



## IMPULSE BUYING TRAP AND POST-PURCHASE REGRET IN HEALTH INSURANCE; THE ROLE OF SOCIAL MEDIA AND ONLINE REVIEWS

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### ABSTRACT

Impulse buying has gained significant interest from researchers examining consumer behavior. This phenomenon is intriguing as it is influenced by various internal psychological factors as well as external market-related influences. Therefore, this paper aims to explore the crucial role that impulse buying experiences play in contributing to post-purchase regret, specifically within the realm of health insurance products. A mixed method approach utilizing an explanatory sequential design is employed to enhance the understanding of quantitative findings, particularly focusing on the moderating role of 'Time Pressure'. Quantitative analysis utilizes the PLS-SEM technique with SmartPLS 4.0 software, while qualitative analysis is conducted using NVivo software. The study reveals that consumer traits, consumer motives, online reviews, and social media significantly impact impulse buying behaviors. Furthermore, it demonstrates that impulse buying positively influences post-purchase regret in the context of health insurance products. This research deepens the understanding of consumer behavior in high-stakes markets by establishing a link between impulse buying and post-purchase regret within the health insurance sector. Identifying and mitigating factors leading to regret can enhance consumer well-being and trust in the Health Insurance industry, supporting broader public health objectives and protecting consumers through informed policy-making.

**Keywords:** Impulse Buying, Post-Purchase Regret, Health Insurance, Mixed Methodology.

### 1. Introduction

The phenomenon of Impulse Buying has gained attention from both researchers and the business community due to its significant implications for society, businesses, and individual consumers (Obukhovich et al., 2023). Impulse buying refers to a behavior characterized by hedonic complexity, arising from an abrupt, intense, and enduring desire to make an immediate purchase, often leading to emotional conflict (Spiteri Cornish, 2020). Typically, Impulse Buying manifests after exposure to products, with the decision to purchase being made hastily, devoid of

thorough contemplation regarding the rationale behind acquiring the goods (Marjerison et al., 2022). As per data, 77% of consumers indulge in impromptu purchases while engaging in recreational digital window shopping on their smartphones (Zhao et al., 2023). These statistics underscore the growing significance of Impulse Buying within the global retail sector. Consequently, researchers have shown keen interest in the phenomenon, approaching it from various angles and employing diverse conceptual frameworks and methodologies. The inclination towards Impulse Buying, directly and indirectly,

influences online impulsive purchasing behavior. When consumers discover discrepancies between their expectations and the actual goods purchased impulsively, they experience not only regret but also feelings of depression and suspicion of deception (W. K. Chen et al., 2020).

As the Internet experiences rapid expansion and e-commerce gains widespread acceptance, the incidence of online impulse purchasing is on the rise. Nevertheless, understanding consumer motivations for impulsive buying in the digital realm necessitates ongoing investigation (Milaković & Ahmad, 2023). Research has extensively examined consumers' reactions after impulsive purchases in various scenarios, including grocery shopping (A. Kumar et al., 2020) and online transactions (Chang & Tseng, 2014). However, the influence of impulsive buying on Post-Purchase Regret in the context of health insurance remains unexplored.

Health insurance falls within the realm of general insurance, offering coverage for medical expenses and surgical procedures to insured individuals, who can be individuals, families, or groups. This involves individuals purchasing insurance in advance by paying a premium, which enables access to healthcare services through a network of affiliated dispensaries and hospitals. Across the nation, the insurer guarantees either cashless treatment of medical conditions or reimbursement of incurred medical costs according to the policy's terms (Singh & Singh, 2020). In 2021, the global health insurance market was valued at USD 2.6 trillion (Research, 2022). Within India, the Gross Direct Premium Income of the Health Insurance Industry amounted to 637 billion in 2021 (Rathore, 2022a), with approximately 514 million people covered under the Health Insurance scheme (Rathore, 2022b).

Despite evidence suggesting that consumers often make less-than-optimal choices when selecting health plans, there has been minimal focus on the role of regret in these decisions (Born & Sirmans, 2019). The increasing costs of healthcare services, coupled with the rising prevalence of chronic conditions such as diabetes, cancer, stroke, and kidney failure, are fueling the growing demand for health insurance (Health Insurance Market Share,

Size, Trends, Analysis 2023-28, 2023). However, health insurance does not always deliver the expected level of financial security. The key factors contributing to the current challenges in the health insurance sector are: firstly, while introducing health insurance may offer policyholders improved financial access to care upon enrolment, it may fail to adequately safeguard against accumulating treatment costs. Secondly, insurance benefit packages often have a limited impact, particularly concerning reimbursement levels (Atake, 2020). Furthermore, the utilization of a third-party payment system by service providers can potentially sway patients towards opting for more expensive care, which may deviate from their original choice if they had access to the same information as the provider (R. Kumar & Duggirala, 2021). Additionally, when insurance buyers pay their premium at the beginning of the year, two potential scenarios may unfold. In the first scenario, if they make use of their health insurance by claiming against certain healthcare services throughout the year, they may perceive their decision as an investment. However, in the second scenario, individuals who do not utilize their health insurance throughout the year might experience feelings of disappointment or regret regarding their purchase, as evidenced by their post-purchase evaluation of the contract (Ekman, 2007).

As described by Joseph-Williams et al., (2011), regret is an emotion rooted in negative cognition, arising when we realize or imagine that our current situation could have been better had we made different decisions in the past. Post-Purchase Regret can have significant repercussions for insurers, potentially leading to policy discontinuation, erosion of trust in the brand, and negative word-of-mouth, all of which contribute to a negative corporate and brand image, as well as diminished brand loyalty.

The results of an extensive literature review underscore a notable theoretical and empirical gap concerning Post-Purchase Regret in the context of health insurance in India. Despite the growing attention to Impulse Buying in consumer behavior research (Joghee & Alzoubi, 2021), none have specifically explored its effects on health insurance products. Therefore, this research identifies the drivers of Impulse Buying and examines

how this leads to Post-Purchase Regret within the context of health insurance, using a mixed-method approach. The following research objectives have been formulated for the study:

- To analyse various factors affecting Impulse Buying
- To examine the moderating impact of Time Pressure on Impulse Buying and Post-Purchase Regret in Health Insurance.
- To investigate the relationship between Impulse Buying and Post-Purchase Regret regarding health insurance products.

## 2. Conceptual Framework

The theoretical framework of this study is developed by adapting the Stimulus-Organism-Response (S-O-R) Model. Mehrabian & Russell's S-O-R model (1974) provides a comprehensive framework explaining how an external stimulus (S) can initiate a psychological process in an organism (O), leading to a behavioral response (R) (Huo et al., 2023). In this model, stimuli encompass external factors such as marketing mix variables and other environmental inputs (Changa et al., 2011). In the context of this research, the stimuli are online reviews and social media influences, which impact consumers' emotional responses. The organism is seen as an intermediary state between the stimulus and response, representing an individual's internal state through affective and cognitive dimensions (Basha et al., 2022; J. Zhang et al., 2022). The affective aspect of the organism in this study is characterized by consumer traits and motives. The response refers to the outcome of consumers' reactions to impulse buying stimuli and their internal evaluations (C.-H. Lee & Chen, 2021). Impulse buying behavior in this context signifies the approach aspect of the response component.

According to (Chan et al., 2024; L. Li et al., 2023; Nguyen et al., 2024; Pupelis & Šeinauskienė, 2023; Raj et al., 2024; Sehra et al., 2024; Singh et al., 2023; Sun et al., 2024; Zhu et al., 2023) Consumer Traits, Consumer Motives, Online Reviews, and Social Media positively influence Impulse Buying. Furthermore, the findings of Chen et al., (2021) found that consumers tend to experience product dissonance after impulse buying, leading to regret and subsequent rumination. (Kong et al., 2023) examined the relationship between time pressure and impulse buying,

discovering that time pressure encourages impulsive purchases. However, previous research has not explored the antecedents of impulse buying that result in post-purchase regret for health insurance products. Therefore, this study presents an appropriate conceptual framework (Figure 1).

## 3. Literature Review

In recent years, online impulse purchases have drawn significant attention from researchers across various disciplines, especially within the emerging field of consumer behavior (Abdelsalam et al., 2020). Theoretical debates on impulse buying behavior have persisted for many years. Consequently, it is not surprising that experts in consumer behavior and retailing have been exploring this subject for over fifty years (Kumar et al., 2020). This section reviews previous research studies on the antecedents of impulse buying and its effects on post-purchase regret.

### 3.1. Consumers Trait

Various personal traits and self-perception can act as internal drivers of impulsive purchasing behavior, with previous studies indicating that individuals exhibiting high levels of impulsivity tend to partake more in impulsive buying (R. Iyer & Griffin, 2021). Materialism refers to the extent to which individual values obtaining and possessing material goods in accordance with their desires or necessities, along with the behaviors they adopt to attain those objectives (Tran, 2022). Materialistic individuals tend to acquire a greater quantity of products and possessions as a means to showcase their status and sense of well-being to their peers, thereby increasing the likelihood of impulsive purchases (Santini et al., 2019).

Sen & Nayak, (2022) corroborated that individuals who embrace individualism as a cultural norm are more prone to materialism and exhibit a heightened tendency for Impulse Buying. Atulkar & Kesari, (2018) suggested that materialistic consumers may engage in impulsive spending not only on lower-priced items but also on high-end products due to environmental cues triggering impulsive behavior. Therefore, this study proposed the following hypothesis -

*H<sup>1</sup>- Materialism has a positive effect on Impulse Buying.*

### 3.2. Consumers Motives

Consumers' motivations, including Hedonic Or Utilitarian reasons, serve as significant internal factors influencing impulse purchases, representing goal-oriented stimulation that shapes particular consumption beliefs (R. Iyer & Griffin, 2021).

#### 3.2.1 Hedonic Motives

Motivation is defined as the driving force behind an individual's actions or behaviors, prompting or inspiring them to act in specific ways. Additionally, it encompasses a person's eagerness to pursue and satisfy emotional needs (Asnawati, 2018). Hedonic shopping motives involve consumers seeking enjoyment and pleasure through their shopping experiences (Yiğit, 2020). According to Widagdo & Roz, (2021), Hedonic Shopping Motivation pertains to an individual's inclination to engage in shopping activities to satisfy psychological needs, such as emotions, contentment, prestige, and other subjective sensations. (Martín-Consuegra et al., 2019; Shahpasandi et al., 2020) proposed that Hedonic Motivations prompt consumers to explore social media platforms, enabling them to engage more effectively with brands and marketing content, potentially resulting in purchases. Widagdo & Roz, (2021) studied the Hedonic Shopping Motivation and Impulse Buying, and found that Hedonic Shopping Motivation influences Impulse Buying behavior in online stores. Similarly, Nur Hidayah & Komala Sari, (2021) believed that Hedonic shopping has a positive impact on Impulse Buying tendencies. Therefore, this study proposed the following hypothesis – *H<sup>2</sup>- Hedonic Motives significantly affect Impulse Buying.*

#### 3.2.2 Utilitarian Motives

Utilitarian behavior is refer as goal-oriented and rational actions, prioritizing effectiveness and instrumental value (Martín-Consuegra et al., 2019). Indrawati et al., (2022) discovered that emphasizing the utilitarian aspect during the online shopping journey increases the probability of customers transitioning their shopping intentions into actual purchases. Park et al., (2012) suggested that utilitarian needs exert a significant influence on impulsive buying behavior. Shopping motives, such as Utilitarian factors, have been employed to assess the diverse impacts on impulsive buying behavior (Arul Rajan, 2020).

Chauhan et al., (2020) investigated Impulse Buying in online shopping amid the COVID-19 pandemic and revealed that utilitarian shopping values play a crucial role in predicting impulsive purchases. The research conducted by Hiranrithikorn & Banjongprasert, (2022) demonstrated a positive correlation between Utilitarian Motives and online Impulse Buying. Therefore, this study proposed the following hypothesis –

*H<sup>3</sup>- Utilitarian Motives significantly affect Impulse Buying.*

### 3.3. Online Reviews

Online Reviews defined as opinions shared by consumers regarding the products or services they have purchased through a particular online shopping platform, facilitated by internet technology (N. Zhang et al., 2021). Sun et al., (2024) investigated the factors influencing users' impulse purchases in online group buying and found that the perceived value of online consumer reviews positively correlates with impulsiveness and the inclination toward impulsive buying. Hong et al., (2023) asserted that Online Reviews play an important role in shaping customers' impulsiveness when making purchases on e-commerce platforms. Wu et al., (2021) supported this finding by confirming that high-quality online review content significantly influences users' purchasing behaviors, facilitating the transition from shopping intentions to actual shopping behaviors. C.-D. Chen & Ku, (2021) studied about diversified online review websites as accelerators for online impulsive buying and concluded that specific characteristics of Online Reviews prompt consumers to engage in impulsive online purchases. Therefore, this study proposed the following hypothesis – *H<sup>4</sup> Online Reviews significantly affect Impulse Buying.*

### 3.4. Social Media Influence

Social networking sites have become significant communication platforms utilized by individual consumers for generating content, disseminating materials, exchanging ideas, expressing opinions, and accessing information and knowledge (Heinrichs et al., 2011). Nuseir, (2020) investigated the extent of social media's impact on fostering 'Impulse Buying' inclinations and concluded that social media platforms actively encourage and create

opportunities for Impulse Buying. Korkmaz & Seyhan, (2021) investigated the effect of social media on Impulse Buying behavior during the covid 19 pandemic, and observed a significant influence of social media on consumers' impulse purchases. The findings of the (Singh et al., 2023) reveals that Social Media Advertising significantly shapes Impulse Buying Intentions. Konga Subba Reddy & B Abdul Azeem, (2022) believed that social media marketing directly affects Impulse Buying behavior. They suggest that unplanned purchases surge due to social media marketing, leading to up to a 40 percent increase in additional expenses attributed to social media factors. Therefore, this study proposed the following hypothesis -

*H<sup>5</sup>- Social Media Influence significantly impacts Impulse Buying.*

### 3.5. Time Pressure

Li et al., (2021) observed that time scarcity has the potential to heighten consumers' Impulse Buying tendencies by exerting pressure and enhancing their perception of value. Sohn & Lee, (2017) argued that Time Pressure during shopping intensifies negative emotions, leading to a rise in affective impulse purchases. Kong et al., (2023) investigated whether Time Pressure could stimulate consumers' Impulse Buying in live streaming e-commerce and discovered that Time Pressure fosters impulsive purchasing behaviors among consumers. Li et al.,( 2023) examined the impact of Time Pressure on tourism and found that it significantly escalates Impulse Buying. Cui et al., (2022) supported this by confirming a direct correlation between Time Pressure and the inclination for impulsive buying. Reynolds et al., (2006) analyzed the precursors and outcomes of regret, revealing that Time Pressure may positively influence external blame and have a negative effect on self-blame. Marjerison et al., (2022) corroborated that Time pressure signifies the positive relationship between Post-Purchase Regret and the Impulse Buying tendency. Therefore, this study proposed the following hypothesis-  
*H<sup>6</sup>- Time Pressure moderates the relationship between Impulse Buying and Post- Purchase Regret.*

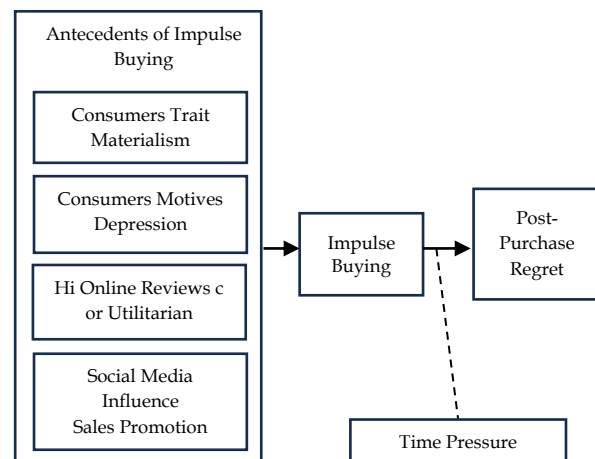
### 3.6. Impulse Buying and Post Purchase Regret

Thürmer et al., (2020) corroborated that “Impulse Buying occurs when a consumer

experiences a sudden, often powerful and persistent urge to buy something immediately”. Hewei, (2022) believed that Impulse Buying entails immediate buying without a predetermined shopping goal, regardless of whether it involves acquiring a specific product category or fulfilling a particular need. Lee et al., (2023) found that Impulse Buying induces emotional stress in consumers.

Kumar et al., (2020) examined the shopping behavior for the purchase of grocery products and analyzed 402 samples the findings of the study reveal that there is a positive association between Post-Purchase Regret and Impulse Buying. Furthermore, the research suggests that individuals with higher levels of impulsivity tend to experience greater Post-Purchase Regret following impulsive purchases compared to those with lower levels of impulsiveness. Chen et al., (2020) investigated the Impulse Buying toward consumers’ post-purchase dissonance and return intention through the survey of 428 samples, and found a positive association between Impulse Buying and product dissonance. Saleh, (2012) suggested a positive connection between unplanned purchases and Post-Purchase Regret. Parsad et al., (2019) investigated the role of in-store atmospherics and Impulse Buying tendency on post-purchase regret and found that impulsive purchases were positively associated with feelings of regret. Therefore, this study proposed the following hypothesis -  
*H<sup>7</sup>- There is a positive association between Impulse Buying and Post-Purchase Regret.*

## 4. Conceptual Model



**Fig 1: Conceptual Model**

## 5. Methodology

### 5.1 Data Collection Procedure

Using a structured questionnaire, the study gathered primary data from individuals who have acquired any Health Insurance Products. An online survey questionnaire (employing a quantitative methodology) was utilized to collect the data. The questionnaire, which included a five-point Likert scale, was distributed via email and social media platforms such as Telegram and WhatsApp to individuals located in various regions of India, employing convenience sampling.

Table 1 displays the sample profile of respondents, revealing that most respondents were male (58.7%) and fell within the age group of 20-25 years. The largest proportion of respondents had a graduate degree (26.75%).

quantitative research enables researchers to uncover detailed patterns of customer behavior through in-depth interviews and confirm these findings with thorough analysis. Therefore, this study employs a mixed-method approach to examine the relationship between impulse buying and post-purchase regret in health insurance products. Mixed-methods research is a methodology that integrates various methods to systematically address research questions, involving the collection, analysis, interpretation, and reporting of both quantitative and qualitative data in an appropriate manner (Dawadi et al., 2021).

Quantitative research involves utilizing numerical values obtained from observations to elucidate and characterize phenomena reflected in those observations. The collected

**Table 1: Demographic profile of respondent (n = 385)**

Variables		Frequency	%
Gender	Male	226	58.7
	Female	159	41.2
Marital Status	Married	213	55.3
	Unmarried	172	44.6
Educational qualification	Undergraduate	35	9.09
	Graduate	103	26.75
	Post Graduate	89	23.11
	PhD	87	22.5
	Professional Education	71	18.44
Age	20-25 Years	112	29.09
	26 - 30 Years	68	17.66
	31-35 Years	46	11.94
	36-40 Years	83	21.55
	41-45 Years	53	13.76
	46-50 Years	23	3.93
Occupation	Salaried	124	32.20
	Self Employed	43	11.16
	Retired	22	5.71
	Student	89	23.11
	Others	107	27.79
Annual Income	Less than Rs. 500,000	149	38.7
	Rs. 500,000- Rs. 750,000	61	15.84
	Rs. 750,000-Rs. 1,000,000	125	32.46
	Rs. 1,000,000-Rs.1,500,000	35	9.09
	More than Rs. 15 lakhs	15	3.89

### 5.2 Data analysis tools and techniques

There are numerous qualitative studies on impulse buying, but only a few focus on post-purchase regret, and none have used a mixed-method approach. Nguyen et al., (2021) suggest that combining qualitative and

numerical data is then analyzed using mathematical methods (Taherdoost, 2022). Whereas, qualitative research generates insights through individual reflection rather than relying on numerical data, measurement, and causal analysis. It emphasizes on the

richness and depth of human experiences and perspectives, offering insights that quantitative approaches may not include (Phillips, 2023). Qualitative research holds significant importance in the fields of Social Sciences and Management Studies, enabling researchers to investigate intricate human phenomena, attitudes, and behaviors within their natural contexts (Kraiwani & Limna, Pongsakorn Siripipatthanakul, 2023).

PLS-SEM was used for quantitative data analysis, whereas Nvivo software was used for the qualitative study. Structural equation

is required to establish convergent validity. The values of AVE are more than 0.50 (See Table 1), which establishes convergent validity of the scale. Consequently, it can be inferred that both convergent validity and internal consistency meet the necessary criteria. Moreover, the square root of AVE for each variable exceeded the shared variances of the inter-construct and correlations between the variables, suggesting robust discriminant validity (See Table 2). Hence, the study suggests that the measurement model fits the data effectively.

**Table 2: Internal Consistency and Convergent Validity**

	<b>Cronbach's alpha</b>	<b>Composite reliability (rho_a)</b>	<b>Composite reliability (rho_c)</b>	<b>Average variance extracted (AVE)</b>
HM	0.934	0.936	0.95	0.792
IB	0.937	0.938	0.951	0.762
MT	0.913	0.914	0.939	0.794
OR	0.889	0.89	0.931	0.818
PPR	0.891	0.891	0.932	0.82
SMI	0.933	0.933	0.952	0.833
TP	0.859	0.859	0.914	0.78
UM	0.928	0.931	0.946	0.778

modeling (SEM) is a popular quantitative technique extensively utilized by researchers in social and management sciences (Ehidiamen Oamen & Moshood Lawal, 2023). NVivo offers significant convenience for thorough data analysis, as well as for creating, organizing, and modifying codes (Tanrikulu, 2022).

**5.2.1 Quantitative Analysis  
Reliability and Validity Measurement**

The present study used Cronbach's alpha values and composite reliability to measure the reliability of each variable within the questionnaire. Internal reliability, convergent validity, and average variance extracted (AVE) were analyzed using SmartPLS 4. According to Fornell and Larcker (1981), a minimum composite reliability threshold of 0.7 is necessary to ensure internal consistency. The Cronbach's alpha was above 0.70, and the composite reliability exceeded 0.80, indicating high internal reliability of the measurement (See Table 1).

Furthermore, convergent validity was examined using AVE. According to Henseler et al. (2009), a minimum AVE threshold of 0.5

**Coefficient of Determination**

Table 3 displays the Coefficient of Determination, or R-square value, which indicates the proportion of variation in the response variable that can be explained by the model. The results indicate that the model successfully explains 92% of the variation in Impulse Buying, and 82% of the variation in Post-Purchase Regret.

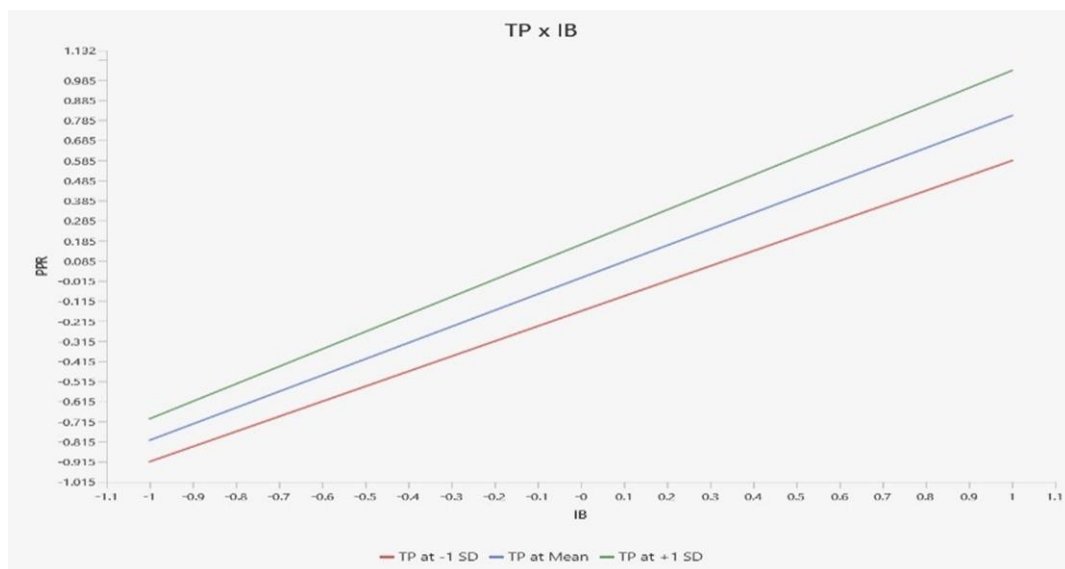
**Table 3: Coefficient of Determination (R2)**

	<b>R-square</b>	<b>R-square adjusted</b>
IB	0.928	0.927
PPR	0.821	0.819

Table 4 shows that all variables included in the path analysis positively impacted Impulse Buying. Also, Impulse Buying significantly affects the Post-Purchase Regret. Furthermore, it is also evident that Time Pressure doesn't moderate the relation between Impulse Buying and Post-Purchase Regret. The moderating role of Impulse Buying tendency is depicted graphically in Figure 2.

**Table 4: Hypothesis Testing**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Result
Hedonic Motivation -> Impulse Buying	0.248	0.249	0.055	4.492	0.000	Supported
Hedonic Motivation -> Post Purchase Regret	0.2	0.202	0.047	4.304	0.000	Supported
Impulse Buying -> Post Purchase Regret	0.808	0.808	0.043	18.949	0.000	Supported
Materialism -> Impulse Buying	0.223	0.221	0.046	4.794	0.000	Supported
Materialism -> Post-Purchase Regret	0.18	0.179	0.04	4.548	0.000	Supported
Online Reviews -> Impulse Buying	0.138	0.136	0.031	4.49	0.000	Supported
Online Reviews -> Post-Purchase Regret	0.111	0.11	0.026	4.31	0.000	Supported
Social Media Influence -> Impulse Buying	0.23	0.231	0.05	4.614	0.000	Supported
Social Media Influence -> Post-Purchase Regret	0.186	0.186	0.04	4.621	0.000	Supported
Time Pressure -> Post-Purchase Regret	0.166	0.164	0.044	3.731	0.000	Supported
Utilitarian Motives -> Impulse Buying	0.162	0.164	0.057	2.866	0.004	Supported
Utilitarian Motives -> Post-Purchase Regret	0.131	0.132	0.046	2.856	0.004	Supported
Time Pressure x Impulse Buying -> Post-Purchase Regret	0.059	0.057	0.03	1.937	0.053	Not Supported



**Fig 2: The moderating effect of Time Pressure**

**5.2.2 Qualitative Analysis**

**Table 5: Word frequency table**

Word	Count
impulse	277
purchase	231
buying	134
regretted	109
influence	81
social	76
media	70
decision	66



**Fig 3: Word Tree Map**



NVivo's text analysis tools, including word frequency and word cloud visualisations, offer researchers valuable insights into the prevalence and significance of certain terms or concepts, enriching their understanding of the data (Dhakal, 2022). NVivo creates word clouds as a visualization tool to assist in identifying and analyzing patterns in coded data by emphasizing word frequencies. As illustrated in Figure 3, the terms "Impulse," "Purchase," "Buying," "Regretted," "Influence," "Social," and "Media" appear most frequently, offering insights into the main themes and issues. This visualization also uncovers common word stems in the text, facilitating the exploration of other words related to key concepts. Table 5 shows that the frequencies of these terms are 277,231,134,109,81,76,70, respectively.

### Interview Analysis

The examination of responses has revealed some other factors like Convenience, Fear of missing out, Excitement, Limited time offers, Discounts, Social Influence (Peer recommendations, Celebrity Endorsement) leads to the Impulse Buying.

*"Online, factors such as limited-time offers and pop-up advertisements can contribute to impulsive buying behavior."*

*"The presence of sales or discounts can sometimes tempt me to make impulsive purchases, whether I'm shopping in-store or online."*

*Social influence, such as peer recommendations or celebrity endorsements, can contribute to Impulse Buying behavior in both environments.*

*Convenience plays a significant role, as the ease of making purchases with just a few clicks online can lead to impulsive buying behavior.*

*"Sometimes I find myself making impulse purchases simply because I'm bored or seeking a distraction from other concerns."*

*"Occasionally, feelings of FOMO (fear of missing out) can prompt me to make impulsive purchases, especially when I see others buying similar items."*

Some participants expressed that they make Impulse Buying for pleasure, excitement or to escape from the current situation and problem.

*"Absolutely, I've made impulse purchases driven by the desire for pleasure or excitement, especially when I wanted to treat myself."*

*"There have been occasions when I've turned to Impulse Buying as a way to distract myself from a current situation or problem."*

*"Sometimes I find myself making impulse purchases in response to a current situation or problem, hoping it will provide some relief or solution."*

Many respondents corroborated that they consider Social Media before making purchase decision and it is also the factor that influence them to make Impulse Purchase.

*"I rely on social media platforms to gather information and insights about products before buying them."*

*"Absolutely, social media has become a go-to resource for me to learn about new products and hear what others are saying about them."*

*"There have been times when I've made impulse purchases after seeing products promoted or endorsed by influencers on social media."*

*"Occasionally, I'll come across a limited-time offer or flash sale on social media that prompts me to make an impulse purchase."*

A substantial portion of respondents exhibited that Online Reviews contribute to the sense of urgency or immediacy that can lead to Impulse Buying.

*"Online reviews by highlighting the popularity or limited availability of certain products, prompts consumers to make impulsive purchasing decisions."*

*"The presence of positive reviews and ratings on online platforms makes consumers feel compelled to act quickly and make impulse purchases."*

*"The time-sensitive nature of Online Reviews, coupled with persuasive language and testimonials, contributes to Impulse Buying behavior."*

*"Online Reviews by providing real-time feedback and testimonials that validate the desirability of certain products, leads to Impulse Buying."*

The majority of the respondents agreed that they are feeling Regret after buying Health Insurance Policy, and main contributing factors are Lack of comparison between different alternatives, Sales Tactics, Marketing Promotions, Limited Time Offers, Sales Incentives etc.

*"The most prominent antecedent of Impulse Buying leading to regret in this health insurance purchase decision is the lack of thorough research and comparison of different insurance plans."*

*"Emotional impulse, such as fear of being uninsured or pressure to make a quick decision, was the most significant antecedent of Impulse Buying in this health insurance purchase, leading to subsequent regret."*

*"The most prominent antecedent of Impulse Buying and regret in this health insurance purchase decision was the influence of persuasive sales tactics or marketing promotions that pressured me to make a hasty decision."*

*"The most significant antecedent of Impulse Buying leading to regret in this health insurance purchase decision was the lack of awareness or understanding of alternative options and their potential benefits or drawbacks."*

Some respondents have demonstrated that Materialism plays an important role in Impulse Purchase and they do purchase things that attracts attention from others but that is not the only motive for the purchase.

*"I enjoy having possessions that draw attention from others. It makes me feel good about myself."  
"I do enjoy having possessions that catch others' eyes, but it's not the sole reason I buy things."*

*"I find pleasure in owning items that others notice, but it's not the main factor driving my purchasing decisions."*

*"I enjoy owning items that make others notice me, but I also consider their practicality and how they align with my personal values."*

The responses received on Time Pressure agreed that Time Pressure affects the likelihood of experiencing regret after an impulse purchase, also Time Pressure led them to make impulsive purchases that you later regretted.

*"Time pressure often leads to hasty decisions, increasing the likelihood of impulse purchases that may result in regret later."*

*"The urgency of Time Pressure can lead to impulse purchases without thorough consideration, heightening the chances of experiencing regret afterward."*

*"Yes, there have been instances where Time Pressure led me to make impulsive purchases that I later regretted once the urgency subsided."*

*"There have been times when Time Pressure pushed me to make impulsive purchases, but upon reflection, I regretted not taking more time to consider the purchase carefully."*

A significant number of respondents have shown the inclination towards an impulse purchase driven by a utilitarian motive, such as a perceived need for convenience or efficiency. Additionally, they have also agreed that it influences Impulse Buying behavior, particularly when there is a perceived need or problem to be solved.

*"The need for practical solutions to everyday tasks has influenced my Impulse Buying behavior on occasion, leading to purchases that serve utilitarian purposes."*

*"The prospect of improving convenience or efficiency has led me to make impulse purchases without much forethought."*

*"I've been tempted to make impulse purchases driven by the desire to improve functionality or efficiency in my daily life."*

## **6. Discussion**

The study makes a unique contribution to the consumer behavior domain, as very few investigations have examined the influence of impulse buying on post-purchase regret. The findings indicate a strong positive influence of impulse buying on post-purchase regret in the context of health insurance. This is significant because it reveals that individuals who impulsively purchase health insurance are more likely to experience regret afterwards.

This empirical study evaluates the antecedents of Impulse Buying, as well as the impact of Impulse Buying on Post-Purchase Regret regarding health insurance products. The conceptual model of the study proposes seven

hypotheses to measure the significance of Hedonic Motivation, Utilitarian Motivation, Online Reviews, Social Media Influence, and Materialism on Impulse Buying. Additionally, the study aims to quantify the moderating impact of Time Pressure on Impulse Buying and Post-Purchase Regret.

The results from Table 4 show that Consumer Trait has a positive and significant effect on Impulse Buying ( $p=0.000$ ), thus confirming the hypothesis. According to the findings, individuals with materialism traits are expected to engage in more impulse purchases compared to those with low Hedonic Motivation. This result is supported by previous research findings of (Atulkar & Kesari, 2018; Santini et al., 2019; Sen & Nayak, 2022), which indicated that individuals who value material possessions highly and believe acquiring more items will enhance their happiness and social status are more likely to engage in impulsive purchasing behavior. The findings from the qualitative phase also support this finding. For example, one of the respondents stated that:

*"I enjoy having possessions that draw attention from others. It makes me feel good about myself."*

The study confirms a strong association between Consumer Motives and Impulse Buying behavior ( $p=0.000$ ) (Table 4), which remains consistent across health insurance products. Furthermore, the study observes that consumers with Hedonic and Utilitarian motives are inclined to make immediate and spontaneous impulse purchases. This finding ropes with previous research studies of (G. R. Iyer et al., 2020; Martín-Consuegra et al., 2019; Sen & Nayak, 2022; Shahpasandi et al., 2020; Widagdo & Roz, 2021), which supported Hedonic and Utilitarian as the important factors leading to online Impulse Buying suggesting that consumers are not just motivated by the immediate emotional gratification of buying something on a whim but also by the practical aspects that the product offers. This makes consumers more likely to engage in impulse buying when shopping online. The findings from the qualitative study also support this hypothesis. For example, respondents reported that:

*"There have been times when I've succumbed to Impulse Buying because the product promised to add an element of fun or enjoyment to my life."*

*"I've been tempted to make impulse purchases driven by the desire to improve functionality or efficiency in my daily life."*

The findings of the study (Table 4) indicate that Online Reviews had a significant effect on consumers' impulse purchases ( $p=0.000$ ). This result aligns with a previous study, which suggested that in addition to commentator credibility, comment quality, comprehensiveness, and quantity positively influence Impulse Buying behavior (Hewei, 2022; Nguyen et al., 2024). This implies a significant influence of Online Reviews on Impulse Buying by suggesting that Positive reviews can create a sense of trust and urgency, making the product seem more desirable and increasing the likelihood of an impulsive purchase. The qualitative study also corroborate this conclusion. For example, one respondent noted that:

*"The presence of positive reviews and ratings on online platforms makes me feel compelled to act quickly and make impulse purchases."*

The Social Media influence was found to have a significant impact on Impulse Buying ( $p=0.000$ ) (Table 4). Previous studies have also investigated the relationship between Social Media Influence and Impulse Buying, identifying a positive correlation between them. This finding is consistent with the perspective proposed by previous research (Konga Subba Reddy & B Abdul Azeem, 2022; Martín-Consuegra Et Al., 2019; Nuseir, 2020; Singh Et Al., 2023). Which supported that social media significantly influences impulse buying, and unplanned purchases have seen an increase attributable to social media. The interactive and engaging nature of social media platforms provides a platform for brands and products to capture potential buyers' attention quickly. Social media influencers, targeted advertisements and peer recommendations create a compelling environment that encourages consumers to make spontaneous purchase decisions. The results of the qualitative study also validate this observation. For example, one respondent remarked that:

*“There have been times when I've made impulse purchases after seeing products promoted or endorsed by influencers on social media.”*

The results of the study confirm that there are no moderating effects of Time Pressure on Impulse Buying and Post-Purchase Regret tendency ( $p=0.053$ ) (Table 4). Which is not in line with (Marjerison et al., 2022) which claimed that Time Pressure has a significant moderating impact on Impulse Buying and Post Purchase Regret. The researcher hypothesizes that there could be two main reasons for this. First, the sample size of the quantitative results may not be sufficiently large or diverse to represent the entire population of India accurately. Second, It is also possible that other variables, such as personal decision-making styles or external situational factors, overshadowed the effect of time pressure. Nonetheless, this finding raises new questions for future research to address and reconcile the differences in the results.

The relation between Impulse Buying and Post-Purchase Regret was supported in this study ( $p=0.000$ ). Therefore, the influence of Impulse Buying on Post-Purchase Regret has a significant impact. The finding is in line with previous studies, which found that Customers' Impulse Purchase is directly related to Post-Purchase Regret (Arora et al., 2023; A. Kumar et al., 2020; Spiteri Cornish, 2020), also a negative post-purchase experience, where a product or service is found to be of limited use or fails to deliver expected benefits, leads to post-purchase regret. This regret subsequently reduces the likelihood of future Impulse Buying. The results of the qualitative study further corroborate this conclusion. For example, one respondent remarked that:

*“The most prominent antecedent of Impulse Buying leading to regret in this health insurance purchase decision is the lack of thorough research and comparison of different insurance plans.”*

## **7. Conclusion**

Impulse Buying has shown an increasing trend over time, prompting researchers to delve into the persistent allure despite its repercussions (Spiteri Cornish, 2020). This study investigated the factors that influence impulse buying and its impact on post-purchase regret for health insurance using a mixed-methods approach that included both

qualitative and quantitative phases. Additionally, it addresses a significant gap in understanding by examining the impact of Impulse Buying on Post-Purchase Regret regarding health insurance products, an area that has received scant attention. Furthermore, the research introduces the variable of Time Pressure as a moderator within the research framework.

The analysis of textual data obtained from open-ended questions identified additional key drivers of impulse buying, such as fear of missing out, excitement, limited-time offers, discounts, and social influence (peer recommendations and celebrity endorsements). Moreover, the main contributing factors to post-purchase regret were found to be a lack of comparison between different alternatives, sales tactics, marketing promotions, and limited-time offers.

The outcomes of the quantitative study found that hedonic motives affect impulse buying. Therefore, marketers should focus on crafting visually appealing and emotionally resonant marketing campaigns that tap into consumers' hedonic desires. Additionally, strategies that emphasize social recognition and the enhancement of self-esteem can be particularly effective in enticing impulsive purchases. Creating a brand image that aligns with consumers' aspirations and fosters a sense of belonging within their social circles can further enhance brand loyalty and drive sales. However, Consumers driven by materialism should be encouraged to focus on the intrinsic value of their purchases rather than constantly seeking more. Companies can promote messages emphasising satisfaction and consumption mindfulness to help reduce post-purchase regret.

It is observed that consumers consistently turn to social media when making purchase decisions. Consequently, the appealing promotional campaigns and regular merchandising displays on social media platforms can lead to planned and unplanned product purchase scenarios. Therefore, Consumers need to critically evaluate social media portrayals and base their purchasing decisions on personal needs rather than social trends. Companies should strive for authenticity in their social media marketing,

setting realistic expectations to prevent consumers from experiencing regret when the product does not match its online image.

The results indicate that Online Reviews can positively influence Impulse Buying behavior. So, consumers should seek a balanced perspective by reading various reviews and verifying their credibility. Companies can facilitate this by encouraging honest and transparent feedback and addressing negative reviews constructively to improve the accuracy of online reviews and reduce post-purchase regret.

The findings highlight the positive influence of Utilitarian Motives on Impulse Buying behavior. Utilitarian consumers, characterized by their specific shopping goals and directed search behavior, play a significant role in driving spontaneous purchases. Therefore, Consumers with utilitarian motives should thoroughly assess the functionality and practicality of products before purchasing. Companies should provide clear and detailed information about the product's utility and performance to ensure it meets consumer expectations and reduces regret. Also, clear and concise product information should be provided to assist utilitarian shoppers in making informed decisions.

Furthermore, addressing the underlying factors that lead to Impulse Buying behavior, particularly in the context of health insurance products, is essential. Marketers should focus on building trust and credibility with consumers by emphasizing the value and benefits of their products. Providing transparent pricing information, highlighting coverage options, and offering personalized recommendations can help slacken concerns and minimize Post-Purchase Regret, and also a long-term success in the competitive marketplace.

## 8. Limitations

The present study has certain limitations that could be addressed by future researchers. Firstly, the study focuses specifically on Health Insurance Products in India. Therefore, its findings cannot be applied to other countries due to differences in purchasing behaviour and financial capacity. Secondly, the study establishes a research framework that includes variables such as consumer

traits, motives, online reviews, and social media influence on impulse buying. However, future studies may include additional variables like interpersonal influence, consumer involvement, and economic background from different regions to gain a more comprehensive understanding. Furthermore, the study has used cross-sectional data, suggesting the potential for future longitudinal studies to ascertain the consistency and causality of consumer behaviors.

## Data Availability

The data are available upon request to the corresponding author.

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## Appendix

Constructs	Items	Measures	Sources
Impulse buying	IB1 IB2 IB3 IB4 IB5 IB6	I am extremely excited when I see something that I want to buy. When I buy something, it is usually spontaneous. I often buy things online without thinking. If I see something new, I want to buy it. My purchases are always unplanned. I am defined by "If I see it, I buy it"	(Tran, 2022)
Materialism	MAT1 MAT2  MAT3 MAT4	I enjoy owning items that make others notice me. My possessions reveal a great deal about how well I am doing in life. I adore splurging on items that are not useful. I think my life would be better if I had some of the things I do not have.	(Tran, 2022)
Hedonic Motives	HM1 HM2 HM3 HM4 HM5	While web browsing, I am able to forget my problems During web browsing, I am very excited, like playing While web browsing, I feel relaxed I enjoy web browsing enough to forget a time out I look around at items on the internet just for fun	(Park et al., 2012)
Utilitarian Motives	UM1 UM2 UM3  UM4  UM5	I browse to buy better items in price or quality I browse for efficient shopping online I browse the shopping websites to gather information about products I look around the shopping websites to comparison shop I browse the shopping websites in order to get additional value as much as possible	(Park et al., 2012)
Social Media Influence	SMI1 SMI2 SMI3 SMI4	Social media provides trustworthy information Social media provides accurate information I can trust the posted information on social media. Social media provides valuable information	(HEINRICHS et al., 2011)
Post Purchase Regret	PPR1 PPR2 PPR3	I regret the choice I made. I feel sorry for my decision. I should have chosen the alternative choice	(Bui et al., 2011)
Online Reviews	OR1  OR2  OR3	If the reviews are fewer, I hesitate to consider the reviews while buying the product.  I believe reviews impact my decision to purchase or not to purchase a product.  Recent reviews are more important than older ones.	(G. R. Iyer et al., 2020)
Time Pressure	TP1 TP2 TP3	I must hurry if I am to complete my shopping trip on time I feel pressured to complete my shopping quickly I do not have enough time to shop	(Lin & Chen, 2013)