šilti saulės spinduliai liečia tavo odą, egzotinį kokteilį skonį bei bendrą akimirklų juoką. 🌴

Tai yra TAVO galimybė susikurti prisiminimus, kurie išliks visam gyvenimui.

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Sužinoti daugiau galite: <https://www.keliaukimevisur.lt/rudenspasiulymas>

Ar pasiruošėi paversti savo pavasarį rojumi? 🌴 Spausk „Užsakyti“ ir paverks savo svajones tikrove! 🌴

#turkijosrojus #rudenspasiulymas #pavasarioatostogos #atostogosturkijoje



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Įsigyk savo pavasario rojų Turkijoje jau DABAR!
<https://www.keliaukimevisur.lt/rudenspasiulymas> UŽSAKYTI

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Įvertinkite, ką galvojate apie pateiktą pasiūlymą reklaminėje žinutėje. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

1. Reklaminė žinutė suteikia naudos.
2. Reklaminė žinutė siūlo nemokamus priedus (dovanų).
3. Reklaminė žinutė suteikia papildomą atlygį.

Įvertinkite reklaminės žinutės vizualinį patrauklumą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

4. Reklaminė žinutė yra vizualiai graži.
5. Reklaminė žinutė turi vizualiai malonų dizainą.
6. Reklaminė žinutė yra vizualiai patraukli.

Įvertinkite pateiktos informacijos reklaminėje žinutėje tinkamumą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

7. Reklaminė žinutė suteikia aktualią informaciją apie pateiktą paslaugą.
8. Reklaminė žinutė suteikia laikui tinkamą informaciją apie paslaugas.
9. Reklaminė žinutė suteikia aiškią informaciją apie siūlomą paslaugą.
10. Reklaminė žinutė yra tinkamas informacinis šaltinis.
11. Reklaminė žinutė yra tinkamas šaltinis sužinoti apie naujausias paslaugas.

Įvertinkite galimą nuosavybės jausmą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

12. Jaučiuosi tarsi reklamuojama paslauga yra mano.
13. Reklamuojamai paslaugai jaučiu aukštą nuosavybės jausmą.
14. Jaučiuosi tarsi man priklausytų reklamuojama paslauga.

Įvertinkite gaunama vertę iš reklaminės žinutės. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

15. Manau, kad reklaminė žinutė yra naudinga.
16. Manau, kad reklaminė žinutė yra vertinga.
17. Manau, kad reklaminė žinutė yra svarbi.

Įvertinkite, ar būtumėte pasiryžęs (-usi) mokėti daugiau, jei reklaminėje žinutėje esanti pasiūlymo kaina pakiltų. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

18. Aš ir toliau būsiu susidomėjęs (-usi) reklamine žinute, net jei pasikeistų kaina (pakiltų).
19. Kainos augimas neatbaidys.
20. Esu pasiryžęs (-usi) mokėti daugiau.
21. Geriau jau mokėčiau didesnę kainą.

Įvertinkite gaunamą malonumą iš reklaminės žinutės. Įvertinkite nuo 1 iki 7, kuomet 1 reiškia „visiškai bjauru/ nuobodu / nemalonu“, o 7 reiškia „visiškai smagu/ jaudinanti/ malonu“.

22. Mano sąveika su reklamine žinute buvo bjauri / smagi.
23. Mano sąveika su reklamine žinute buvo nuobodi / jaudinanti.
24. Mano sąveika su reklamine žinute buvo nemaloni / maloni.

Įvertinkite motyvaciją paspausti reklaminę žinutę su tikslu įsigyti paslaugą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

25. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą yra funkcionalu.
26. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą yra praktiška.
27. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą yra būtina.
28. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą yra žavu.
29. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą yra smagu.
30. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą jaudina.

Žemiau bus pateikta keletas teiginių apie pirkimo įpročius. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

31. Aš dažnai perku prekes / paslaugas neapgalvotai.
--

32. Kartais jaučiuosi tarsi perku prekes / paslaugas užvaldyta (-as) akimirkos.
33. „Pirk dabar, galvok apie tai vėliau“ puikiai mane apibūdina.
34. Esu pirkęs (-usi) prekes / paslaugas, kurių prieš tai neplanavau pirkti.
35. Aš dažnai perku neplanuotai.

Įvertinkite norą pirkti reklaminėje žinutėje pateiktą paslaugą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

36. Pajutau staigų norą ką nors nusipirkti pamačius šią reklaminę žinutę.
37. Aš norėčiau įsigyti reklaminėje žinutėje pateiktą paslaugą, net jei to nebuvo planavęs (-usi).
38. Aš norėčiau įsigyti reklaminėje žinutėje pateiktą paslaugą, net jei man to šiuo metu nereikia.

Antra dalis

Pabaigai, prašau atsakyti keletą klausimų apie save.

Jūsų lytis

Vyras
Moteris
Nenoriu atskleisti

Jūsų amžius

18 – 24
25 – 32
33 – 40
41 – 48
49 ir daugiau

Jūsų veikla

Studentas (-ė)
Dirbantis studentas (-ė)
Dirbantis (-i)
Nedirbantis (-i)
Dirbu sau
Kita

Jūsų vidutinės pajamos EURAIS per mėnesį (pasirinkite vieną variantą):

Iki 500
501 – 700
701 – 900
901 – 1200
1201 – 1500

1501 – 2000
2001 ir daugiau
Nenoriu atskleisti

Ačiū už Jūsų atsakymus.

Annex 4

Questionnaire 2 (Q2) in Lithuanian

Laba diena,

Esu Vilniaus universiteto verslo mokyklos skaitmeninės rinkodaros krypties magistro studentė. Šiuo metu vykdau mokslinio darbo tyrimą apie tai, kaip psichologinės nuosavybės elementų buvimas reklaminėje žinutėje veikia kliento suvokimą ir skatina norą pirkti impulsyviai.

Jūsų dalyvavimas ir atsakymai labai prisidėtų prie šio tyrimo įgyvendinimo ir būtų be galo vertingi ateities moksliniams tyrimams.

Apklausa yra anoniminė. Surinkti duomenys bus panaudoti tik moksliniam tyrimui atlikti.

Šios apklausos atlikimas Jums užtruks apie 10 minučių.

Jei turėtumėte klausimų dėl tyrimo ar anketos galite kreiptis el. paštu: simona.vaicekauskaite@vm.stud.vu.lt.

Dėkoju už Jūsų dalyvavimą ir pagalbą prisidedant prie tyrimo.

Kontrolinis klausimas

Ar Jums yra tekę pirkti paslaugas internetu? Pavyzdys: poilsinė/pažintinė kelionė, spa, masažas, koncerto bilietas, internetiniai kursai, automobilio nuoma, sportavimo narystė, internetinės televizijos/kino prenumeratos ir panašiai. Pažymėkite vieną Jums tinkamą atsakymo variantą – taip arba ne.

Taip
Ne

Pirma dalis

Įsivaizduokite, kad naršote po savo Facebook paskyrą ir pamatote šią reklaminę žinutę. Atidžiai peržiūrėkite bei įvertinkite reklaminę žinutę (paveikslėlį, tekstą, pasiūlymą, kitus elementus).

Toliau anketoje pasirinkite Jums tinkamiausius atsakymus į pateiktus klausimus.



Įvertinkite, ką galvojate apie pateiktą pasiūlymą reklaminėje žinutėje. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

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3. Reklaminė žinutė suteikia papildomą atlygį.

Įvertinkite reklaminės žinutės vizualinį patrauklumą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

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11. Reklaminė žinutė yra tinkamas šaltinis sužinoti apie naujausias paslaugas.

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Įvertinkite gaunama vertę iš reklaminės žinutės. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

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17. Manau, kad reklaminė žinutė yra svarbi.

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19. Kainos augimas neatbaidys.
20. Esu pasiryžęs (-usi) mokėti daugiau.
21. Geriau jau mokėčiau didesnę kainą.

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23. Mano sąveika su reklamine žinute buvo nuobodi / jaudinanti.
24. Mano sąveika su reklamine žinute buvo nemaloni / maloni.

Įvertinkite motyvaciją paspausti reklaminę žinutę su tikslu įsigyti paslaugą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

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30. Paspausti reklaminę žinutę su tikslu įsigyti paslaugą jaudina.

Žemiau bus pateikta keletas teiginių apie pirkimo įpročius. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

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32. Kartais jaučiuosi tarsi perku prekes / paslaugas užvaldyta (-as) akimirkos.
33. „Pirk dabar, galvok apie tai vėliau“ puikiai mane apibūdina.
34. Esu pirkęs (-usi) prekes / paslaugas, kurių prieš tai neplanavau pirkti.

35. Aš dažnai perku neplanuotai.

Įvertinkite norą pirkti reklaminėje žinutėje pateiktą paslaugą. Atsakymus žymėkite skalėje nuo 1 iki 7, kuomet 1 reiškia „visiškai nesutinku“, o 7 reiškia „visiškai sutinku“.

36. Pajutau staigų norą ką nors nusipirkti pamačius šią reklaminę žinutę.

37. Aš norėčiau įsigyti reklaminėje žinutėje pateiktą paslaugą, net jei to nebuvo planavęs (-usi).
--

38. Aš norėčiau įsigyti reklaminėje žinutėje pateiktą paslaugą, net jei man to šiuo metu nereikia.
--

Antra dalis

Pabaigai, prašau atsakyti keletą klausimų apie save.

Jūsų lytis

Vyras

Moteris

Nenoriu atskleisti

Jūsų amžius

18 – 24

25 – 32

33 – 40

41 – 48

49 ir daugiau

Jūsų veikla

Studentas (-ė)

Dirbantis studentas (-ė)

Dirbantis (-i)

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Dirbu sau

Kita

Jūsų vidutinės pajamos EURAIS per mėnesį (pasirinkite vieną variantą):

Iki 500

501 – 700

701 – 900

901 – 1200

1201 – 1500

1501 – 2000

2001 ir daugiau

Nenoriu atskleisti

Ačiū už Jūsų atsakymus.

Annex 5

Questionnaire in English

Hello,

I am a master's student at Vilnius University Business School in the digital marketing field. Currently, I am conducting a research on how the presence of psychological ownership elements inclusion in advertising messages can affect customer perceptions and encourage the urge to buy impulsively.

Your participation and responses would greatly contribute to the implementation of this research, and would be very valuable for future scientific research.

The survey is anonymous, and the collected data will only be used in the research.

It will take about 10 minutes to complete the survey.

If you have any questions about the research or the questionnaire, you can contact me via email at: simona.vaicekauskaite@vm.stud.vu.lt.

Thank you for your participation and assistance in contributing to the research.

Screening question

Have you ever bought services online? Example: holiday trips/sightseeing tours, spa/massage, concert tickets, online courses, car rental, gym membership, online TV/movie subscriptions, and similar. Choose one response that is appropriate for you – yes or no.

Yes
No

First part

Imagine that you are browsing through your Facebook account, and come across this sponsored post. Carefully review and evaluate the sponsored post (image, text, offer, other elements). Then, in the questionnaire, select the most appropriate answers to the provided questions.

<Sponsored post with or without psychological ownership.>

Evaluate what you think about the presented offer in the sponsored post. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

1. Sponsored post provide benefit.
2. Sponsored post offer free premiums (gifts).
3. Sponsored post gives additional rewards.

Evaluate the visual appeal of the sponsored post. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

4. Sponsored post is visually pleasing.
5. Sponsored post has visually pleasing design.
6. Sponsored post is visually appealing.

Evaluate the suitability of the information provided in the sponsored post. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

7. Sponsored post supplies relevant information on given services.
8. Sponsored post provides timely information on services.
9. Sponsored post provides accurate information about the service.
10. Sponsored post is a good source of information.
11. Sponsored post is a good source of up to date services.

Evaluate the potential sense of ownership. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

12. I feel like I own this advertised service.
13. I feel a very high degree of personal ownership of this advertised service.
14. I feel like this advertised service is mine.

Evaluate the perceived value from the sponsored post. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

15. I feel that sponsored post is useful.
16. I feel that sponsored post is valuable.
17. I feel that sponsored post is important.

Evaluate whether you would be willing to pay more if the price of the offer in the sponsored post increased. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

18. I will continue to be interested in sponsored post offers even if there may be some price increases.
19. Price increases will not deter.
20. I am willing to pay more.
21. Rather pay a higher price.

Evaluate the enjoyment gained from the sponsored post. Evaluate on a scale from 1 to 7, where 1 means “strongly disgusting/ dull/ unpleasant”, and 7 means “strongly enjoyable/ exiting/ pleasant”.

22. My interaction with this sponsored post was disgusting/enjoyable.
23. My interaction with this sponsored post was dull/exciting.

24. My interaction with this sponsored post was unpleasant/pleasant.
--

Evaluate the motivation to click on the sponsored post with the intention to buy the service. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

25. Clicking through the sponsored post to buy the service is functional.

26. Clicking through the sponsored post to buy the service is practical.
--

27. Clicking through the sponsored post to buy the service is necessary.
--

28. Clicking through the sponsored post to buy the service is delightful.

29. Clicking through the sponsored post to buy the service is fun.
--

30. Clicking through the sponsored post to buy the service is thrilling.
--

Below, you will find several statements about buying habits. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

31. I often buy products /services without thinking.
--

32. Sometimes I feel like buying products / services on the spur-of-the-moment.

33. “Buy now, think about it later”, describes me well.

34. I have bought products /services I had not intended to purchase.
--

35. I often make unplanned purchases.

Evaluate the urge to buy the service presented in the sponsored post. Mark your answers on a scale from 1 to 7, where 1 means “strongly disagree”, and 7 means “strongly agree”.

36. I felt a sudden urge to buy something after viewing sponsored post.

37. I want to buy the service from sponsored post even though I had not planned to purchase.
--

38. I want to buy the service from sponsored post even though I do not really need it.
--

Second part

At the end, please answer a few questions about yourself.

Your gender

Men

Woman

Prefer not to say

Your age

18 – 24

25 – 32

33 – 40

41 – 48

49 and more

Your status

Student
Working Student
Working
Not working
Working for myself
Other

Your average income in EUROS per month (choose one option):

Up to 500
501 – 700
701 – 900
901 – 1200
1201 – 1500
1501 – 2000
2001 and more
Prefer not to say

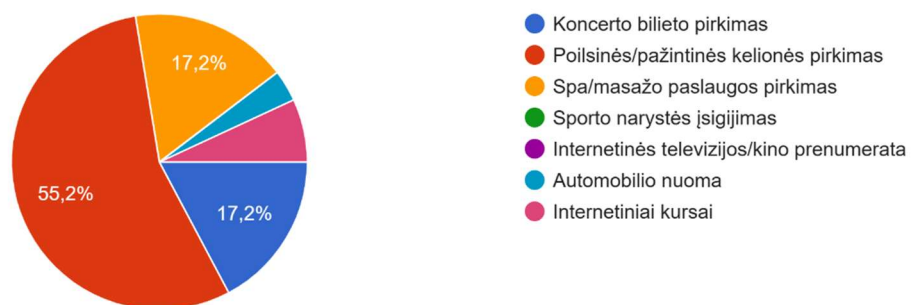
Thank you for your answers.

Annex 6

One question survey results for choosing service in sponsored posts

Prašau Jūsų pagalbos iš žemiau pateiktų paslaugų pasirinkti vieną paslaugą, kurią pirtumėte internetu:

29 atsakymai

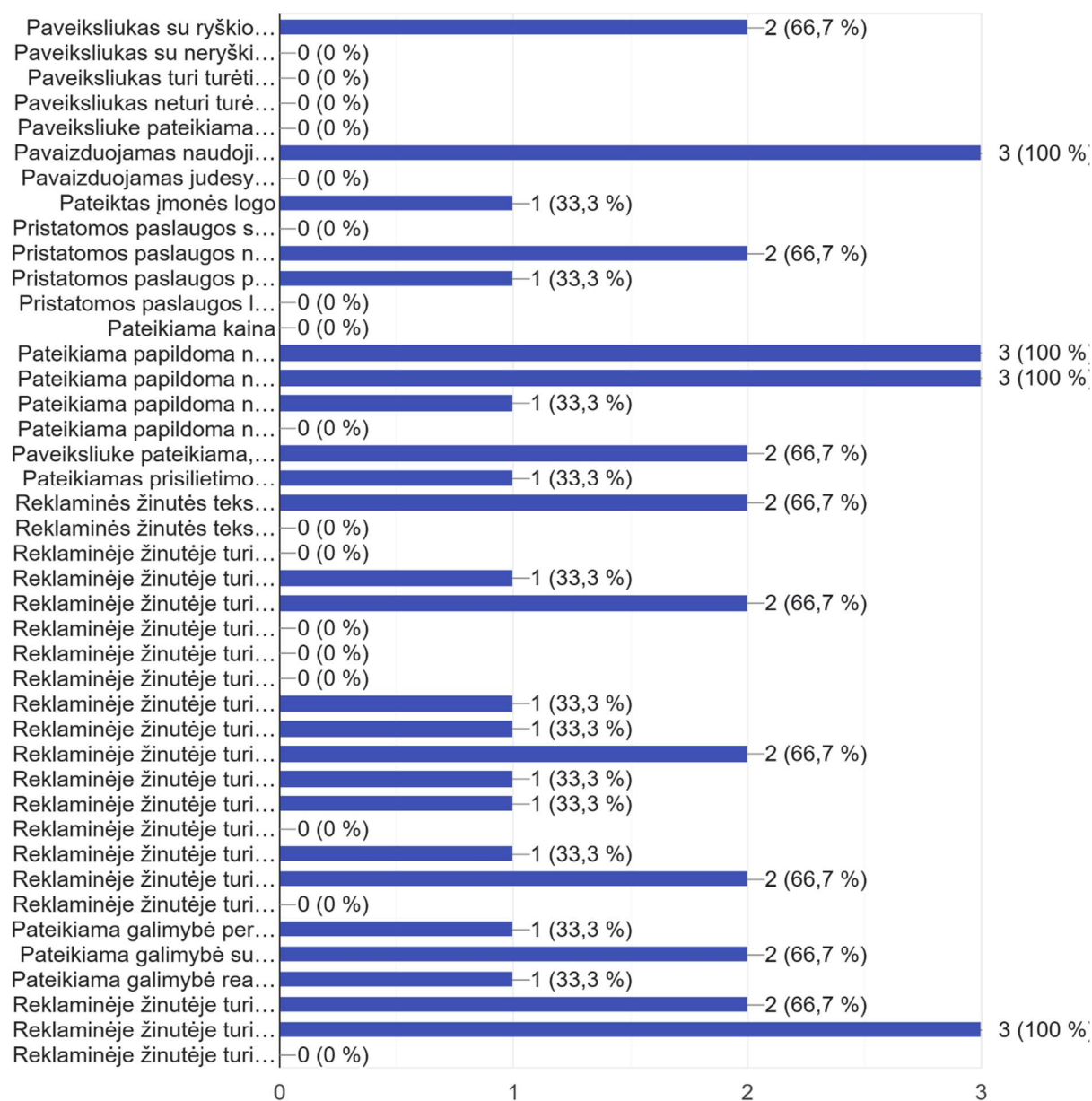


Annex 7

Expert survey results (together and separate) of chosen element for sponsored post with PO

Prašau Jūsų, kaip eksperto (-ės) pagalbos pažymėti elementus, kurie turėtų būti pateikti reklaminėje žinutėje su psichologine nuosavybe ir paskatintų šį jausmą bei norą pirkti impulsyviai:

3 atsakymai



Expert 1

Prašau Jūsų, kaip eksperto (-ės) pagalbos **pažymėti elementus**, kurie turėtų būti pateikti reklaminėje žinutėje su psichologine nuosavybe ir paskatintų šį jausmą bei norą pirkti impulsyviai:

- Paveiksliukas su ryškiomis spalvomis
- Paveiksliukas su neryškiomis spalvomis
- Paveiksliukas turi turėti daug spalvų
- Paveiksliukas neturi turėti daug spalvų
- Paveiksliuke pateikiama paslauga
- Pavaizduojamas naudojimasis paslauga
- Pavaizduojamas judesys/judėjimas (statiniame paveiksliuke)
- Pateiktas įmonės logo
- Pristatomos paslaugos savybės
- Pristatomos paslaugos naudos
- Pristatomos paslaugos prieinamumas/pasiekiamumas
- Pristatomos paslaugos lokacija/paskirstymas (jei paslauga suteikiama fiziškai)
- Pateikiama kaina
- Pateikiama papildoma nauda - nemokamas išbandymas
- Pateikiama papildoma nauda - dovana
- Pateikiama papildoma nauda - nuolaida
- Pateikiama papildoma nauda – 2+1 (Buy One, Get One free)
- Paveiksliuke pateikiama, kaip asmuo, kuris naudojasi paslauga yra patenkintas (-a)/laimingas (-a)
- Pateikiamas prisilietimo elementas (pavyzdžiui mygtukas “pirki/užsakyti dabar”)
- Reklaminės žinutės teksto stilius turi būti stiprus, emocionalus, išraiškingas
- Reklaminės žinutės teksto stilius turi būti paprastas be emocijų
- Reklaminėje žinutėje turi pasireikšti humoras
- Reklaminėje žinutėje turi pasireikšti/jaustis empatija
- Reklaminėje žinutėje turi pasireikšti/jaustis laimė/džiaugsmas
- Reklaminėje žinutėje turi pasireikšti/jaustis liūdesys

- Reklaminėje žinutėje turi pasireikšti/jaustis baimė
- Reklaminėje žinutėje turi pasireikšti/jaustis stresas
- Reklaminėje žinutėje turi pasireikšti praradimo jausmas
- Reklaminėje žinutėje turi pasireikšti prisiryšimo jausmas
- Reklaminėje žinutėje turi būti pateiktas įsivaizdavimas (kaip pats klientas naudojasi, turi paslaugą)
- Reklaminėje žinutėje turi būti naudojami skirtingi rašto stiliai (du, trys skirtingi raštai)
- Reklaminėje žinutėje turi būti naudojamas vieno rašto stilius
- Reklaminėje žinutėje turi būti pateiktas šūkis
- Reklaminėje žinutėje turi būti pateikti haštagai
- Reklaminėje žinutėje turi būti nurodytas laiko limitas (iki kada)
- Reklaminėje žinutėje turi būti pateiktas kiekis
- Pateikiama galimybė personalizuoti
- Pateikiama galimybė sužinoti daugiau (su URL)
- Pateikiama galimybė reaguoti (pamėgti, pasidalinti, komentuoti)
- Reklaminėje žinutėje turi būti pateiktas aiškus veiksmas (CTA)
- Reklaminėje žinutėje turi pasireikšti hedonizmas (malonumą skatinantys veiksniai)
- Reklaminėje žinutėje turi pasireikšti utilitarizmas (naudą skatinantys veiksniai)

Expert 2

Prašau Jūsų, kaip eksperto (-ės) pagalbos **pažymėti elementus**, kurie turėtų būti pateikti reklaminėje žinutėje su psichologine nuosavybe ir paskatintų šį jausmą bei norą pirkti impulsyviai:

- Paveikslukas su ryškiomis spalvomis
- Paveikslukas su neryškiomis spalvomis
- Paveikslukas turi turėti daug spalvų
- Paveikslukas neturi turėti daug spalvų
- Paveiksluke pateikiama paslauga
- Pavaizduojamas naudojimasis paslauga
- Pavaizduojamas judesys/judėjimas (statiniame paveiksliuke)
- Pateiktas įmonės logo
- Pristatomos paslaugos savybės
- Pristatomos paslaugos naudos
- Pristatomos paslaugos prieinamumas/pasiekiamumas
- Pristatomos paslaugos lokacija/paskirstymas (jei paslauga suteikiama fiziškai)
- Pateikiama kaina
- Pateikiama papildoma nauda - nemokamas išbandymas
- Pateikiama papildoma nauda - dovana
- Pateikiama papildoma nauda - nuolaida
- Pateikiama papildoma nauda – 2+1 (Buy One, Get One free)
- Paveiksluke pateikiama, kaip asmuo, kuris naudojasi paslauga yra patenkintas (-a)/laimingas (-a)
- Pateikiamas prisilietimo elementas (pavyzdžiui mygtukas “pirki/užsakyti dabar”)
- Reklaminės žinutės teksto stilius turi būti stiprus, emocionalus, išraiškingas
- Reklaminės žinutės teksto stilius turi būti paprastas be emocijų
- Reklaminėje žinutėje turi pasireikšti humoras
- Reklaminėje žinutėje turi pasireikšti/jaustis empatija
- Reklaminėje žinutėje turi pasireikšti/jaustis laimė/džiaugsmas
- Reklaminėje žinutėje turi pasireikšti/jaustis liūdesys

- Reklaminėje žinutėje turi pasireikšti/jaustis baimė
- Reklaminėje žinutėje turi pasireikšti/jaustis stresas
- Reklaminėje žinutėje turi pasireikšti praradimo jausmas
- Reklaminėje žinutėje turi pasireikšti prisiryšimo jausmas
- Reklaminėje žinutėje turi būti pateiktas įsivaizdavimas (kaip pats klientas naudojasi, turi paslaugą)
- Reklaminėje žinutėje turi būti naudojami skirtingi rašto stiliai (du, trys skirtingi raštai)
- Reklaminėje žinutėje turi būti naudojamas vieno rašto stilius
- Reklaminėje žinutėje turi būti pateiktas šūkis
- Reklaminėje žinutėje turi būti pateikti haštagai
- Reklaminėje žinutėje turi būti nurodytas laiko limitas (iki kada)
- Reklaminėje žinutėje turi būti pateiktas kiekis
- Pateikiama galimybė personalizuoti
- Pateikiama galimybė sužinoti daugiau (su URL)
- Pateikiama galimybė reaguoti (pamėgti, pasidalinti, komentuoti)
- Reklaminėje žinutėje turi būti pateiktas aiškus veiksmas (CTA)
- Reklaminėje žinutėje turi pasireikšti hedonizmas (malonumą skatinantys veiksniai)
- Reklaminėje žinutėje turi pasireikšti utilitarizmas (naudą skatinantys veiksniai)

Expert 3

Prašau Jūsų, kaip eksperto (-ės) pagalbos **pažymėti elementus**, kurie turėtų būti pateikti reklaminėje žinutėje su psichologine nuosavybe ir paskatintų šį jausmą bei norą pirkti impulsyviai:

- Paveikslukas su ryškiomis spalvomis
- Paveikslukas su neryškiomis spalvomis
- Paveikslukas turi turėti daug spalvų
- Paveikslukas neturi turėti daug spalvų
- Paveiksluke pateikiama paslauga
- Pavaizduojamas naudojimasis paslauga
- Pavaizduojamas judesys/judėjimas (statiniame paveiksliuke)
- Pateiktas įmonės logo
- Pristatomos paslaugos savybės
- Pristatomos paslaugos naudos
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- Pateikiama papildoma nauda - dovana
- Pateikiama papildoma nauda - nuolaida
- Pateikiama papildoma nauda – 2+1 (Buy One, Get One free)
- Paveiksluke pateikiama, kaip asmuo, kuris naudojasi paslauga yra patenkintas (-a)/laimingas (-a)
- Pateikiamas prisilietimo elementas (pavyzdžiui mygtukas “pirki/užsakyti dabar”)
- Reklaminės žinutės teksto stilius turi būti stiprus, emocionalus, išraiškingas
- Reklaminės žinutės teksto stilius turi būti paprastas be emocijų
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- Reklaminėje žinutėje turi pasireikšti/jaustis empatija
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- Reklaminėje žinutėje turi pasireikšti/jaustis liūdesys

- Reklaminėje žinutėje turi pasireikšti/jaustis baimė
- Reklaminėje žinutėje turi pasireikšti/jaustis stresas
- Reklaminėje žinutėje turi pasireikšti praradimo jausmas
- Reklaminėje žinutėje turi pasireikšti prisiryšimo jausmas
- Reklaminėje žinutėje turi būti pateiktas įsivaizdavimas (kaip pats klientas naudojasi, turi paslaugą)
- Reklaminėje žinutėje turi būti naudojami skirtingi rašto stiliai (du, trys skirtingi raštai)
- Reklaminėje žinutėje turi būti naudojamas vieno rašto stilius
- Reklaminėje žinutėje turi būti pateiktas šūkis
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- Reklaminėje žinutėje turi būti nurodytas laiko limitas (iki kada)
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- Pateikiama galimybė personalizuoti
- Pateikiama galimybė sužinoti daugiau (su URL)
- Pateikiama galimybė reaguoti (pamėgti, pasidalinti, komentuoti)
- Reklaminėje žinutėje turi būti pateiktas aiškus veiksmas (CTA)
- Reklaminėje žinutėje turi pasireikšti hedonizmas (malonumą skatinantys veiksniai)
- Reklaminėje žinutėje turi pasireikšti utilitarizmas (naudą skatinantys veiksniai)

Annex 8

Grouping of experts chosen element according to sponsored post text, image, and promotional offer

Tekstas (Text)	<p>Pristatomos paslaugos naudos Pristatomos paslaugos prieinamumas/pasiekiamumas Reklaminės žinutės teksto stilius turi būti stiptus, emocionalus, išraiškingas Reklaminėje žinutėje turi pasireikšti/jaustis empatija Reklaminėje žinutėje turi pasireikšti/jaustis laimė/džiaugsmas Reklaminėje žinutėje turi pasireikšti praradimo jausmas Reklaminėje žinutėje turi pasireikšti prisiryšimo jausmas Reklaminėje žinutėje turi būti pateiktas įsivaizdavimas (kaip pats klientas naudojasi, turi paslaugą) Reklaminėje žinutėje turi būti naudojami skirtingi rašto stiliai (du, trys skirtingi raštai) Reklaminėje žinutėje turi būti naudojamas vieno rašto stiliu Reklaminėje žinutėje turi būti pateikti haštagai Reklaminėje žinutėje turi būti nurodytas laiko limitas (iki kada) Reklaminėje žinutėje turi pasireikšti hedonizmas (malonumą skatinantys veiksniai)</p>
Paveikslukas (Image)	<p>Paveikslukas su ryškiomis spalvomis Pavaizduojamas naudojimasis paslauga Pateiktas įmonės logo Paveiksluke pateikiama, kaip asmuo, kuris naudojasi paslauga yra patenkintas (-a)/laimingas (-a) Pateikiamas prisilietimo elementas (pavyzdžiui mygtukas “pirki/užsakyti dabar”)</p>
Reklaminis pasiūlymas (Promotional offer)	<p>Pateikiama papildoma nauda - nemokamas išbandymas Pateikiama papildoma nauda – dovana Pateikiama papildoma nauda – nuolaida – pasirinkta viena – dovana nemokama Pateikiama galimybė personalizuoti</p>
Neįtraukta niekur (not grouped)	<p>Pateikiama galimybė reaguoti (pamėgti, pasidalinti, komentuoti) Reklaminėje žinutėje turi būti pateiktas aiškus veiksmas (CTA) Pateikiama galimybė sužinoti daugiau (su URL)</p>

Source: compiled by the author using expert survey results.

Annex 9

*Q2 Chronbatch's alpha of promotional rewards (PR)***Case Processing Summary**

		N	%
Cases	Valid	113	100.0
	Excluded ^a	0	.0
	Total	113	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.610	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Total Correlation	Cronbach's Alpha if Item Deleted
Sponsored post provide benefit.	5.50	4.770	.153	.805
Sponsored post offer free premiums (gifts).	7.31	2.912	.505	.373
Sponsored post gives additional rewards.	7.19	2.278	.664	.068

Case Processing Summary

		N	%
Cases	Valid	113	100.0
	Excluded ^a	0	.0
	Total	113	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.805	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Total Correlation	Cronbach's Alpha if Item Deleted
Sponsored post offer free premiums (gifts).	2.81	1.510	.675	.
Sponsored post gives additional rewards.	2.69	1.341	.675	.

Annex 10

*PR Independent samples t-test from***Group Statistics**

	Questionnaire	N	Mean	Std. Deviation	Std. Error Mean
PR	Q1	118	5.9576	1.08214	.09962
	Q2	113	3.3333	.83333	.07839

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference			
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
PR	Equal variances assumed	.900	.344	20.587	229	<.001	<.001	2.62429	.12747	2.37313	2.87546
	Equal variances not assumed			20.702	219.030	<.001	<.001	2.62429	.12677	2.37446	2.87413

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
PR	Cohen's d	.96847	2.710	2.350	3.066
	Hedges' correction	.97166	2.701	2.343	3.056
	Glass's delta	.83333	3.149	2.661	3.633

Annex 11

*VA Independent samples t-test***Group Statistics**

	Questionnaire	N	Mean	Std. Deviation	Std. Error Mean
VA	Q1	118	6.0085	1.11662	.10279
	Q2	113	4.4897	1.04566	.09837

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference			
	F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
VA Equal variances assumed	.194	.660	10.660	229	<.001	<.001	1.51880	.14248	1.23806	1.79954
VA Equal variances not assumed			10.675	228.888	<.001	<.001	1.51880	.14228	1.23846	1.79914

Independent Samples Effect Sizes

	Standardizer ^a	Point Estimate	95% Confidence Interval	
			Lower	Upper
VA	Cohen's d	1.08249	1.403	1.114 1.690
	Hedges' correction	1.08606	1.398	1.110 1.684
	Glass's delta	1.04566	1.452	1.130 1.771

Annex 12

*I Independent samples t-test***Group Statistics**

	Questionnaire	N	Mean	Std. Deviation	Std. Error Mean
I	Q1	118	6.0034	.95505	.08792
	Q2	113	4.4265	.93140	.08762

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference		
	F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
I	.000	.996	12.697	229	<.001	<.001	1.57684	.12419	1.33214	1.82155
			12.704	228.922	<.001	<.001	1.57684	.12412	1.33227	1.82141

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
I	Cohen's d	.94356	1.671	1.370	1.970
	Hedges' correction	.94666	1.666	1.365	1.963
	Glass's delta	.93140	1.693	1.351	2.031

Annex 13

*PV Independent samples t-test***Group Statistics**

	Questionnaire	N	Mean	Std. Deviation	Std. Error Mean
PV	Q1	118	5.7429	1.13010	.10403
	Q2	113	4.0000	1.06533	.10022

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference			
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
PV	Equal variances assumed	.356	.551	12.050	229	<.001	<.001	1.74294	.14464	1.45795	2.02793
	Equal variances not assumed			12.066	228.945	<.001	<.001	1.74294	.14445	1.45831	2.02757

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
PV	Cohen's d	1.09890	1.586	1.289	1.881
	Hedges' correction	1.10251	1.581	1.284	1.875
	Glass's delta	1.06533	1.636	1.299	1.969

Annex 14

*PE Independent samples t-test***Group Statistics**

	Questionnaire	N	Mean	Std. Deviation	Std. Error Mean
PE	Q1	118	6.0000	1.07196	.09868
	Q2	113	4.1091	1.15250	.10842

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference		
	F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
PE	.739	.391	12.918	229	<.001	<.001	1.89086	.14637	1.60244	2.17927
Equal variances assumed										
Equal variances not assumed			12.898	225.976	<.001	<.001	1.89086	.14660	1.60197	2.17974

Independent Samples Effect Sizes

	Standardizer ^a	Point Estimate	95% Confidence Interval	
			Lower	Upper
PE	Cohen's d	1.11208	1.700	2.000
	Hedges' correction	1.11574	1.695	1.994
	Glass's delta	1.15250	1.641	1.974

Annex 15

*Correlation of PV on WTPM***Correlations**

Questionnaire		PV	WTPM
Q1 sponsored post with POPV stimulus	Pearson Correlation	1	.578**
	Sig. (1-tailed)		<.001
	N	118	118
	WTPM Pearson Correlation	.578**	1
	Sig. (1-tailed)	<.001	
	N	118	118
Q2 sponsored post withoutPV PO stimulus	Pearson Correlation	1	.527**
	Sig. (1-tailed)		<.001
	N	113	113
	WTPM Pearson Correlation	.527**	1
	Sig. (1-tailed)	<.001	
	N	113	113

** . Correlation is significant at the 0.01 level (1-tailed).

Annex 16

*Correlation of PV on UTBI***Correlations**

Questionnaire		PV	UTBI	
Q1 sponsored post with POPV stimulus	Pearson Correlation	1	.564**	
	Sig. (1-tailed)		<.001	
	N	118	118	
	UTBI	Pearson Correlation	.564**	1
	Sig. (1-tailed)	<.001		
	N	118	118	
Q2 sponsored post withoutPV PO stimulus	Pearson Correlation	1	.533**	
	Sig. (1-tailed)		<.001	
	N	113	113	
	UTBI	Pearson Correlation	.533**	1
	Sig. (1-tailed)	<.001		
	N	113	113	

** . Correlation is significant at the 0.01 level (1-tailed).

Annex 17
Correlation of PE on UTBI

Correlations

Questionnaire		PE	UTBI
Q1 sponsored post with POPE stimulus	Pearson Correlation	1	.495**
	Sig. (1-tailed)		<.001
	N	118	118
	UTBI Pearson Correlation	.495**	1
	Sig. (1-tailed)	<.001	
	N	118	118
Q2 sponsored post withoutPE PO stimulus	Pearson Correlation	1	.594**
	Sig. (1-tailed)		<.001
	N	113	113
	UTBI Pearson Correlation	.594**	1
	Sig. (1-tailed)	<.001	
	N	113	113

** . Correlation is significant at the 0.01 level (1-tailed).

Annex 18

*Regression of PV on WTPM Q1***Correlations**

		WTPM	PV
Pearson Correlation	WTPM	1.000	.578
	PV	.578	1.000
Sig. (1-tailed)	WTPM	.	<.001
	PV	.000	.
N	WTPM	118	118
	PV	118	118

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.578 ^a	.334	.328	.98114

a. Predictors: (Constant), PV

b. Dependent Variable: WTPM

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.049	1	56.049	58.225	<.001 ^b
	Residual	111.665	116	.963		
	Total	167.714	117			

a. Dependent Variable: WTPM

b. Predictors: (Constant), PV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.851	.470		1.813	.072		
	PV	.612	.080	.578	7.631	<.001	1.000	1.000

a. Dependent Variable: WTPM

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.4638	5.1385	4.3686	.69213	118
Std. Predicted Value	-4.197	1.112	.000	1.000	118
Standard Error of Predicted Value	.091	.391	.119	.046	118
Adjusted Predicted Value	1.5515	5.1704	4.3676	.69349	118
Residual	-3.52608	2.06562	.00000	.97694	118
Std. Residual	-3.594	2.105	.000	.996	118
Stud. Residual	-3.610	2.120	.001	1.004	118
Deleted Residual	-3.55781	2.09534	.00108	.99318	118
Stud. Deleted Residual	-3.815	2.153	-.005	1.023	118
Mahal. Distance	.005	17.614	.992	2.334	118
Cook's Distance	.000	.088	.008	.015	118
Centered Leverage Value	.000	.151	.008	.020	118

a. Dependent Variable: WTPM

Annex 19

*Regression of PV on WTPM Q2***Correlations**

		WTPM	PV
Pearson Correlation	WTPM	1.000	.527
	PV	.527	1.000
Sig. (1-tailed)	WTPM	.	<.001
	PV	.000	.
N	WTPM	113	113
	PV	113	113

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.527 ^a	.278	.271	.94028

a. Predictors: (Constant), PV

b. Dependent Variable: WTPM

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.727	1	37.727	42.672	<.001 ^b
	Residual	98.138	111	.884		
	Total	135.865	112			

a. Dependent Variable: WTPM

b. Predictors: (Constant), PV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	.482	.345		1.397	.165	
	PV	.545	.083	.527	6.532	<.001	1.000 1.000

a. Dependent Variable: WTPM

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.0271	4.2959	2.6615	.58039	113
Std. Predicted Value	-2.816	2.816	.000	1.000	113
Standard Error of Predicted Value	.088	.265	.118	.042	113
Adjusted Predicted Value	.9862	4.3864	2.6611	.58153	113
Residual	-2.02470	3.24890	.00000	.93607	113
Std. Residual	-2.153	3.455	.000	.996	113
Stud. Residual	-2.167	3.527	.000	1.005	113
Deleted Residual	-2.05001	3.38539	.00038	.95492	113
Stud. Deleted Residual	-2.204	3.726	.003	1.018	113
Mahal. Distance	.000	7.930	.991	1.766	113
Cook's Distance	.000	.261	.010	.028	113
Centered Leverage Value	.000	.071	.009	.016	113

a. Dependent Variable: WTPM

Annex 20

*Regression of PV on UTBI Q1***Correlations**

		UTBI	PV
Pearson Correlation	UTBI	1.000	.564
	PV	.564	1.000
Sig. (1-tailed)	UTBI	.	<.001
	PV	.000	.
N	UTBI	118	118
	PV	118	118

Model Summary^b

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.564 ^a	.319	.313	1.03625

a. Predictors: (Constant), PV

b. Dependent Variable: UTBI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.229	1	58.229	54.227	<.001 ^b
	Residual	124.561	116	1.074		
	Total	182.791	117			

a. Dependent Variable: UTBI b. Predictors: (Constant), PV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.483	.496		2.989	.003		
	PV	.624	.085	.564	7.364	<.001	1.000	1.000

a. Dependent Variable: UTBI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1070	5.8525	5.0678	.70547	118
Std. Predicted Value	-4.197	1.112	.000	1.000	118
Standard Error of Predicted Value	.096	.413	.126	.049	118
Adjusted Predicted Value	2.3163	5.9014	5.0678	.70313	118
Residual	-4.02018	2.72732	.00000	1.03181	118
Std. Residual	-3.880	2.632	.000	.996	118
Stud. Residual	-3.896	2.753	.000	1.007	118
Deleted Residual	-4.05470	2.98484	.00004	1.05655	118
Stud. Deleted Residual	-4.161	2.836	-.007	1.039	118
Mahal. Distance	.005	17.614	.992	2.334	118
Cook's Distance	.000	.358	.012	.041	118
Centered Leverage Value	.000	.151	.008	.020	118

a. Dependent Variable: UTBI

Annex 21

*Regression of PV on UTBI Q2***Correlations**

		UTBI	PV
Pearson Correlation	UTBI	1.000	.533
	PV	.533	1.000
Sig. (1-tailed)	UTBI	.	<.001
	PV	.000	.
N	UTBI	113	113
	PV	113	113

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.533 ^a	.285	.278	1.02045

a. Predictors: (Constant), PV

b. Dependent Variable: UTBI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.974	1	45.974	44.150	<.001 ^b
	Residual	115.586	111	1.041		
	Total	161.559	112			

a. Dependent Variable: UTBI

b. Predictors: (Constant), PV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.350	.375		.933	.353		
	PV	.601	.091	.533	6.645	<.001	1.000	1.000

a. Dependent Variable: UTBI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.9510	4.5594	2.7552	.64069	113
Std. Predicted Value	-2.816	2.816	.000	1.000	113
Standard Error of Predicted Value	.096	.288	.128	.046	113
Adjusted Predicted Value	.9467	4.6078	2.7543	.63937	113
Residual	-2.35656	2.70871	.00000	1.01588	113
Std. Residual	-2.309	2.654	.000	.996	113
Stud. Residual	-2.329	2.710	.000	1.005	113
Deleted Residual	-2.39662	2.82251	.00087	1.03600	113
Stud. Deleted Residual	-2.377	2.791	.000	1.014	113
Mahal. Distance	.000	7.930	.991	1.766	113
Cook's Distance	.000	.154	.010	.024	113
Centered Leverage Value	.000	.071	.009	.016	113

a. Dependent Variable: UTBI

Annex 22

*Regression of PE on UTBI Q1***Correlations**

		UTBI	PE
Pearson Correlation	UTBI	1.000	.495
	PE	.495	1.000
Sig. (1-tailed)	UTBI	.	<.001
	PE	.000	.
N	UTBI	118	118
	PE	118	118

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.495 ^a	.245	.239	1.09041

a. Predictors: (Constant), PE

b. Dependent Variable: UTBI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.867	1	44.867	37.735	<.001 ^b
	Residual	137.924	116	1.189		
	Total	182.791	117			

a. Dependent Variable: UTBI

b. Predictors: (Constant), PE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.602	.573		2.795	.006		
	PE	.578	.094	.495	6.143	<.001	1.000	1.000

a. Dependent Variable: UTBI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.9496	5.6455	5.0678	.61926	118
Std. Predicted Value	-3.421	.933	.000	1.000	118
Standard Error of Predicted Value	.100	.359	.133	.050	118
Adjusted Predicted Value	3.0562	5.7206	5.0702	.61161	118
Residual	-4.64548	1.93220	.00000	1.08574	118
Std. Residual	-4.260	1.772	.000	.996	118
Stud. Residual	-4.295	1.780	-.001	1.008	118
Deleted Residual	-4.72060	1.94872	-.00243	1.11312	118
Stud. Deleted Residual	-4.663	1.797	-.008	1.037	118
Mahal. Distance	.000	11.700	.992	2.042	118
Cook's Distance	.000	.218	.013	.038	118
Centered Leverage Value	.000	.100	.008	.017	118

a. Dependent Variable: UTBI

Annex 23

*Regression of PE on UTBI Q2***Correlations**

		UTBI	PE
Pearson Correlation	UTBI	1.000	.594
	PE	.594	1.000
Sig. (1-tailed)	UTBI	.	<.001
	PE	.000	.
N	UTBI	113	113
	PE	113	113

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.594 ^a	.353	.347	.97029

a. Predictors: (Constant), PE

b. Dependent Variable: UTBI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.057	1	57.057	60.605	<.001 ^b
	Residual	104.503	111	.941		
	Total	161.559	112			

a. Dependent Variable: UTBI

b. Predictors: (Constant), PE

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1	(Constant)	.210	.339		.620	.537	
	PE	.619	.080	.594	7.785	<.001	1.000

a. Dependent Variable: UTBI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.8297	4.5455	2.7552	.71375	113
Std. Predicted Value	-2.698	2.508	.000	1.000	113
Standard Error of Predicted Value	.092	.264	.122	.042	113
Adjusted Predicted Value	.8161	4.5602	2.7532	.71227	113
Residual	-2.10044	2.53405	.00000	.96595	113
Std. Residual	-2.165	2.612	.000	.996	113
Stud. Residual	-2.177	2.668	.001	1.004	113
Deleted Residual	-2.12367	2.64544	.00196	.98289	113
Stud. Deleted Residual	-2.215	2.746	.001	1.012	113
Mahal. Distance	.009	7.278	.991	1.631	113
Cook's Distance	.000	.156	.009	.019	113
Centered Leverage Value	.000	.065	.009	.015	113

a. Dependent Variable: UTBI

Annex 24

*Questionnaire 2 (Q2) multiple regression of PE statements on UTBI***Correlations**

		UTBI	My interaction with this sponsored post was disgusting/enjoyable.	My interaction with this sponsored post was dull/exciting.	My interaction with this sponsored post was unpleasant/pleasant.
Pearson Correlation	UTBI	1.000	.533	.501	.612
	My interaction with this sponsored post was disgusting/enjoyable.	.533	1.000	.753	.785
	My interaction with this sponsored post was dull/exciting.	.501	.753	1.000	.732
	My interaction with this sponsored post was unpleasant/pleasant.	.612	.785	.732	1.000
Sig. (1-tailed)	(1-UTBI	.	<.001	<.001	<.001
	My interaction with this sponsored post was disgusting/enjoyable.	.000	.	.000	.000
	My interaction with this sponsored post was dull/exciting.	.000	.000	.	.000
	My interaction with this sponsored post was unpleasant/pleasant.	.000	.000	.000	.
N	UTBI	113	113	113	113
	My interaction with this sponsored post was disgusting/enjoyable.	113	113	113	113
	My interaction with this sponsored post was dull/exciting.	113	113	113	113
	My interaction with this sponsored post was unpleasant/pleasant.	113	113	113	113

Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.620 ^a	.384	.367	.95557

a. Predictors: (Constant), My interaction with this sponsored post was unpleasant/pleasant., My interaction with this sponsored post was dull/exciting., My interaction with this sponsored post was disgusting/enjoyable.

b. Dependent Variable: UTBI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.030	3	20.677	22.644	<.001 ^b
	Residual	99.529	109	.913		
	Total	161.559	112			

a. Dependent Variable: UTBI

b. Predictors: (Constant), My interaction with this sponsored post was unpleasant/pleasant., My interaction with this sponsored post was dull/exciting., My interaction with this sponsored post was disgusting/enjoyable.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.162	.398		-.407	.685		
	My interaction with this sponsored post was disgusting/enjoyable.	.109	.142	.103	.770	.443	.315	3.172
	My interaction with this sponsored post was dull/exciting.	.059	.097	.074	.609	.544	.381	2.625
	My interaction with this sponsored post was unpleasant/pleasant.	.506	.137	.477	3.686	<.001	.338	2.960

a. Dependent Variable: UTBI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.5120	4.5560	2.7552	.74420	113
Std. Predicted Value	-3.014	2.420	.000	1.000	113
Standard Error of Predicted Value	.098	.337	.172	.054	113
Adjusted Predicted Value	.4514	4.5716	2.7539	.74764	113
Residual	-2.09900	2.72565	.00000	.94268	113
Std. Residual	-2.197	2.852	.000	.987	113

Stud. Residual	-2.242	2.935	.001	1.004	113
Deleted Residual	-2.18646	2.88671	.00129	.97699	113
Stud. Deleted Residual	-2.285	3.045	.001	1.013	113
Mahal. Distance	.178	12.941	2.973	2.621	113
Cook's Distance	.000	.127	.009	.017	113
Centered Leverage Value	.002	.116	.027	.023	113

a. Dependent Variable: UTBI

Annex 25

Moderation of IMT on the relationship of PE and UTBI Q1

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PE
 W : IBT

Sample
 Size: 118

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6635	.4402	.8975	29.8874	3.0000	114.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.0868	.0922	55.1512	.0000	4.9041	5.2695
PE	.3351	.1006	3.3314	.0012	.1358	.5344
IBT	.5181	.0838	6.1797	.0000	.3520	.6842
Int_1	-.0412	.0650	-.6341	.5273	-.1699	.0875

Product terms key:

Int_1 : PE x IBT

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0020	.4021	1.0000	114.0000	.5273

Focal predict: PE (X)
 Mod var: IBT (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PE IBT UTBI .

BEGIN DATA.

-1.0720	-1.1358	4.0890
.0000	-1.1358	4.4984
1.0000	-1.1358	4.8803
-1.0720	.0000	4.7276
.0000	.0000	5.0868
1.0000	.0000	5.4220
-1.0720	1.1358	5.3662
.0000	1.1358	5.6753
1.0000	1.1358	5.9636

END DATA.

GRAPH/SCATTERPLOT=

PE WITH UTBI BY IBT .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

IBT PE

----- END MATRIX -----

Annex 26

Moderation of IMT on the relationship of PE and UTBI Q2

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PE
 W : IBT

Sample
 Size: 113

OUTCOME VARIABLE:

UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.7073	.5002	.7407	36.3687	3.0000	109.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7276	.0822	33.1627	.0000	2.5645	2.8906
PE	.5468	.0723	7.5613	.0000	.4035	.6902
IBT	.4640	.0884	5.2517	.0000	.2889	.6392
Int_1	.1218	.0639	1.9071	.0591	-.0048	.2485

Product terms key:

Int_1 : PE x IBT

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0167	3.6370	1.0000	109.0000	.0591

Focal predict: PE (X)
 Mod var: IBT (W)

Conditional effects of the focal predictor at values of the moderator(s):

IBT	Effect	se	t	p	LLCI	ULCI
-.9423	.4320	.0912	4.7380	.0000	.2513	.6127
.0000	.5468	.0723	7.5613	.0000	.4035	.6902

.9423 .6616 .0969 6.8264 .0000 .4695 .8537

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PE IBT UTBI .
BEGIN DATA.

-1.1525 -.9423 1.7924
.0000 -.9423 2.2903
1.1525 -.9423 2.7882
-1.1525 .0000 2.0973
.0000 .0000 2.7276
1.1525 .0000 3.3578
-1.1525 .9423 2.4023
.0000 .9423 3.1648
1.1525 .9423 3.9273

END DATA.

GRAPH/SCATTERPLOT=

PE WITH UTBI BY IBT .

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:
95.0000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: The following variables were mean centered prior to analysis:

IBT PE

----- END MATRIX -----

Annex 27

Moderation of IMT on the relationship of PV and UTBI Q1

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PV
 W : IBT

Sample
 Size: 118

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6605	.4363	.9039	29.4100	3.0000	114.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.0654	.0946	53.5630	.0000	4.8780	5.2527
PV	.3802	.1012	3.7577	.0003	.1798	.5806
IBT	.4514	.0935	4.8290	.0000	.2662	.6365
Int_1	.0035	.0516	.0673	.9465	-.0988	.1057

Product terms key:

Int_1 : PV x IBT

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0000	.0045	1.0000	114.0000	.9465

Focal predict: PV (X)
 Mod var: IBT (W)

Data for visualizing the conditional effect of the focal predictor:
 Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PV IBT UTBI .

BEGIN DATA.

-1.1301	-1.1358	4.1275
.0000	-1.1358	4.5527
1.1301	-1.1358	4.9779
-1.1301	.0000	4.6357
.0000	.0000	5.0654
1.1301	.0000	5.4950
-1.1301	1.1358	5.1440
.0000	1.1358	5.5781
1.1301	1.1358	6.0121

END DATA.

GRAPH/SCATTERPLOT=

PV WITH UTBI BY IBT .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

IBT PV

----- END MATRIX -----

Annex 28

Moderation of IMT on the relationship of PV and UTBI Q2

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PV
 W : IBT

Sample
 Size: 113

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6199	.3842	.9127	22.6705	3.0000	109.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7507	.0929	29.6155	.0000	2.5667	2.9348
PV	.4747	.0907	5.2322	.0000	.2949	.6545
IBT	.4259	.1022	4.1653	.0001	.2232	.6285
Int_1	.0130	.0693	.1884	.8509	-.1242	.1503

Product terms key:

Int_1 : PV x IBT

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0002	.0355	1.0000	109.0000	.8509

Focal predict: PV (X)
 Mod var: IBT (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PV IBT UTBI .

BEGIN DATA.

-1.0653	-.9423	1.8569
.0000	-.9423	2.3494
1.0653	-.9423	2.8420
-1.0653	.0000	2.2451
.0000	.0000	2.7507
1.0653	.0000	3.2564
-1.0653	.9423	2.6333
.0000	.9423	3.1520
1.0653	.9423	3.6708

END DATA.

GRAPH/SCATTERPLOT=

PV WITH UTBI BY IBT .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

IBT PV

----- END MATRIX -----

Annex 29

Moderation of HUCTM on the relationship of PV and UTBI Q1

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PV
 W : HUCTM

Sample
 Size: 118

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6220	.3869	.9830	23.9826	3.0000	114.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.0319	.1012	49.6993	.0000	4.8313	5.2324
PV	.3417	.1319	2.5897	.0109	.0803	.6031
HUCTM	.4325	.1214	3.5620	.0005	.1920	.6730
Int_1	.0358	.0436	.8202	.4138	-.0506	.1222

Product terms key:

Int_1 : PV x HUCTM

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0036	.6727	1.0000	114.0000	.4138

Focal predict: PV (X)
 Mod var: HUCTM (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PV HUCTM UTBI .

BEGIN DATA.

-1.1301	-1.1913	4.1787
.0000	-1.1913	4.5167
1.1301	-1.1913	4.8547
-1.1301	.0000	4.6457
.0000	.0000	5.0319
1.1301	.0000	5.4180
-1.1301	1.1913	5.1127
.0000	1.1913	5.5470
1.1301	1.1913	5.9814

END DATA.

GRAPH/SCATTERPLOT=

PV WITH UTBI BY HUCTM .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

HUCTM PV

----- END MATRIX -----

Annex 30

Moderation of HUCTM on the relationship of PV and UTBI Q2

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PV
 W : HUCTM

Sample
 Size: 113

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6375	.4064	.8799	24.8728	3.0000	109.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7014	.1006	26.8560	.0000	2.5021	2.9008
PV	.2106	.1173	1.7946	.0755	-.0220	.4431
HUCTM	.5280	.1156	4.5672	.0000	.2988	.7571
Int_1	.0679	.0610	1.1126	.2683	-.0531	.1889

Product terms key:

Int_1 : PV x HUCTM

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0067	1.2378	1.0000	109.0000	.2683

Focal predict: PV (X)
 Mod var: HUCTM (W)

Data for visualizing the conditional effect of the focal predictor:
 Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PV HUCTM UTBI .

BEGIN DATA.

-1.0653	-1.0722	1.9886
.0000	-1.0722	2.1354
1.0653	-1.0722	2.2821
-1.0653	.0000	2.4771
.0000	.0000	2.7014
1.0653	.0000	2.9258
-1.0653	1.0722	2.9656
.0000	1.0722	3.2675
1.0653	1.0722	3.5694

END DATA.

GRAPH/SCATTERPLOT=

PV WITH UTBI BY HUCTM .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

HUCTM PV

----- END MATRIX -----

Annex 31

Moderation of HUCTM on the relationship of PE and UTBI Q1

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PE
 W : HUCTM

Sample
 Size: 118

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5991	.3589	1.0279	21.2742	3.0000	114.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.0723	.1068	47.5124	.0000	4.8608	5.2838
PE	.1487	.1434	1.0375	.3017	-.1353	.4328
HUCTM	.5174	.1188	4.3554	.0000	.2820	.7527
Int_1	-.0048	.0558	-.0862	.9314	-.1154	.1058

Product terms key:

Int_1 : PE x HUCTM

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0000	.0074	1.0000	114.0000	.9314

Focal predict: PE (X)
 Mod var: HUCTM (W)

Data for visualizing the conditional effect of the focal predictor:
 Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PE HUCTM UTBI .

BEGIN DATA.

-1.0720	-1.1913	4.2903
.0000	-1.1913	4.4559
1.0000	-1.1913	4.6104
-1.0720	.0000	4.9128
.0000	.0000	5.0723
1.0000	.0000	5.2210
-1.0720	1.1913	5.5353
.0000	1.1913	5.6886
1.0000	1.1913	5.8316

END DATA.

GRAPH/SCATTERPLOT=

PE WITH UTBI BY HUCTM .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

NOTE: The following variables were mean centered prior to analysis:

HUCTM PE

----- END MATRIX -----

Annex 32

Moderation of HUCTM on the relationship of PE and UTBI Q2

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 1
 Y : UTBI
 X : PE
 W : HUCTM

Sample
 Size: 113

OUTCOME VARIABLE:
 UTBI

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6645	.4416	.8277	28.7317	3.0000	109.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.6707	.0959	27.8465	.0000	2.4806	2.8607
PE	.2981	.1110	2.6853	.0084	.0781	.5180
HUCTM	.4414	.1187	3.7194	.0003	.2062	.6767
Int_1	.0936	.0479	1.9522	.0535	-.0014	.1886

Product terms key:

Int_1 : PE x HUCTM

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0195	3.8110	1.0000	109.0000	.0535

Focal predict: PE (X)
 Mod var: HUCTM (W)

Conditional effects of the focal predictor at values of the moderator(s):

HUCTM	Effect	se	t	p	LLCI	ULCI
-1.0722	.1977	.1272	1.5547	.1229	-.0543	.4497
.0000	.2981	.1110	2.6853	.0084	.0781	.5180

1.0722 .3984 .1173 3.3969 .0010 .1660 .6309

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

PE HUCTM UTBI .
BEGIN DATA.

-1.1525 -1.0722 1.9695
.0000 -1.0722 2.1974
1.1525 -1.0722 2.4252
-1.1525 .0000 2.3272
.0000 .0000 2.6707
1.1525 .0000 3.0142
-1.1525 1.0722 2.6848
.0000 1.0722 3.1440
1.1525 1.0722 3.6031

END DATA.

GRAPH/SCATTERPLOT=

PE WITH UTBI BY HUCTM .

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:

95.0000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: The following variables were mean centered prior to analysis:

HUCTM PE

----- END MATRIX -----