International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 20s, 2025
https://theaspd.com/index.php

Emotional Consumers And Online Impulse Purchase: Analysing Affective Reaction

Sree Remya S R[1], DR. S Kavitha[2]
[1]Research scholar, Department of Management (GRGSMS), PSGR Krishnammal College forWomen Coimbatore, Tamil Nadu, sr.sree16@gmail.com, ORCID ID: 0009-0001-2441-3729
[2]Associate Professor , Department of Management (GRGSMS) , PSGR Krishnammal College for Women Coimbatore, Tamil Nadu, ORCID ID: 0000-0003-0910-9814

Abstract
Impulse buying is the act of making an unplanned purchase suddenly by the customer while shopping. The online impulse purchase is the impulsive purchase of goods from the online retailers. In this study, the SOR model framework was proposed to identify the impact of marketing strategy on online impulse purchases with a focus on the alternative reactions of customers. The research examines how marketing factors like product variety, apps and websites, promotional tactics, price tactics, and brand image influence the customers affective reactions which ultimately leads to online impulse purchases. An online survey was conducted with 720 online consumers from Bangalore, Chennai, Visakhapatnam, and Kochi. A structural equation model (SEM) was used for the analysis of the data. The findings of the study suggest that marketing strategies significantly influence the customers emotions, perceptions, and arousal levels, finally affecting online impulse purchases. Affective responses may be forecast through several marketing techniques, with brand image having the most influence. These techniques include product variety, pricing tactics, apps and websites, and promotional tactics. Online businesses can apply this study's results to determine the most effective and most efficient marketing tactics to persuade customers and boost online impulsive sales.
Keywords: *Online Impulse Purchase, Pricing Strategies, Brand Image, Affective Responses, Product Presentation, Promotional Techniques*

1. INTRODUCTION

Consumer buying behaviour is the way the consumer behaves in deciding to purchase a product based on their needs, and wants (Moser, Schoenebeck, & Resnick, 2019). The three major components of buying behavior are dynamic nature, it involves links among events in the environment, and the internal states of consumers like emotions and feelings (Jayasooriya, Kumar, & Lanka, n.d.). This reveals that marketers must study consumer buying behaviour to sharpen and formulate new marketing tactics for more sales (Nawaz, Dastgeer, & Kashif, 2022). Impulse buying behaviour is a type of buying behaviour among customers, that happens suddenly and on the spot purchase by the customers while shopping (Moser et al., 2019).

The impulse purchase is a stigmatized phenomenon that spreads customer behaviour worldwide (Sirhindi, 2010). Both external and internal factors at the same time affect impulse purchases (Aragoncillo & Orús, 2018; Luo et al., 2021). Promotional and price tactics, brand image and loyalty, product presentation, and place are the external stimuli that trigger the customers' emotions and lead them to impulse purchases. Impulse purchases can be made offline and online (Aragoncillo & Orús, 2018). In the offline mode, people want to go to the marketplace like retail outlets, supermarkets, and shopping malls (Yang, Cao, Ye, & Shi, 2022). With the introduction and the wild spread of the internet world, online retailers started to sell their products online, and to be stable in the marketplace with their competitors they introduced different marketing strategies which increased impulse purchases in customers (Eroğlu & Şahan, 2018; Maréchal et al., 2019). In this study, the SOR model is used to find marketing strategies that affect the internal stage of the customer's online impulse purchases with the help of the SOR model.

2. REVIEW OF LITERATURE

SOR model

The Stimulus Organism and Response Model (S-O-R) was first introduced by Mehrabian and Russell (1974) It serves as a mostly useful conceptual framework for research on consumer behaviour (M. W. Karim, Chowdhury, Al Masud, & Arifuzzaman, 2021). The SOR model's foundation is environmental psychology, which holds that the outside world is the external stimulus (S) that influences consumers' internal states (O) to indicate their outward behaviour responses (R) (X. Li, Guo, & Huang, 2023).

Affective and mental reactions make up the internal body state (O); the former comprises emotions, feelings, states of mind, pleasure, and arousal. (Z. Zhang, Zhang, & Wang, 2022).

The SOR model is generally used to describe online consumer behaviour (Elisa, Fakhri, & Pradana, 2022). The SOR model's main benefit is its flexibility, which consents to the examination of a range of internal and external stimuli (Z. Zhang et al., 2022). One of the most well-validated frameworks for analysing consumer behaviour is the S-O-R model, this enables researchers to interpret and include a wide range of specific features and analyse how they affect consumers' emotions and responses. (Sanny, Rafi Chandra, Chelles, & Angelica Santoso, n.d.).The term "stimulus" refers to a situational or marketing stimulation that affects customers (Redine, Deshpande, Jebarajakirthy, & Surachart Kumtonkun, 2023; J. Zhang, Jiang, Turner, & Pahlevan-Sharif, 2022). The cognitive and affective states of a person represent the organism, which is their internal state (Luo et al., 2021). It is also considered a stage between stimulation and response, as it serves as a middle state between them (Gong & Jiang, 2023)The final part of the S-O-R paradigm is the response, which is commonly referred to as behaviour (Bao & Yang, 2022; X. Li et al., 2023). The SOR model can help online retailers improve online impulse buying behavior by understanding the fundamentals and applying them to their marketing tactics.

Stimulus

Stimulus refer to the external triggers that tempt consumers to buy a product (Y. Y. Lee & Gan, 2020). Online retailer's marketing stimulus is vital in influencing online consumer behaviour (Dong & Tarofder, 2024). Online retailers implement various marketing strategies to attract and increase online impulse purchase among online customers (Huo, Wang, Sadiq, & Pang, 2023; Zafar et al., 2021). The stimulus like the variety of products, website design, promotional offers, price skimming tactics, and perceived brand image impact customers' sudden decision to purchase the product (Elisa et al., 2022; Tu, Wu, Jean, & Huang, 2017; Wang, Liu, Du, & Wang, 2021).

Consumers who shop online are typically in search of variety, as they want to explore the broad range of choices available on websites (Y. Zhao et al., n.d.). variety of products enhances the efficiency of purchasing by providing more access to similar products and enabling a broader range of goods through longer browsing online When it comes to shopping, a variety of options provides a break from the normal and a way to avoid repetition, which is typically the result of exploratory searches (Dong & Tarofder, 2024; Jayasooriya et al., n.d.). Customers are likely to make sudden brand switches when they come across new options and variants, which in turn motivates them to make a snap decision and buy impulsively (Huang & Cai, 2021). Variety-seeking is strongly associated with impulsive buying; it would encourage consumers to get involved in such types of actions. (Akram, Hui, Khan, Yan, & Akram, 2018; Rodrigues, Lopes, & Varela, 2021).

Navigability and search features are examples of task-relevant signals that can assist users in achieving their online buying objectives(Akram, Hui, Kaleem Khan, et al., 2018). On the other hand, mood-relevant stimuli like the general appeal of a website have more of an impact on consumers' enjoyment of online surfing than they do on achieving certain buying objectives (Narimanfar & Ghafari Ashtiani, 2021; Rahman & Hossain, 2022). Important requirements for online impulse buying include product availability (scarcity), website visual appeal, and ease of use (C. H. Lee, Chen, Huang, Chang, & Demirci, 2021; Wells, Parboteeah, & Valacich, 2011).

One key component of marketing stimuli that has been extensively used to study impulsive purchasing behaviour is price (Nitnaware, Urkande, Narval, & Rinwa, n.d.-a). Discounts on prices are given to entice customers to make impulsive purchases, and this can act as a foundation for further purchases (Fook & McNeill, 2020). Customers spend less than their original cost when prices are decreased, and the customer feels happy and motivated by the visible price reduction, which contributes to their impulsive purchasing behaviour (C. H. Lee et al., 2021). When a product is on sale, consumers are more likely to believe that they should take the chance rather than pass it up (Bao & Yang, 2022). One of the most famous marketing strategies, price discounts plays a big role in impulsive purchases since they can have a favorable impact and provide possibilities for purchases (Nitnaware et al., n.d.-a; Xu, Zhang, & Zhao, 2020).

Promotion is defined as a tactic to increase sales by offering a discount, extra value, or incentive for the products to encourage buyers to purchase them. (Cavazos-Arroyo & Máynez-Guaderrama, 2022; M. W. Karim et al., 2021).It is easier for customers to buy something that seems like a great deal even if customers don't need it when they are drawn in by the promotion. (Chauhan, Banerjee, & Dagar, 2023). Marketing features that influence consumers' purchasing decisions, such "a membership discount," "extending the warranty," and "having the option to pay in installments," are significant. (J. Zhang et al., 2022).

The perception of a brand can impact impulsive purchases made by people based on their own or other people's experiences using the good, or it may motivate people to purchase a product even when they had no intention of doing so in the first time (M. W. Karim et al., 2021). A product's brand image plays a big part in luring in potential customers (Z. Zhang et al., 2022). Beginning with the formation of a deeply implanted brand image in customers' thoughts, the brand image may favorably influence the stimulation of impulse purchasing behaviour to encourage impulsive purchases while shopping (Liu & Zhang, 2019; Z. Zhang et al., 2022).

Organism

The internal experience of a person's emotional cognition, including cognitive and affective states, is an internal state or organism (O) (Chauhan et al., 2023). The affective state of consumers influences impulsive online purchases. The effects of affective stimuli on buying impulsively online have been extensively studied in previous researchers (Xu et al., 2020). The control, arousal, and pleasure aspects of an emotional response to external environmental interactions can be used to characterize affective reactions (Jayasooriya et al., n.d.). Purchasers on impulse are typically more emotionally motivated than average consumers (Jayasooriya et al., n.d.; Nitnaware et al., n.d.-a). Researchers specifically suggest that pre-existing positive affective states and experiences have a greater influence on online impulse purchases than negative affective states (Dong & Tarofder, 2024). It has been widely known that the cognitive process and the affective states are interconnected (Akram, Hui, Khan, et al., 2018). According to the feelings as an information model, consumers' assessment might be influenced by the prevalent information that the present emotional states provide (Abdelsalam, Salim, Alias, & Husain, 2020). Since emotions have the power to distort perceptions and beliefs, affective reactions play a more prominent role in decision-making (Bao & Yang, 2022; Gupta, Prashar, Parsad, & Sai Vijay, 2021). However, both emotional and cognitive reactions must be assessed in combination since both are essential inputs in a mutual connection (Jayasooriya et al., n.d.).

Customers may have a variety of affective reactions when they are shopping (Jayasooriya et al., n.d.). Both good and negative reactions are possible for each type of effect(Xu et al., 2020). Moods can be happy or negative, feelings can be favorable or unfavorable. The emotional system, which is mostly reactive, has no direct control, is physically felt in the body, responds to almost any kind of stimuli, and is mostly provided, generating affective reactions(Aiolfi, Bellini, & Grandi, 2022; Arief, Mustikowati, & Chrismardani, 2023).

Response

Impulsive buying is a quick, attractive, and hedonistically complicated purchase behaviour that doesn't include careful evaluation of all the options and information available (Vikas, Yadav, & Agrawal, 2024). It is a somewhat common behaviour during the buying process. Information about online marketing has the greater ability to attract customers' attention and arouse their interest in things they would not have planned to buy (Sun, Han, Wang, Li, & Wang, 2021). When anyone has a strong urge to purchase a good without giving it much thought, they are engaging in impulse purchasing (J. Zhang et al., 2022). It's not difficult to identify impulse buying in the world around us. People frequently purchase items that are part of flash sales even when they don't need them, especially when the retail sector has flash sales of products from certain companies (X. Li et al., 2023; Rahman & Hossain, 2022; Tu et al., 2017).

Over the last ten years, the Internet has grown at a faster pace, and the most rapidly expanding area of e-commerce is online shopping (Gupta et al., 2021).Since many consumers can use an internet connection at home and work, online stores are frequently open around the clock. (Luo et al., 2021). The internet is quickly becoming a worldwide phenomenon and is altering the way people shop and purchase products and services (Gong & Jiang, 2023). Online impulsive buying refers to purchases made by customers without rational thought since they were solely motivated by their feelings at the moment to acquire a thing(Nabela & Albari, 2023). About their practicality, the sophisticated features of online shopping platforms readily entice customers, leading to a surge in impulsive purchases (Tu et al., 2017).

3. Research aim

Consumer behavior is dynamic and online impulse buying is the nature of buying behaviour. The research aims to find out the impacts of online marketing strategies on online impulse purchases. The internet makes and is becoming the alternative mode of shopping, the marketers and researchers are always exploring and finding new marketing strategies to find and to implement new marketing strategies to reach their customers. Despite many research works on impulse buying having emerged in the web environment, many gaps remain in the extant research. Firstly, while empirical work has addressed

marketing tactics in influencing impulse buying, very limited work has explored the interaction impacts of product variety, web and application electronic platforms, promotion tactics, pricing tactics, and reputation of a brand in the context of SOR model. The interaction among these forces and their joint influence on affective states—such as feelings, perceptions, and degree of arousal—must be empirically verified.

Secondly, earlier researches are mostly interested in general consumer attitude towards online shopping, but few region-specific studies exist, particularly for Indian cities. Cultural, economic, and technological environments may lead to differences in impulse buying behavior in online shopping, and hence local research is needed. The research aims to find the impacts of online marketing strategies on online impulse purchases. Online marketing is a highly competitive field, so it is extremely important to find out the most effective strategy that will lead customers to make an impulsive purchase. Thus, the marketers will be able to strengthen their strategies and implement them to increase sales and profit.

4. Hypothesis development

Product Variety

Consumers who shop online often have the option to choose a wide range of product alternatives which creates positive emotion in the customers (X. Li et al., 2023; Z. Zhao, Du, Liang, & Zhu, 2019). (Huang & Cai, 2021; Parsad, Prashar, & Vijay, 2019) shows that consumers' inclination to shop online is frequently influenced by their tendency towards variety seeking. Based on the above discussion, the following hypothesis is developed:

H1: Product variety positively affects the affective reaction

Apps and websites

The website's quality may encourage users to make impulsive purchases (C. H. Lee et al., 2021). Customers' emotions positively correlate with certain website personality attributes such as vitality, joy, reliability, complexity, and satisfaction (Hayu, Surachman, Rofiq, & Rahayu, 2020; Wells et al., 2011). A few factors, including carefully developed content, variety, easy navigation, and website design which motivates users to try making a purchase, might influence consumers' impulsive purchases.(Akram, Hui, Kaleem Khan, et al., 2018; Rahman & Hossain, 2022) discovered that consumers' emotional states are positively and considerably impacted by the visual depiction of e-commerce websites, leading to feelings of pleasure and happiness. Drawing on the prior researched materials, the following hypothesis is created:

H2: App and website positively affect the affective reaction

Price Tactics

Customers feel more impulsive during price reductions or discounts (Shiu, Wei, & Chang, 2023). As a result, the primary factor influencing impulsive purchases is a good's reduced price (Feng, Al Mamun, Masukujjaman, & Yang, 2023). To motivate customers to purchase several products, sales promotions are planned as an episode of different promotional materials (Fook & McNeill, 2020). Online businesses are increasingly utilising price reductions, gift packs, and vouchers as part of their promotional strategies (Redine et al., 2023). because it causes customers to engage in hedonistic browsing and have positive emotions. (Arief et al., 2023; Bao & Yang, 2022) Consumers who browse products happily express feeling satisfied and at ease when the costs are fair and within their budgets. The following hypothesis is developed regarding the subject matter already pointed out above:

H3: Price tactics positively affect the affective reaction

Promotion Tactics

Promotions are capable of influencing consumers' purchasing decisions and result in impulsive purchases (Redine et al., 2023).Promotion is defined as a tactic used to increase sales by enticing people to purchase an item by offering a discount, prize, or offer. (M. ; Li et al., 2022). When consumers are attracted by marketing, they are more likely to purchase something that looks to be a good deal, no matter whether they don't require it. Promotional elements that impact consumers' decisions to buy include "a membership discount," "extending the warranty," and "being able to make payments in installments." (Sun et al., 2021). The study found a significant positive relationship between emotional reactions and sales promotion (Jayasooriya et al., n.d.). Based on the above discussion, the following hypothesis is developed:

H4: Promotional tactics positively affect the affective reaction

Brand image

Having a good brand image for your product plays a very important part when it comes to attracting potential customers (Mayasari, Haryanto, Hutagaol, Ramadhan, & Amir, 2023). The formation of a deeply ingrained brand image within the minds of customers with a positive emotion can adversely affect

the development of impulse purchases (Mayasari et al., 2023; Trivedi, 2021). The brand image can influence the triggering of the internal states of the customers that encourage impulsive shopping because it affects the formation of a deeply ingrained brand image (Kholis, Saifuddin, & Arif, 2023). The following hypothesis is developed regarding the subject matter already pointed out above:
H5: Brand image positively affects the affective reaction

Affective reaction

The effects of affective reaction on buying impulsively online have been extensively studied in previous research. Online impulsive purchases are influenced by users' emotive states (Elisa et al., 2022; Kholis et al., 2023). It has been widely accepted that the most extensively researched aspects of emotional stimulation include arousal, pleasure, pleasant emotion, and poor emotion (Van Overveld, 2016). Arousal is a measure of how much an environment may affect stimulation (Y. Y. Lee, Gan, & Liew, 2023). Through organizing, impulsive purchasing behaviours are linked to high arousal. Pleasure is defined as "the affective reaction to a hedonic valence stimulus" (Tu et al., 2017) . It assesses “the degree to which an individual gets fulfilled and happy when exposed to a stimulus,” to put it more precisely (Yu, 2022). If anyone had a great shopping experience earlier, they are more likely to pick up information that is reflected in their positive attitude (Vihari, Sinha, Tyagi, & Mittal, 2022a).
“The degree to which an individual gets happy, excited, and motivated” is referred to as positive feeling (Vihari, Sinha, Tyagi, & Mittal, 2022b). Previous research has looked into how happy feelings affect impulsive internet purchasing behaviour (Yi, Khan, Su, Tong, & Zhao, 2023). Impulsive shoppers are often more emotional, they find enjoyment in exploring and purchasing goods, and when they recognize they are about to make an impulsive purchase, they move fast and with great pleasure (Kholis et al., 2023). In other words, impulsive buying is favorably and strongly influenced by a pleasant mood (Kholis et al., 2023; Yi et al., 2023). Therefore, we propose that further research be done on additional moods, sentiments, and emotions (such as affection). The following hypothesis has been established in response to the discussion above:
H6: Affective reactions positively affect the online impulse purchase

5. METHODOLOGY

5.1. Model Development

The theoretical framework underpinning the study is the Stimulus-Organism-Response model (SOR), which explains consumer reactions to various stimulus in the environment, and is understood to influence online impulsive buying consumers' emotional state in response to the online store marketing campaign. It is assumed in this model that consumer emotional response is then activated by five core stimulus dimensions: product range, apps/website, price, promotion, and brand reputation (H1 – H5). The psychological and emotional state activated by such promotional stimuli is called an affective response and is assumed to operate as the organism construct in the model. This affective response impacts online impulsive buying, which is the reaction construct of the model (H6).
The study emphasizes that although marketing strategies lead to impulse buys, they do not do so directly through marketing strategy. The mediational affective reaction between marketing stimulus on emotional engagement then leads to impulse buying as a resultant behavior is the main focus of the study. Importantly, this model applies to a rapidly growing market of metro cities where digital retail is additionally being fuelled by consumer exposures of online shopping. The model behavior is novel because it synthesizes marketing stimulus, psychological responses, and behavioral response to provide actionable insight for retailers to develop effective marketing strategies to motivate impulse buying.

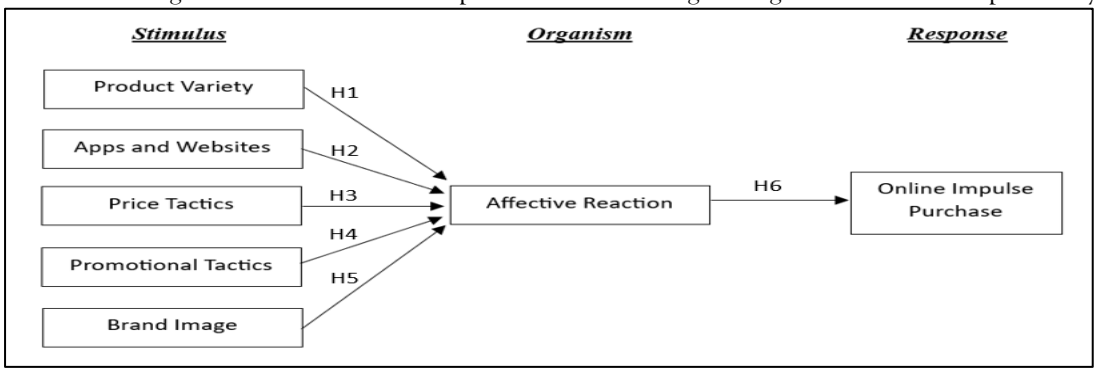


Figure 1. The research framework

5.2. Sample and data collection Methods

This study examines the effect of marketing strategy on online impulse buying based on SOR theory. The paper also analyses the mediating role of affective reaction between the online retailer's marketing strategy and online impulse buying purchases among the four metro cities Bangalore, Chennai, Visakhapatnam, and Kochi. This research study used the questionnaire-survey method, a commonly used method in empirical research, to get the needed data. Data were gathered for the current study by developing and surveying respondents using a questionnaire based on a five-point Likert scale. As it is impossible to determine the exact population composition in advance, stratified random sampling with a non-proportionate design method was used in this study. It is well known that Bangalore, Chennai, Visakhapatnam, and Kochi are the most famous and largest metro cities in the southern part of India. As these are fast-growing metropolises with a lot of migrants coming from other cities, the exact population of these cities is not well known. There were 180 data samples collected from each city, making up a total of 720 samples collected from each city.

The study employs stratified random sampling with a non-proportionate design for several justified reasons. First, conducting a probability-based proportional sampling method would have been complicated due to population weighting as it would be impossible to determine a population mix based on the nature of migration patterns and rapid urbanization in Bangalore, Chennai, Visakhapatnam, and Kochi. Since stratified random sampling provides greater representation across varying consumer types within these metro cities, sampling biases would thereby decrease and external validity would increase. Further, the non-proportionate design is justified since the aim of the study is to obtain equal samples (180) per city for comparison purposes across regions versus to reflect population proportions. Stratified random sampling provided statistical reliability by not allowing one city to dominate in number and promote a more evenly distributed dataset for cross city analyses. Finally, the sampling design of stratified random sampling opened access to targeted online consumers where it ensured transferable qualities of the findings to digital shoppers who live in rapidly growing metro areas.

5.3. Measurement Items and Scaling

Table 1. Reliability test result

Construct	Cronbach's Alpha	N of Items	Source
Product Variety	0.953	5	(Arief et al., 2023; Huang & Cai, 2021; Parsad et al., 2019; Tanveer, Kazmi, & Rahman, 2022)
Apps and Websites	0.938	5	(C. H. Lee et al., 2021; Narimanfar & Ghafari Ashtiani, 2021; Rahman & Hossain, 2022)
Price Tactics	0.929	5	(Aqmala & Putra, 2022; Fook & McNeill, 2020; Huo et al., 2023; Y. Zhao et al., n.d.)
Promotion Tactics	0.926	5	(Akram, Hui, Kaleem Khan, et al., 2018; Kholis et al., 2023; Luo et al., 2021; Tu et al., 2017)
Brand image	0.985	5	(Mayasari et al., 2023; Trivedi, 2021; Xu et al., 2020)
Affective Reaction	0.968	5	(Jayasooriya et al., n.d.; Y. Y. Lee et al., 2023; Martaleni, Hendrasto, Hidayat, Dzikri, & Yasa, 2022; Tu et al., 2017; Van Overveld, 2016)
Online impulse buying	0.949	8	(Che-Chang, Ying-Yun, & Yi-Chou, 2020; M. ; Li et al., 2022; Nitnaware, Urkande, Narval, & Rinwa, n.d.-b; Xiao, Liu, & Wu, 2023)

An assessment of the reliability of a set of survey items is done by calculating the Cronbach's alpha coefficient. Table 1 indicates the high degree of reliability across several dimensions of product variety (α= 0.953, 5 items), apps and websites (α= 0.938, 5 items), Price Tactics (α= 0.929, 5 items), promotional tactics (α= 0.926, 5 items), Brand image (α= 0.985, 5 items), Affective reaction (α= 0.968, 5 items), and online impulse purchase (α= 0.949, 8 items). The statistics show that the data collected for each construct were reliable. Cronbach's Alpha is greater than 0.70, which indicates high internal consistency, and the highest reliability of the data collected.

5.4. Demographic information of the respondents

Table 2 Demographic profile of the respondents

Items	Category	Numbers	Percent
Gender	Male	326	45%
	Female	394	55%
Age	Generation Z	380	53%
	Generation y	380	53%
Place	Chennai	180	25%
	Visakhapatnam	180	25%
	Kochi	180	25%
	Bangalore	180	25%
Source of income	Salary	310	43%
	Business	221	31%
	Dependent	189	26%
Family monthly income	Up to 200000	183	25%
	200001-300000	229	32%
	300001- 400000	204	28%
	Above 400000	104	14%

The table 2 depicts the structure of the 720 participants involved in the study. Of those that answered female and male, the breakdown was 55% female and 45% male. For total participants, the even distribution holds true across the generations cohort indicators, as Generation Z (53%) and Generation Y (53%). The data was collected it in four metropolitan cities (Chennai, Visakhapatnam, Kochi, and Bangalore) with each city contributing 25% of the participants. For participants that reported source of income, 43% indicated they made money from salary, 31% were in business, and 26% were dependents. For total monthly family income, 32% of participants earned ₹200,001–₹300,000, 28% earned ₹300,001–₹400,000, 25% earned up to ₹200,000 and 14% earned over ₹400,000. The sample diversity in terms of gender, age, location and overall financial earnings is an indication that the sample is a fair representation of the targeted population and will help evaluate the degree of influence marketing strategies have on online impulse purchasing behavior. The breakdown by source of income and level of earnings provides some background about the consumption process for each economic class.

6. Analysis and Findings of the research

6.1. Measurement model

The study Emotional Consumers and Online Impulse Purchase: Analysing Affective Reaction is done here by collecting 720 valid responses through the questionnaire. These data are coded and then analysed in IBM SPSS Statistics 26 and AMOS 22. Confirmatory factor analysis (CFA), which has been performed on the data. According to the test result, the model seems to have a sensibly good fit to the data based on the results of the test. The RMSEA is less than .08. The GFI, AGFI, IFI, as well as the CFI of the model, are greater than .09, which indicates the validity of the model.

Table 3 shows the results obtained from the Confirmatory Factor Analysis (CFA) which supported the validity and reliability of the constructs in the research. Each construct had three or more indicators that produced Standardized Factor Loadings (SFL) exceeding 0.80 which means the indicators demonstrated individual indicator reliability. The Average Variance Extracted (AVE) also demonstrated values exceeding 0.50 providing evidence of convergent validity. The Composite Reliability (CR) were also above 0.90 for all constructs demonstrating the overall quality internal consistency. The constructs of Product Variety, Apps and Websites, Pricing Tactics, Promotional Tactics, Brand Image, Affective Reaction, and Online Impulse Purchase all had good measurement property evidencing the overall robustness of the model. The study's analysis provided additional evidence to indicate that the study examined the framework in the context of online impulse purchasing behaviour.

Table 3. Confirmatory factor analysis

Construct	Indicator	Standardized Factor Loading (SFL)	Error Variance	AVE	CR
Product Variety (PV)	PV1	0.849	0.279	0.729	0.929
	PV2	0.855	0.268		

	PV3	0.819	0.329		
	PV4	0.829	0.312		
	PV5	0.915	0.162		
Apps and Websites (WA)	WA1	0.852	0.274	0.718	0.921
	WA2	0.838	0.297		
	WA3	0.834	0.304		
	WA4	0.837	0.299		
	WA5	0.876	0.232		
Pricing Tactics (PF)	PF1	0.838	0.297	0.719	0.923
	PF2	0.839	0.296		
	PF3	0.839	0.295		
	PF4	0.840	0.294		
	PF5	0.806	0.350		
Promotional Tactics (P)	P1	0.812	0.340	0.698	0.924
	P2	0.818	0.330		
	P3	0.824	0.321		
	P4	0.843	0.289		
	P5	0.836	0.301		
Brand Image (BH)	BH1	0.844	0.287	0.715	0.926
	BH2	0.848	0.280		
	BH3	0.854	0.270		
	BH4	0.846	0.284		
	BH5	0.846	0.284		
Affective Reaction (PE)	PE1	0.842	0.291	0.728	0.938
	PE2	0.878	0.229		
	PE3	0.848	0.280		
	PE4	0.879	0.227		
	PE5	0.896	0.197		
Online Impulse Purchase (OIB)	OIB1	0.802	0.356	0.721	0.954
	OIB2	0.850	0.277		
	OIB3	0.814	0.337		
	OIB4	0.852	0.274		
	OIB5	0.826	0.317		
	OIB6	0.832	0.307		
	OIB7	0.858	0.263		
	OIB8	0.844	0.287		

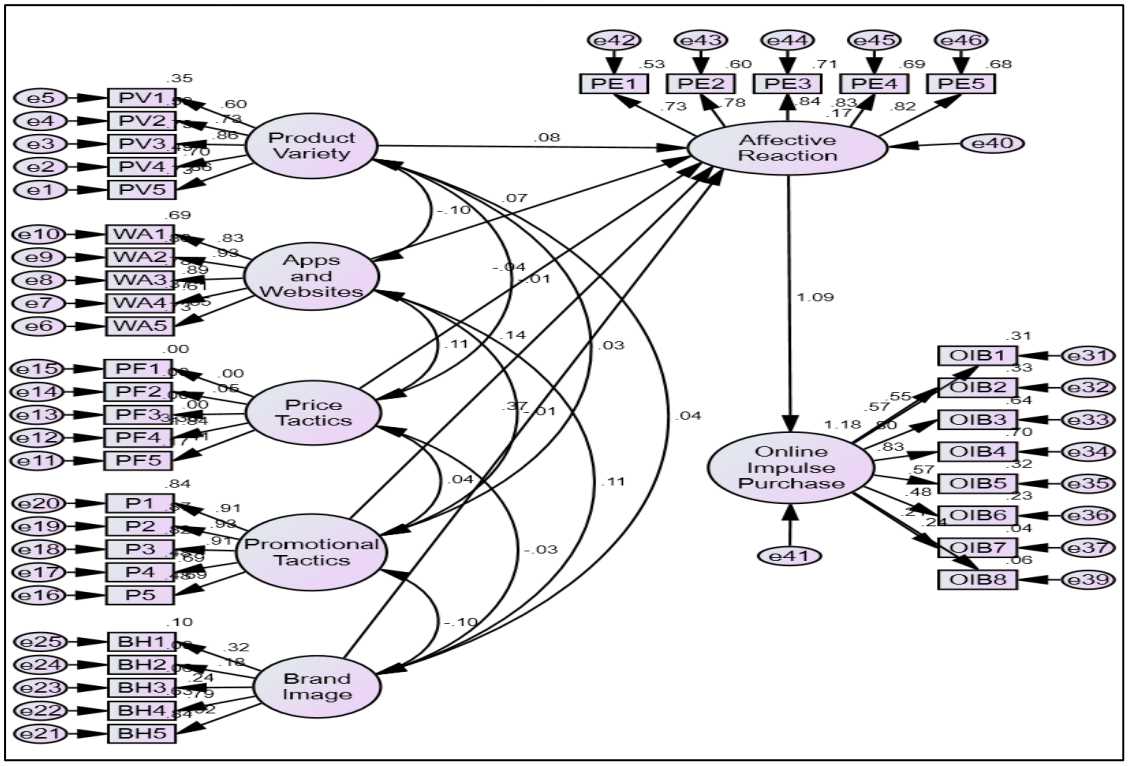
Table 4. Discriminant Validity

Construct	CR	AVE	OIB	PV	WA	PF	P	BH	PE
OIB	0.954	0.721	0.849						
PV	0.929	0.698	0.104	0.836					
WA	0.921	0.719	0.127	0.134	0.836				
PF	0.923	0.705	0.121	0.126	0.181	0.839			
P	0.924	0.71	0.103	0.118	0.126	0.104	0.842		
BH	0.926	0.715	0.398	0.121	0.118	0.126	0.127	0.845	
PE	0.938	0.728	0.103	0.127	0.121	0.118	0.104	0.419	0.853

Discriminant validity is provided in Table 4. The results show that each construct is distinct and has been separated from other constructs within the model. Discriminant validity was established when the square root of the AVE (bold diagonal elements) was greater than the correlation between constructs (off-diagonal elements). Overall, the constructs of Online Impulse Buying (OIB), Product Variety (PV), Apps

and Websites (WA), Pricing Tactics (PF), Promotional Tactics (P), Brand Image (BH), and Affective Reaction (PE) showed very strong evidence of discriminant validity. Accordingly, all constructs measured a specific and constant construct, and this situation also provides strong evidence of the reliability and validity of the measurement model.

6.2. Structural Equation Model (SEM) Analysis



In the structural equation model (SEM) model the X^2/df value derived from the calculations is 1.56, which is less than 5, which indicates a fit model. With a GFI value of 0.979 and an AGFI value of 0.968, the model fit is considered good, as both values are above 0.9. The IFI (0.951), CFI (0.942) show, and an RMSEA value of 0.03 a show that the model is perfectly fit.

Table 5. Test results of SEM model

Path Relation			Estimate	S.E.	C.R.	P	Label
Affective Reaction	<--	Product Variety	.112	.038	2.947	***	Significant
Affective Reaction	<--	Apps and Websites	.055	.023	2.391	***	Significant
Affective Reaction	<--	Pricing Tactics	.102	.042	2.428	***	Significant
Affective Reaction	<--	Promotional Tactics	.221	.061	3.622	***	Significant
Affective Reaction	<--	Brand Image	.441	.099	4.458	***	Significant
Online Impulse Purchase	<--	Affective Reaction	.697	.081	8.608	***	Significant

Using the SOR model as a mediating factor, the path coefficient in Table 5 SEM model results illustrates the direction and intensity of the association between marketing tactics and online impulse purchases. The brand image has the highest estimated value of 0.441 with a critical ratio (CR) of 3.622 to the affective responses which establishes the significance ($p<0.01$) 1% level. Secondly the promotional tactics with an estimated value of 0.221, thirdly product variety with an estimated value of 0.112, fourthly Pricing Tactics with an estimated value of 0.102, and finally the Apps and Websites with an estimated value of 0.055 to the affective responses which determines the significance at the 1% level ($p<0.01$). These results indicate that marketing strategies like product variety, Apps and Websites, Pricing Tactics, Promotional Tactics, and Brand Image significantly impact the affective reactions of the customers. The affective reaction significantly influences online impulse purchases with a path coefficient of 0.697. This

indicates that the affective reaction plays a mediating relationship between the identified marketing strategies and customer's tendency to make online impulse purchases.

7. DISCUSSION

Table 6. Result of hypotheses testing

Hypotheses		Supported / Not Supported
H1	Product variety positively affects the affective reaction	Supported
H2	App and website positively affect the affective reaction	Supported
H3	Price tactics positively affect the affective reaction	Supported
H4	Promotional tactics positively affect the affective reaction	Supported
H5	Brand image positively affects the affective reaction	Supported
H6	Affective reactions positively affect online impulse purchase	Supported

The research aims to find the effects of various online retailer marketing tactics on online impulse purchases, directing on the mediating role of the customer's affective responses with the SOR model. The study's outcomes provided support for the hypotheses about the positive effects of different online retailers' marketing stimuli on affective responses. According to data analysis, the five online retailers' marketing strategies influenced customers' emotions, arousal, perceptions, and pleasure. They are Product Variety, Apps and Websites, Pricing Tactics, Promotional Tactics, and Brand Image. Hence, all of the mentioned dimensions significantly influenced customers' emotions, arousal, perceptions, and pleasure (Akram, Hui, Kaleem Khan, et al., 2018; Kholis et al., 2023; Luo et al., 2021; Tu et al., 2017). These findings are aligned with the literature and other studies, confirming the importance of online marketing tactics for customers' emotions, arousal, perceptions, and pleasure (N. U. Karim, Nisa, & Imam, 2021; X. Li et al., 2023).

The study's conclusions have a number of implications for online retailers to enhance their marketing strategies and drive customers in the online impulse purchases. The brand image is having the highest impact on the emotions and the feelings of the customers. The brand image of the product that is highly influencing the customers when compared to the other marketing strategies like product variety, price tactics, apps and websites, and promotional tactics. Online retailers want to concentrate more on the brand image and strengthen the brand values and image they can easily heat the customers' emotions and lead to impulse purchases. Most researchers have mentioned that apps and websites mostly influence impulse purchases (Akram, Hui, Kaleem Khan, et al., 2018; Rahman & Hossain, 2022; Tu et al., 2017). Still, in this study, the brand image has the highest influence on the affective reaction followed by promotional tactics, product variety, pricing strategies, and apps and websites. Through strengthening the promotional and pricing tactics, product features, apps, and visual applies, website easy navigation, layouts, and Online retailers may effectively encourage online customers' emotive reactions and facilitate online impulse purchases by offering a diverse range of items across many categories.

Theoretical Contributions

This research provides various theoretical contributions by extending the Stimulus-Organism-Response (SOR) model for online impulse buying. First, it evidences that affective responses are a mediator between marketing strategies and consumer behavior, confirming and adding to previous works (Akram et al., 2018; Kholis et al., 2023; Luo et al., 2021; Tu et al., 2017). Secondly, in sharp contrast to previous studies that have emphasized app and website usability as the main variables affecting impulse buying (Rahman & Hossain, 2022; Tu et al., 2017), this contribution demonstrated that brand image ante tinged the affective response. In this way, it conflicts with those studies and concludes that the emotional attachment to a brand trumps digital usability or fit in terms of an opportunity for impulse buying (Karim, Nisa, & Imam, 2021; Li et al., 2023).

In addition, this research considers the multiple marketing stimuli within one overall model (i.e. product assortment, apps and websites, pricing strategy, promotional strategy, and brand image), to give a more holistic view of how marketing stimuli can interact and work collectively, resulting in an impact on online impulse buying. In addition, this study also contributes to the literature, and further establishes some

theoretical based on the SOR framework (Akram et al., 2018). all analysis was operationalized through Structural Equation Modelling (SEM) which allow for causal inferences in the model.

This study adds new insight to the marketing literature by revealing brand image is the greatest contributor of all factors in terms of consumers' impulsive choice. In doing so, this research demonstrates how various consumer's perceptions of trust, quality and emotional attachment to a brand can trigger impulsive behavior (Luo et al., 2021). This research is very important for understanding the evolution narrative for brand positioning in the digital commerce space and how potentiated emotional outputs that consumers can generate from the brand image, compared to the historical reliance of consumer price or promotion based trigger brand impulsive choices (Kholis et al., 2023). In conclusion, the research brings forth a further extension of the SOR model in consumer engagement looking at emotional engagement preferences rather than convenience engagement and explains other theorists and practitioners working within consumer behavior and online engagement (Li et al., 2023).

8. Conclusion, limitations and future research direction

The study examines the impact of marketing strategies on online impulse purchases focusing on the mediating role of affective reactions of the customers with the SOR model. The consumption pattern of the customers has changed due to technological development and innovations in the information system and internet. The study aims to identify the affective reactions as a main mediator between marketing stimuli and online impulse purchasing. As described in the path analysis, affective reactions noticeably mediated the connection between marketing strategies and behaviour towards online impulse purchases. Thus, it can be considered critical to understanding the emotional status of customers so that way online purchasing behaviour can be forecast.

The external marketing strategies stimulus are carefully designed by the online retailers are highly influence the purchase decision-making power of the customers. The importance of marketing strategies in shaping. One of the important factors that retailers on the internet should take into account when bringing a product to the market, along with website quality design, price breaks, and brand awareness campaigns, is customers' emotive reactions and how these drive online impulse purchases. The brand image emerged as the strongest predictor of affective responses, followed by promotional tactics, product variety, pricing strategies, and apps and websites.

The study's shortcomings include its narrow focus on marketing tactics and neglect of other potentially important variables, such as social influence, consumer income and financial background, trust, and cultural aspects, that may have an impact on online impulse purchases. Future studies can solve these limitations, and further research can be done. There is room for more study in the areas of cross-cultural influence, financial influence, and cognitive reaction to online impulse purchase activity.

Appendix A

Table A1. Questionnaire

Variables	Item Code	Items	Reference(s)
Product Variety (PV)	PV1	The availability of a wide variety of products influences my decision to purchase online.	(Arief et al., 2023; Huang & Cai, 2021; Parsad et al., 2019; Tanveer, Kazmi, & Rahman, 2022)
	PV2	You prefer shopping on websites that offer a large selection of products within the same category.	
	PV3	A greater variety of products makes it easier for me to find what you need.	
	PV4	Too many product choices make it difficult for me to make a purchase decision.	
	PV5	You are more likely to make an impulse purchase when there are many options available	

Apps and Websites (WA)	WA1	A user-friendly website/app increases my likelihood of purchasing online.	(C. H. Lee et al., 2021; Narimanfar & Ghafari Ashtiani, 2021; Rahman & Hossain, 2022)
	WA2	You trust e-commerce platforms more when they have a well-designed and professional website.	
	WA3	Fast-loading websites/apps positively influence my online shopping experience.	
	WA4	You are more likely to make an impulse purchase on mobile apps compared to websites.	
	WA5	Personalized recommendations on shopping apps and websites encourage me to buy more.	
Pricing Tactics (PF)	PF1	Discounts and special offers influence my online purchasing decisions.	(Aqmala & Putra, 2022; Fook & McNeill, 2020; Huo et al., 2023; Y. Zhao et al., n.d.)
	PF2	You are more likely to buy a product if it is advertised as "limited-time pricing."	
	PF3	You prefer online stores that provide clear and transparent pricing.	
	PF4	Bundled pricing (e.g., buy 2 get 1 free) increases my likelihood of purchasing.	
	PF5	You tend to compare prices on multiple websites before making a purchase.	
Promotional Tactics (P)	P1	Flash sales and limited-time offers encourage me to make impulse purchases.	(Akram, Hui, Kaleem Khan, et al., 2018; Kholis et al., 2023; Luo et al., 2021; Tu et al., 2017)
	P2	You are more likely to purchase from an online store that provides free shipping promotions.	
	P3	Email and social media advertisements influence my buying decisions.	
	P4	Influencer promotions impact my interest in a product.	
	P5	You find personalized promotional offers more appealing than general discounts.	
Brand Image (BH)	BH1	You prefer purchasing from brands that have a strong and reputable online presence.	(Mayasari et al., 2023; Trivedi, 2021; Xu et al., 2020)
	BH2	A well-known brand makes me feel more confident about my purchase.	
	BH3	You are more likely to buy from brands that have positive customer reviews and ratings.	
	BH4	The brand's social responsibility and ethical practices influence my shopping decisions.	

	BH5	You trust branded products more than generic or lesser-known alternatives.	
Affective Reaction (PE)	PE1	You feel excited when you see a product that you like while shopping online.	(Jayasooriya et al., n.d.; Y. Y. Lee et al., 2023; Martaleni, Hendrasto, Hidayat, Dzikri, & Yasa, 2022; Tu et al., 2017; Van Overveld, 2016)
	PE2	Online shopping improves my mood when you am feeling down.	
	PE3	You feel regret after making an impulse purchase.	
	PE4	You tend to buy things online based on my emotions rather than necessity.	
	PE5	The design and visuals of an online store influence how you feel about purchasing.	
Online Impulse Purchase (OIB)	OIB1	You frequently make unplanned purchases when shopping online.	(Che-Chang, Ying-Yun, & Yi-Chou, 2020; M. ; Li et al., 2022; Nitnaware, Urkande, Narval, & Rinwa, n.d.-b; Xiao, Liu, & Wu, 2023)
	OIB2	Seeing discounts and limited-time deals makes me buy things impulsively.	
	OIB3	You tend to add extra items to my cart that you didn't originally plan to buy.	
	OIB4	The convenience of online shopping increases my tendency to make impulse purchases.	
	OIB5	You regret impulse purchases you make online.	
	OIB6	You are influenced by product recommendations and "frequently bought together" suggestions.	
	OIB7	Ads and promotions on social media make me buy things impulsively.	
	OIB8	You feel satisfied after making an impulse purchase online.	

REFERENCE

1. Abdelsalam, S., Salim, N., Alias, R. A., & Husain, O. (2020). Understanding Online Impulse Buying Behavior in Social Commerce: A Systematic Literature Review. IEEE Access, 8, 89041–89058. https://doi.org/10.1109/ACCESS.2020.2993671
2. Aiolfi, S., Bellini, S., & Grandi, B. (2022). Using mobile while shopping in-store: a new model of impulse-buying behaviour. Journal of Consumer Marketing, 39(5), 432–444. https://doi.org/10.1108/JCM-05-2020-3823
3. Akram, U., Hui, P., Kaleem Khan, M., Tanveer, Y., Mehmood, K., & Ahmad, W. (2018). How website quality affects online impulse buying: Moderating effects of sales promotion and credit card use. Asia Pacific Journal of Marketing and Logistics, 30(1), 235–256. https://doi.org/10.1108/APJML-04-2017-0073
4. Akram, U., Hui, P., Khan, M. K., Yan, C., & Akram, Z. (2018). Factors affecting online impulse buying: Evidence from Chinese social commerce environment. Sustainability (Switzerland), 10(2). https://doi.org/10.3390/su10020352
5. Aqmala, D., & Putra, F. I. F. S. (2022). Ask, Bid, Buy! Online Impulse Buying Behaviour of Ethnic Chinese Mothers in Indonesia. Quality - Access to Success, 23(190), 342–354. https://doi.org/10.47750/QAS/23.190.36
6. Aragoncillo, L., & Orús, C. (2018). Impulse buying behaviour: An online-offline comparative and the impact of social media. Spanish Journal of Marketing - ESIC, 22(1), 42–62. https://doi.org/10.1108/SJME-03-2018-007
7. Arief, M., Mustikowati, R. I., & Chrismardani, Y. (2023). Why customers buy an online product? The effects of advertising attractiveness, influencer marketing and online customer reviews. LBS Journal of Management & Research, 21(1), 81–99. https://doi.org/10.1108/lbsjmr-09-2022-0052
8. Bao, Z., & Yang, J. (2022). Why online consumers have the urge to buy impulsively: roles of serendipity, trust and flow experience. Management Decision, 60(12), 3350–3365. https://doi.org/10.1108/MD-07-2021-0900
9. Cavazos-Arroyo, J., & Máynez-Guaderrama, A. I. (2022). Antecedents of Online Impulse Buying: An Analysis of Gender and Centennials' and Millennials' Perspectives. Journal of Theoretical and Applied Electronic Commerce Research, 17(1), 122–137. https://doi.org/10.3390/jtaer17010007

10. Chauhan, S., Banerjee, R., & Dagar, V. (2023). Analysis of Impulse Buying Behaviour of Consumer During COVID-19: An Empirical Study. Millennial Asia, 14(2), 278–299. https://doi.org/10.1177/09763996211041215
11. Che-Chang, C., Ying-Yun, H., & Yi-Chou, W. (2020). Partial least squares structural equation modeling in online shopping: The moderator effect between impulsive buying tendency and behavior. WSEAS Transactions on Business and Economics, 17, 542–550. https://doi.org/10.37394/23207.2020.17.53
12. Dong, Y., & Tarofder, A. K. (2024). Beyond the screen: How affection drives impulsive purchases in livestreaming e-commerce. International Journal of Applied Economics, Finance and Accounting, 18(1), 168–179. https://doi.org/10.33094/ijaefa.v18i1.1338
13. Elisa, H. P., Fakhri, M., & Pradana, M. (2022). The moderating effect of social media use in impulsive buying of personal protective equipments during the COVID-19 pandemic. Cogent Social Sciences, 8(1). https://doi.org/10.1080/23311886.2022.2062094
14. Eroğlu, M. Z., & Şahan, E. (2018). Impulsivity and impulse control disorders in pregnancy. Psychiatry and Clinical Psychopharmacology, 28(2), 199–204. https://doi.org/10.1080/24750573.2017.1385209
15. Feng, Z., Al Mamun, A., Masukujjaman, M., & Yang, Q. (2023). Modeling the significance of advertising values on online impulse buying behavior. Humanities and Social Sciences Communications, 10(1). https://doi.org/10.1057/s41599-023-02231-7
16. Fook, L. A., & McNeill, L. (2020). Click to buy: The impact of retail credit on over-consumption in the online environment. Sustainability (Switzerland), 12(18). https://doi.org/10.3390/SU12187322
17. Gong, X., & Jiang, X. (2023). Understanding consumer impulse buying in livestreaming commerce: The product involvement perspective. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1104349
18. Gupta, P., Prashar, S., Parsad, C., & Sai Vijay, T. (2021). Role of Shopping App Attributes in Creating Urges for Impulse Buying: An Empirical Investigation Using SEM and Neural Network Technique. In Journal of Electronic Commerce in Organizations (Vol. 19, Issue 1, pp. 43–64). IGI Global. https://doi.org/10.4018/JECO.2021010103
19. Hayu, R. S., Surachman, Rofiq, A., & Rahayu, M. (2020). The effect of website quality and government regulations on online impulse buying behavior. Management Science Letters, 10(5), 961–968. https://doi.org/10.5267/j.msl.2019.11.015
20. Huang, X., & Cai, R. (2021). Does Product Semantics Matter in Stimulating Impulse Buying Behavior for Internet Products? Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.676086
21. Huo, C., Wang, X., Sadiq, M. W., & Pang, M. (2023). Exploring Factors Affecting Consumer's Impulse Buying Behavior in Live-Streaming Shopping: An Interactive Research Based Upon SOR Model. SAGE Open, 13(2). https://doi.org/10.1177/21582440231172678
22. Jayasooriya, S. P., Kumar, S., & Lanka, S. (n.d.). Affective and Cognitive Responses of Consumer Behavior.
23. Karim, M. W., Chowdhury, M. A. M., Al Masud, M. A., & Arifuzzaman, M. (2021). Analysis of factors influencing impulse buying behavior towards e-tailing sites. Contemporary Management Research, 17(2), 97–126. https://doi.org/10.7903/CMR.20457
24. Karim, N. U., Nisa, N. un, & Imam, S. S. (2021). Investigating the Factors that Impact Online Shopping and Sales Promotion on Consumer's Impulse Buying Behavior: A Gender-based Comparative Study in the UAE. International Journal of Business and Administrative Studies, 7(3). https://doi.org/10.20469/ijbas.7.10002-3
25. Kholis, N., Saifuddin, M., & Arif, N. A. S. (2023). The role of positive emotional response in the relationship between store atmosphere, sales promotion, hedonic shopping motivation, and impulsive buying in Indonesia's largest department store. Kasetsart Journal of Social Sciences, 44(3), 823–832. https://doi.org/10.34044/j.kjss.2023.44.3.20
26. Lee, C. H., Chen, C. W., Huang, S. F., Chang, Y. T., & Demirci, S. (2021). Exploring consumers' impulse buying behavior on online apparel websites: An empirical investigation on consumer perceptions. International Journal of Electronic Commerce Studies, 12(1), 83–106. https://doi.org/10.7903/ijecs.1971
27. Lee, Y. Y., & Gan, C. L. (2020). Applications of SOR and para-social interactions (PSI) towards impulse buying: the Malaysian perspective. Journal of Marketing Analytics, 8(2), 85–98. https://doi.org/10.1057/s41270-020-00077-5
28. Lee, Y. Y., Gan, C. L., & Liew, T. W. (2023). Rationality and impulse buying: Is your emotion a part of the equation? Computers in Human Behavior Reports, 12. https://doi.org/10.1016/j.chbr.2023.100337
29. Li, M. ;, Wang, Q. ;, Cao, Y., Foroudi, P., Qi, J., Tchounwou, P. B., Li, M., Wang, Q., & Cao, Y. (2022). Citation: Understanding Consumer Online Impulse Buying in Live Streaming E-Commerce: A Stimulus-Organism-Response Framework. https://doi.org/10.3390/10.3390/ijerph19074378
30. Li, X., Guo, M., & Huang, D. (2023). The role of scarcity promotion and cause-related events in impulse purchase in the agricultural product live stream. Scientific Reports, 13(1). https://doi.org/10.1038/s41598-023-30696-8
31. Liu, Q., & Zhang, F. (2019). Study on the influencing factors of mobile users' impulse purchase behavior in a large online promotion activity. Journal of Electronic Commerce in Organizations, 17(2), 88–101. https://doi.org/10.4018/JECO.2019040108
32. Luo, H., Cheng, S., Zhou, W., Song, W., Yu, S., & Lin, X. (2021). Research on the impact of online promotions on consumers' impulsive online shopping intentions. Journal of Theoretical and Applied Electronic Commerce Research, 16(6), 2386–2404. https://doi.org/10.3390/jtaer16060131
33. Maréchal, E., Denoiseux, B., Thys, E., Cras, P., Crosiers, D., & Bologna, M. (2019). Impulsive-Compulsive Behaviours in Belgian-Flemish Parkinson's Disease Patients: A Questionnaire-Based Study. Parkinson's Disease, 2019. https://doi.org/10.1155/2019/7832487
34. Martaleni, M., Hendrasto, F., Hidayat, N., Dzikri, A. A., & Yasa, N. N. K. (2022). Flash sale and online impulse buying: Mediation effect of emotions. Innovative Marketing, 18(2), 49–59. https://doi.org/10.21511/im.18(2).2022.05
35. Mayasari, I., Haryanto, C., Hutagaol, O. D., Ramadhan, A. R., & Amir, I. (2023). EXAMINING THE ROLE OF SOCIAL MEDIA MARKETING ON BRAND LOVE AND ITS IMPACT ON BRAND CENTRALITY: THE STUDY OF LOCAL FASHION BRANDS FOR THE MILLENNIALS. Journal of Indonesian Economy and Business, 38(2), 147–165. https://journal.ugm.ac.id/v3/jieb

36. Moser, C., Schoenebeck, S. Y., & Resnick, P. (2019, May 2). Impulse buying: Design practices and consumer needs. Conference on Human Factors in Computing Systems - Proceedings. https://doi.org/10.1145/3290605.3300472
37. Nabela, H. R., & Albari, A. (2023). The influence of online customer shopping experience on online impulsive buying in e-commerce with attitudinal loyalty as a mediation variable. International Journal of Research in Business and Social Science (2147-4478), 12(6), 56–65. https://doi.org/10.20525/ijrbs.v12i6.2876
38. Narimanfar, S., & Ghafari Ashtiani, P. (2021). A study on investigating the impact of website features on online impulse buying behaviour. Turkish Journal of Marketing, 6(3), 175–191. https://doi.org/10.30685/tujom.v6i3.130
39. Nawaz, N., Dastgeer, G., & Kashif, S. (2022). Impulse Buying Behavior of Footwear Purchasers: A Structural Model. Contemporary Management Research, 18(2), 93–132. https://doi.org/10.7903/cmr.21348
40. Nitnaware, S., Urkande, K., Narval, F., & Rinwa, R. (n.d.-a). A STUDY OF IMPULSE BUYING BEHAVIOR AND ITS INFLUENCING FACTOR INCLUDED IN AN ONLINE AND PHYSICAL SHOPPING MODE.
41. Nitnaware, S., Urkande, K., Narval, F., & Rinwa, R. (n.d.-b). A STUDY OF IMPULSE BUYING BEHAVIOR AND ITS INFLUENCING FACTOR INCLUDED IN AN ONLINE AND PHYSICAL SHOPPING MODE.
42. Parsad, C., Prashar, S., & Vijay, T. S. (2019). Comparing between product-specific and general impulse buying tendency: Does shoppers' personality influence their impulse buying tendency? Asian Academy of Management Journal, 24(2), 41–61. https://doi.org/10.21315/aamj2019.24.2.3
43. Rahman, M. F., & Hossain, M. S. (2022). The impact of website quality on online compulsive buying behavior: evidence from online shopping organizations. South Asian Journal of Marketing. https://doi.org/10.1108/sajm-03-2021-0038
44. Redine, A., Deshpande, S., Jebarajakirthy, C., & Surachartkumtonkun, J. (2023). Impulse buying: A systematic literature review and future research directions. In International Journal of Consumer Studies (Vol. 47, Issue 1, pp. 3–41). John Wiley and Sons Inc. https://doi.org/10.1111/ijcs.12862
45. Rodrigues, R. I., Lopes, P., & Varela, M. (2021). Factors Affecting Impulse Buying Behavior of Consumers. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.697080
46. Sanny, L., Rafi Chandra, G., Chelles, K., & Angelica Santoso, L. (n.d.). THE IMPULSE BUYING OF GEN Z WHEN USING E-WALLET IN INDONESIA. In Journal of Applied Engineering and Technological Science (Vol. 5, Issue 1).
47. Shiu, J. Y., Wei, G., & Chang, H. H. (2023). Impulse control during the online shopping frenzy in China: the role of consumer inertia. Humanities and Social Sciences Communications, 10(1). https://doi.org/10.1057/s41599-023-02204-w
48. Sirhindi, A. (2010). A CRITICAL REVIEW OF IN-STORE AND ONLINE IMPULSE PURCHASE BEHAVIOR.
49. Sun, G., Han, X., Wang, H., Li, J., & Wang, W. (2021). The Influence of Face Loss on Impulse Buying: An Experimental Study. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.700664
50. Tanveer, T., Kazmi, S. Q., & Rahman, M. U. (2022). Determinants of Impulsive Buying Behavior: An Empirical Analysis of Consumers' Purchase Intentions for Offline Beauty Products. Nurture, 16(2), 75–89. https://doi.org/10.55951/nurture.v16i2.129
51. Trivedi, J. P. (2021). Effect of influencer marketing on online impulse purchase: The mediating role of consumer-brand engagement. Journal of Electronic Commerce in Organizations, 19(3), 49–64. https://doi.org/10.4018/JECO.2021070104
52. Tu, C.-K., Wu, K.-W., Jean, C.-H., & Huang, Y. (2017). The Impact of Online Promotions on Online Impulsive Buying Behavior: Mediating Effects of Perceived Value, Positive Emotion, and Moderating Effects of Online Reviews. Economics and Management Innovations (ICEMI), 1, 280–282. https://doi.org/10.26480/icemi.01.2017.280.282
53. Van Overveld, M. (2016). Emotion regulation can be costly. A study on the effects of emotion regulation strategies on impulsive purchases in consumers. Innovative Marketing, 12(1), 41–49. https://doi.org/10.21511/im.12(1).2016.04
54. Vihari, N. S., Sinha, N. K., Tyagi, A., & Mittal, S. (2022a). Effect of mindfulness on online impulse buying: Moderated mediation model of problematic internet use and emotional intelligence. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.1012331
55. Vihari, N. S., Sinha, N. K., Tyagi, A., & Mittal, S. (2022b). Effect of mindfulness on online impulse buying: Moderated mediation model of problematic internet use and emotional intelligence. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.1012331
56. Vikas, J., Yadav, R., & Agrawal, S. (2024). An integrative review on online impulse buying: antecedents and consequences. In Academy of Marketing Studies Journal (Vol. 28, Issue 2).
57. Wang, S., Liu, Y., Du, Y., & Wang, X. (2021). Effect of the covid-19 pandemic on consumers' impulse buying: The moderating role of moderate thinking. International Journal of Environmental Research and Public Health, 18(21). https://doi.org/10.3390/ijerph182111116
58. Wells, J. D., Parboteeah, D. V., & Valacich, J. S. (2011). Online impulse buying: Understanding the interplay between consumer impulsiveness and website quality. Journal of the Association for Information Systems, 12(1), 32–56. https://doi.org/10.17705/1jais.00254
59. Xiao, Y., Liu, M., & Wu, B. (2023). The Effect of Social Appearance Anxiety on the Online Impulse Purchases of Fashionable Outfits Among Female College Students During Pandemic Periods: The Mediating Role of Self-Control and the Moderating Role of Subjective Socioeconomic Status. Psychology Research and Behavior Management, 16, 303–318. https://doi.org/10.2147/PRBM.S392414
60. Xu, H., Zhang, K. Z. K., & Zhao, S. J. (2020). A dual systems model of online impulse buying. Industrial Management and Data Systems, 120(5), 845–861. https://doi.org/10.1108/IMDS-04-2019-0214
61. Yang, J., Cao, C., Ye, C., & Shi, Y. (2022). Effects of Interface Design and Live Atmosphere on Consumers' Impulse-Buying Behaviour from the Perspective of Human– Computer Interaction. Sustainability (Switzerland), 14(12). https://doi.org/10.3390/su14127110
62. Yi, Q., Khan, J., Su, Y., Tong, J., & Zhao, S. (2023). Impulse buying tendency in live-stream commerce: The role of viewing frequency and anticipated emotions influencing scarcity-induced purchase decision. Journal of Retailing and Consumer Services, 75. https://doi.org/10.1016/j.jretconser.2023.103534

63. Yu, Y. (2022). Effects of Negative Emotions and Cognitive Characteristics on Impulse Buying During COVID-19. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.848256
64. Zafar, A. U., Qiu, J., Shahzad, M., Shen, J., Bhutto, T. A., & Irfan, M. (2021). Impulse buying in social commerce: bundle offer, top reviews, and emotional intelligence. Asia Pacific Journal of Marketing and Logistics, 33(4), 945–973. https://doi.org/10.1108/APJML-08-2019-0495
65. Zhang, J., Jiang, N., Turner, J. J., & Pahlevan-Sharif, S. (2022). The Impact of Scarcity on Consumers' Impulse Buying Based on the S-O-R Theory. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.792419
66. Zhang, Z., Zhang, N., & Wang, J. (2022). The Influencing Factors on Impulse Buying Behavior of Consumers under the Mode of Hunger Marketing in Live Commerce. Sustainability (Switzerland), 14(4). https://doi.org/10.3390/su14042122
67. Zhao, Y., Li, Y., Wang, N., Zhou, R., Xin, &, & Luo, R. (n.d.). A Meta-Analysis of Online Impulsive Buying and the Moderating Effect of Economic Development Level. https://doi.org/10.1007/s10796-021-10170-4/Published
68. Zhao, Z., Du, X., Liang, F., & Zhu, X. (2019). Effect of product type and time pressure on consumers' online impulse buying intention. Journal of Contemporary Marketing Science, 2(2), 137–154. https://doi.org/10.1108/jcmars-01-2019-0012