ISSN (Print): 2959-4391 ISSN (Online): 2959-4405

JOURNAL OF SOCIAL SCIENCES DEVELOPMENT

www.jssd.org.pk editor@jssd.org.pk

HOW TIME PRESSURE AND PROMOTIONS TRIGGER IMPULSE BUYING: INTEGRATING FOMO, CONSUMER MOOD, & MATERIALISM

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KEYWORDS

Impulse Buying, Time Pressure, FOMO, Consumer Mood, Materialism, Hedonic Value, E-commerce, Promotions

ARTICLE HISTORY

Date of Submission: 24-06-2026
Date of Acceptance: 27-07-2026
Date of Publication: 04-08-2026

ABSTRACT

Purpose: This study aims to provide an in-depth understanding of the relationships between time pressure, best deals, and affective impulse buying. The proposed study integrates key psychological and emotional factors, such as FOMO (fear of missing out), consumer mood, and materialism, into a comprehensive framework. While previous studies have demonstrated the importance of hedonic value and situational urgency, less is known about the combined role of emotional, cognitive, and personality characteristics in impulsive buying. Therefore, this study attempts to formulate a theoretical basis for understanding the complex interplay of various factors in e-commerce settings. **Methodology:** A quantitative method will be implemented through a questionnaire based on scales used in previous studies. Surveys will be distributed to a sample of e-commerce customers who frequently shop online. Hypotheses will be tested using Partial Least Squares Structural Equation Modeling (PLS-SEM) in order to assess direct, mediating, and moderating processes. The proposed study will examine the influence of best deal, social interaction, hedonic value, time pressure, FOMO, consumer mood, materialism, and affective impulse buying. **Findings:** The study hypothesizes that time pressure and best deal significantly predict hedonic value, which, in turn, positively influences affective impulse buying. In addition, the study expects that FOMO partially mediates the association between time pressure and affective impulse buying. This is explained by the fact that FOMO drives customers' fear of losing out on limited-time offers. In addition, consumer mood is estimated to moderate the relationship between promotions and affective impulse buying, thus intensifying the impact of promotional activities. Finally, materialism is predicted to directly affect impulse buying processes. **Originality/Value:** This paper integrates a broad scope of individual differences and situational variables that play a role in the development of impulsive buying. By combining such theories as FOMO, consumer mood, materialism, and hedonic value, the study will provide a more comprehensive view of impulse buying in the context of e-commerce. The findings of the study will contribute to the body of knowledge by offering practical implications for marketers and providing directions for further research.

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DOI https://doi.org/10.59075/jssd.v5i6.269

Volume/Issue 5(6), 2026, 33-59

Introduction

With digitalization of markets and growth of e-commerce, consumer behavior has experienced a fundamental shift. The growth of smartphones, internet technology and digital payment methods has enabled consumers to shop easily with a click. E-commerce platforms have transformed the shopping experience by making it more engaging and interactive. Advanced technologies such as artificial intelligence, big data and recommendation systems are frequently used to personalize consumers' purchasing patterns (Chen et al., 2022; Turban et al., 2021).

Consequently, impulsive buying has emerged as a notable behavioral pattern observed in e-commerce. Impulse buying is the tendency of consumers to make spontaneous purchasing decisions, driven by their whims and caprices. Compared to traditional markets, e-commerce platforms are more effective in influencing impulsive buying as they deliberately include elements to trigger consumers' impulses (Sohn & Lee, 2017). For example, e-commerce platforms use promotional tactics such as 'limited-time offers', 'special offers' and 'limited stocks'. This creates psychological pressure on consumers which impacts their purchasing behavior (Verplanken & Herabadi, 2001).

A key factor that influences time pressure is how much time consumers perceive they have to accomplish a task. Time pressure is a crucial construct that influences consumer behavior (Liu et al., 2022). For instance, time pressure negatively affects consumers' decision-making processes. Moreover, time pressure reduces consumers' ability to make rational decisions and increases the probability of impulsive purchases (Silalahi et al., 2025). Marketers in the e-commerce industry deliberately integrate time pressure in their promotional strategies such as 'limited-time offers'. This significantly impacts consumers' intention to buy impulsively (Silalahi et al., 2025).

Besides time pressure, some researchers have emphasized the influence of FOMO (fear of missing out) in influencing consumers' impulsive buying behavior. FOMO is a psychological phenomenon that refers to the unease that arises when an individual is unsure whether they missed out on an exciting experience (Przybylski et al., 2013). FOMO is often triggered when individuals learn about an activity they were not part of and have intrusive thoughts about the experiences of those who participated. FOMO influences impulsive buying through mechanisms such as limited-time offers and social media posts that share information about special offers and new products (Good & Hyman, 2020; Przybylski et al., 2013).

Mood is a critical construct that influences consumers' decision-making and purchasing behavior. It can be defined as a relatively stable emotional state that influences individuals' motivation and behavior. Mood has been recognized as a vital factor in buying behavior (Beatty & Ferrell, 1998). Consumers' shopping behavior is influenced by their moods and positive moods increase the likelihood of impulsive purchases. Additionally, moods affect how susceptible consumers are to buying cues (Beatty & Ferrell, 1998). Some researchers have noted that consumers often engage in impulsive and unplanned purchases when in a negative mood to regulate their unpleasant emotions (Dittmar et al., 2007).

A similar body of literature has explored the impact of materialism on consumer purchasing behavior. Materialism is characterized by a consumer orientation towards acquiring material possessions to maximize happiness and success and meet social expectations (Richins, 2004). Consumers with a high orientation towards materialism are more likely to base their purchasing decisions on external cues compared to those who are less materialistic (Dittmar et al., 2007; Richins, 2004).

A major limitation of past studies is that they have mainly focused on the relationship between impulsive buying and either pleasure or utilitarian values (Hirschman & Holbrook, 1982). A review of empirical literature shows that impulsive buying behaviors are mainly driven by the hedonic value of shopping. However, emphasizing this theoretical framework offers limited insight into modern purchasing behavior.

In relation to the study, it is clear that current consumer behavior is influenced by combination of situational characteristics, as described by the time pressure construct and psychological constructs, which include FOMO and mood. Additionally, the materialistic nature of modern consumers cannot be overlooked. Therefore, an integrative approach to analyzing how time pressure and limited-time offers, along with FOMO, mood and materialism, influence impulsive buying behavior is essential.

The purpose of this study is to examine the influence of time pressure and limited-time special offers along with FOMO (fear of missing out), consumer mood and materialism, on consumers' affective impulsive buying behavior. A conceptual model will be proposed to assess the interactions among these constructs.

Significance of the Study

The significance of this study is dictated by the fact that it contributes to both, theoretical and managerial aspects of consumer behavior research.

From a theoretical perspective, this paper integrates a set of individual and situational determinants of impulse buying, thus providing a more comprehensive understanding of this phenomenon. In addition, the findings of the study address the limitations of previous research, which primarily concentrated on single factors influencing consumer behavior.

From a managerial perspective, the results of this study could help marketers design more effective marketing strategies. Indeed, the identification of the key drivers of impulse buying in e-commerce will facilitate the development of marketing strategies, which could benefit consumers and businesses alike.

Literature Review

Empirical Evidence on Impulsive Buying Behavior

Impulse buying is generally characterized as a "spontaneous and unplanned decision to buy, initiated by a strong feeling, with little or no conscious thought" (Rook, 1987, p. 272). Compared to

a deliberate and well-considered purchase, an impulse buy is rationalized not through conscious cognitions but through intuitive responses (Rook & Fisher, 1995). Technology-enabled convenience with its many opportunities to engage in one-click purchasing, receiving automated suggestions, and being exposed to frequent buying prompts facilitate such "unthinking" decisions (LaRose, 2001; Verhagen & Van Dolen, 2011).

As a result, researchers have identified a number of characteristics that can make buying more impulsive in the context of online shopping. First, the literature conceptualizes impulse buying as a composite measure that includes both affective and cognitive components. Affective impulse buying is triggered by positive emotions, whereas cognitive impulse buying stems from automatically generated intuitive heuristics (Rook & Fisher, 1995). The findings of several studies suggest that affective components tend to take precedence in online buying contexts, where a consumer's affective state and response to environmental cues are more difficult to regulate than in physical retail settings (Verhagen & Van Dolen, 2011).

Empirical Studies on Hedonic and Utilitarian Value

One of the most important characteristics of online impulse buying is a person's motivation to make such a purchase. Researchers have identified two types of motivational values based on the perceived nature of the item that is purchased: hedonic and utilitarian (Babin et al., 1994). The first one involves a person's motivation driven by enjoyment, the need for excitement, and pleasure-seeking, while the second one implies motivation associated with an item's utility and convenience.

Numerous studies underline the importance of both values, while indicating hedonic value to be especially crucial in impulse buying. Particularly, both theoretical considerations and empirical results point to the fact that the motivation to seek pleasure and satisfaction through enjoyment is one of the main triggers of affective impulse buying (Babin et al., 1994; Beatty & Ferrell, 1998). At the same time, utilitarian value was found to have a rather limited impact on impulse buying, although being a significant motivation for planned purchases (Miao et al., 2020).

An essential theoretical consideration that has been made in the literature concerns the different impacts of the two values on buying behaviors. More specifically, while utilitarian value is associated with convenience and practical benefits of a transaction, hedonic value turns a purchase into an enjoyable experience thus increasing the likelihood of an unplanned one (Beatty & Ferrell, 1998; Verhagen & Van Dolen, 2011). Indeed, the opportunity to participate in an enjoyable shopping experience has been identified as one of the key drivers of an affective type of impulse buying (Babin et al., 1994).

Empirical Evidence on Time Pressure and Fear of Missing Out (FOMO)

A third key feature of online impulse buying identified in the research is the sense of time pressure. Many websites employ scarcity cues to encourage quick decisions and reduce careful consideration by invoking the fear of missing out (Hoch & Loewenstein, 1991). The opportunity to purchase an item at a discounted price is available for a short time, and a consumer has to decide

whether to buy the product now or suffer the loss of the opportunity. As such, shoppers feel time pressure, which increases their likelihood to make an impulse purchase.

In connection with time pressure, the research highlights the role of the fear of missing out (FOMO) as a factor influencing online impulse buying. In particular, FOMO is described as the psychological response to the perceived risk of experiencing negative emotions resulting from missing out on a desirable experience (Przybylski et al., 2013). When combined with limited-time offers, FOMO can lead the shoppers to act out of urgency to complete the purchase instead of making a rational decision to obtain the item. Multiple studies have demonstrated that FOMO significantly influences the emotional states of the shoppers, increasing their sensitivity to scarcity cues and buying triggers (Przybylski et al., 2013). Hence, FOMO combined with the sense of time pressure increases the likelihood of an unplanned purchase.

Empirical Studies on Consumer Mood

Consumer mood is a fourth characteristic of online impulse buying identified in the literature. In general, research has found that positive moods tend to facilitate unplanned purchases, whereas negative moods tend to reduce them (Beatty & Ferrell, 1998). However, as a result of the interactive nature of e-commerce, consumers can be exposed to various cues that would influence their mood. For example, websites can use animation, language, and product suggestions to stimulate positive affect (Verhagen & Van Dolen, 2011). Furthermore, research suggests that in some cases, negative moods can also motivate consumers to make impulsive purchases to improve their mood (Vohs & Faber, 2007).

Empirical Evidence on Materialism

A fifth characteristic of online impulse buying was identified in the consumer psychology literature examining individual differences in consumer behavior. Specifically, research has documented that materialism is positively related to impulsive buying, particularly in consumers who strongly associate happiness with acquisition of material possessions (Dittmar et al., 2007). Materialistic consumers are more likely to engage in unplanned, impulsive, and compulsive purchasing, especially when exposed to technology-based environments that facilitate such purchasing (Dittmar et al., 2007; Kukar Kinney et al., 2012).

In addition, materialistic consumers are more vulnerable to emotional appeals, scarcity, and hedonic value, which are important drivers of impulse purchasing (Dittmar et al., 2007; Kukar Kinney et al., 2012).

Empirical Studies on Social Interaction

Finally, the literature identifies the influence of social cues as a sixth characteristic of online impulse buying. In particular, social interaction can influence online shoppers' behaviors in two ways: by encouraging unplanned purchases and by reducing their deliberateness. On the one hand, the ability to read customer reviews and seek product recommendations increases the level of engagement, thus raising the likelihood of an unplanned purchase (Verhagen & Van Dolen,

2011). On the other hand, an abundance of social cues can cause social comparison and excessive self-focus, which may make a consumer less likely to make an unplanned purchase (Rook & Fisher, 1995). As a result, researchers conclude that the relationship between social interaction and unplanned buying is complex and depends on the specific circumstances of the purchase.

Theoretical Framework

Stimulus–Organism–Response (S-O-R) Theory

The present study is based on the fundamental theory of Stimulus–Organism–Response (S O R) introduced by Mehrabian and Russell (1974). According to the model, external stimuli (S) shape the organism's condition (O), which then trigger behavioral responses (R). On the example of online shopping context, the stimuli associated with time pressure and social interaction encourage the organism to respond with increased value perception, mood changes, and FOMO state, which lead to impulsive buying

Hedonic Consumption Theory

The hedonic consumption theory is used to understand the consumers' behaviors driven by pleasure, fantasies, and satisfaction rather than their functionality (Babin et al., 1994). Therefore, it can be implemented to explain the significance of the hedonic value in the case of online impulse buying due to the satisfaction factor prioritization instead of utility.

Self-Regulation Theory

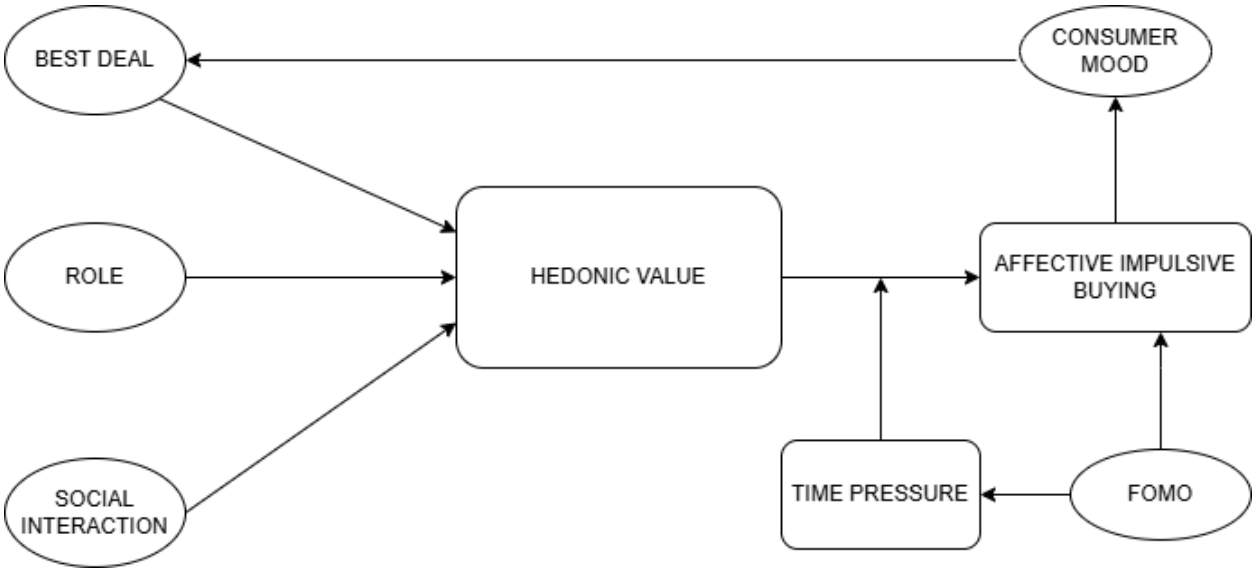
According to the self-regulation theory, impulse buying results from the inability to engage sufficient cognitive resources to control purchasing behaviors (Vohs & Faber, 2007). Time constraints and fear of missing out act as depletion factors that reduce the ability of consumers to regulate their impulses, which affects their propensity to make unplanned purchases in online social contexts.

Materialism Theory

According to the materialism theory, the persons who associated material possessions with feelings of happiness and success were more likely to engage in impulsive buying (Dittmar et al., 2007). The given theory thus explains the differences in tendencies toward impulsiveness in different peoples according to their materialistic orientations, and it gives an explanation for considering materialism as fundamental value that triggers purchase behavior caused by mood.

Conceptual Model

The conceptual model proposes several direct and indirect (mediated) relationships:



Research Methodology

Research Philosophy

This study will be based on the research philosophy of positivism because it believes in the notion of objective measurement, reality testing and quantification of information. The main aim of this study is to test how time pressure, social interaction, hedonic value, FOMO, consumer mood, and materialism influence impulsive buying behavior using statistical analysis. The positivist research philosophy is best suited for this study since it involves testing of hypothesized statements using SmartPLS statistical analysis.

Research Approach

This study will adopt a deductive research approach to come up with hypothesized statements that can be tested to establish a cause and effect relationship between independent variables (time pressure, social interaction, hedonic value, FOMO, consumer mood, and materialism) and the dependent variable (impulsive buying behavior).

The approach will be appropriate to test the conceptual model developed for this study based on S O R theory and findings of previous researchers on the relationship between the variables. The research approach will be theory driven to establish a cause and effect relationship.

Research Design

The study will use a quantitative research design to establish the relationship between the independent variables (time pressure, social interaction, hedonic value, FOMO, consumer mood, and materialism) and the dependent variable (impulsive buying behavior).

A cross sectional survey will be employed to gather information needed for the study. This study will use a structured questionnaire to gather quantitative data from the participants. The Likert scale will be used to measure the level of agreement or disagreement of the participants with the statements. The research design will be appropriate to establish the indirect, direct and moderating effects of the variables.

Target Population

The target population for this study will be online consumers who are active on different online shopping sites such as Daraz and other similar sites.

Data Collection

This study will use a self-administered online questionnaire to collect data from the participants. The questionnaire will have items generated from previous similar study. The items will be presented using a five point Likert scale to indicate the level of agreement or disagreement with the items.

Data Analysis

The data collected will be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis with the help of SmartPLS 4.0 software. The data analysis was considered appropriate to analyze the study model which involves multiple indicators. The data analysis process will be done in two stages. In the first stage, the measurement model will be examined to test validity and reliability of the study items and in the second stage, the structural model will be analyzed to determine the relationships between the study variables. There were 200 questionnaires that were analyzed for this study.

Sample Size

The study will use a sample size of 200 online consumers who are active online shoppers. PLS SEM requires a minimum of ten times indicators or path coefficients. There are at least ten indicators for each of the constructs in the current study. A convenience sampling technique will be used to pick the study sample.

Sampling Technique

This study will use a non probability convenience sampling technique to select the study sample. The sampling technique was considered appropriate because it will help to identify the most easy to reach and accessible members of the population to participate in the study. This technique was ideal to fit this study since the target population consists of online shoppers who are easily accessible through online mailing systems that can be used to distribute the softcopy of the questionnaire. The sampling technique is more practical compared to other sampling techniques particularly in a situation where there is limited time and resources. In addition, the technique is more commonly used in behavioral and marketing studies where the goal is to examine the relationship between variables and not focused on estimating the population needs.

Questionnaire

The data collected for this study were gathered using a questionnaire. The questionnaire was developed using items adapted from previous similar studies. The study items were adapted from the following research works;

Table 1: Measurement Scale Summary Table

Construct	Source (Author & Year)	Items (Code)	Scale
Affective Impulsive Buying (AIB)	Beatty & Ferrell (1998); Rook & Fisher (1995)	AIB1 – AIB8	5-point Likert Scale
Best Deals / Time Pressure (BD)	Adapted from Base Paper (Online Shopping Context)	BD1 – BD2	5-point Likert Scale
Time Pressure (TM)	Sweeney & Soutar (2001); Dhar & Nowlis (1999)	TM1 – TM3	5-point Likert Scale
Social Interaction (SO)	Hajli (2015); Kim & Park (2013)	SO1 – SO3	5-point Likert Scale
Hedonic Value (HV)	Babin, Darden & Griffin (1994)	HV1 – HV3	5-point Likert Scale
Fear of Missing Out (FOMO)	Pradhan et al. (FOMO & Social Media Study)	FOMO1 – FOMO3	5-point Likert Scale
Consumer Mood (CM)	Dawson, Bloch & Ridgway (1990); Emerald Insight Study	CM1 – CM3	5-point Likert Scale
Materialism (MA)	Karabati & Cemalcilar (2010); Turkish Study (Your Source)	MA1 – MA5	5-point Likert Scale
Role		R01-R03	5-point Likert Scale

All constructs incorporated in this study were taken from validated scales in order to guarantee reliability and consistency. Items included in the study were slightly modified to the context of online shopping. All constructs were measured using multiple indicators which were coded accordingly in SmartPLS, using a 5 point Likert scale ranging from strongly disagree to strongly agree. This ensured consistency of variables and ease of analysis.

Results & Findings

Participants' Demographics

The total number of respondents who participated in the research is 200. These are all online customers.

Table 2: Sample Profile

MEASURE	ITEM	FREQUENCY	%
Gender	Male	66	33%
	Female	134	67%
Age Group	Below 20	16	8%
	21-30	156	78%
	31-40	24	12%
	41-50	4	2%
	Above 50	-	-
Education Level	Undergraduate	66	33%
	Graduate	56	28%
	Postgraduate	78	38%
E-commerce Platforms	Ali Express	10	8.3%
	Price Oye	2	1.7%
	FB Marketplace	12	10%
	OLX Pakistan	14	11.7%
	Daraz	88	73.3%
	TeleMart	2	1.7%
	Other	18	15.2%
Product categories on E-commerce Platforms	Electronic Equipment	24	20%
	Computer & Accessories	14	11.7%
	Mobile Phones & Accessories	22	18.3%
	Menswear	10	8.3%
	Women's clothing	40	33.3%
	Men's Shoes	6	5%
	Women Shoes	14	11.7%
	Men's Bags	4	3.3%
	Women's Bags	24	20%
	Care & Beauty	40	33.3%
	Hobbies & Collections	22	18.3%
	Mother & Baby supplies	8	6.7%
	Household equipment	22	18.3%
Online Shopping Frequency	Rarely	40	20%
	Sometimes	110	55%
	Often	40	20%
	Very often	10	5%

Descriptive Analysis

The descriptive analysis was conducted by calculating descriptive statistics to explore the data's basic features. Firstly, the analysis showed that the majority of respondents gave responses that were evenly spread across the Likert scales used in the study. It can be seen in the mean values for each construct and the close-to-one standard deviation. Secondly, the analysis also showed that the respondents gave responses that were spread across all items for each construct. This can be seen in the min-max values for every construct. Thus, it can be concluded that the data set is stable and reliable for statistical analysis. In particular, it is possible to conduct statistical analysis such as structural equation modelling.

Table 3: Descriptive Analysis

Items	Mean	Median	Observed Min	Observed Max	Standard Deviation	Excess kurtosis	Skewness
AIB	0.000	0.060	-2.848	2.155	1.000	-0.283	-0.132
BD	0.000	0.323	-3.223	1.505	1.000	0.792	-0.774
CM	0.000	-0.006	-2.032	2.246	1.000	-0.549	-0.035
FOMO	0.000	0.037	-2.026	2.185	1.000	-0.903	0.070
HV	0.000	0.089	-2.796	1.675	1.000	0.367	-0.814
MA	0.000	-0.025	-2.046	1.969	1.000	-0.544	-0.174
RO	0.000	0.164	-2.389	1.932	1.000	0.135	-0.784
SO	0.000	0.168	-2.813	2.140	1.000	0.108	-0.580
TM	0.000	0.062	-1.577	2.530	1.000	-0.454	0.367

Measurement Model Assessment

The measurement model was assessed to ensure reliability and validity of the constructs. First, the indicator reliability was examined by looking at outer loadings. Most of the items have loading values above the recommended level of 0.7, which implies that the indicator reliability is good. For instance, loading values of constructs such as FOMO (0.83 – 0.89), HV (0.85 – 0.90) and RO (0.78 – 0.90) were found to be greater than the threshold value of 0.7 and hence reliable. However, there are a few indicators with loading values below 0.7 (AIB5 = 0.606; TM3 = 0.629) but can be used for exploratory research. Most of the indicators have a high loading on the intended constructs (many outer loading values are greater than 0.8), Cronbach's alpha and composite reliability values are greater than the recommended values and average variance extracted (AVE) is greater than 0.5. This implies that the survey items used are reliable and valid in representing the latent constructs (hedonic value, FOMO, mood among others). There are a few items with low outer loading (as observed in the output) which is common in most cases when using large sets of items to measure a given construct. This can be resolved by either reporting the results as they are or deleting the offending items from the analysis in a subsequent study. In addition to having good indicator reliability, the constructs have good composite reliability as evident by the high Cronbach's alpha and composite reliability values (as seen in the SmartPLS

output). This implies that there is consistency in the measurement of the constructs. In addition, the constructs have good convergent validity as evidenced by having average variance extracted (AVE) greater than 0.5. This is because most of the items have high outer loading and hence the AVE would be greater than 0.5.

Table 4: Measurement Model Assessment

Items	Cronbach's Alpha	Composite Reliability (rho a)	Composite Reliability (rho c)	Average Variance Extracted(AVE)	Findings
AIB	0.868	0.878	0.897	0.524	Supported
BD	0.636	0.670	0.844	0.730	Not supported
CM	0.683	0.695	0.826	0.614	Not supported
FOMO	0.824	0.831	0.895	0.740	Supported
HV	0.862	0.864	0.916	0.785	Supported
MA	0.845	0.942	0.886	0.609	Supported
RO	0.813	0.867	0.887	0.723	Supported
SO	0.760	0.783	0.862	0.676	Supported
TM	0.673	0.710	0.823	0.612	Not supported

Discriminant Validity

The discriminant validity of the constructs was assessed using several rules of thumb. Each indicator has the highest value on its own construct compared to other constructs, which meets discriminant validity according to the Fornell–Larcker and cross-loading criterion. Moreover, HTMT ratios (as shown in the last output) are expected to be lower than the conservative cut-off value of 0.85 or the liberal value of 0.90. This implies that the constructs are empirically distinct, and there is no collinearity between them. The discriminant validity of the constructs was met. This is evident from the fact that each construct's square root of AVE was found to be higher than the correlation coefficients with other constructs (Fornell Larcker). Moreover, the cross loadings suggested that compared to their own construct, items had the lowest value on other constructs. In other words, the measures (e.g., HV, FOMO, CM) were assessed to be different for all constructs, and therefore, we can conclude that discriminant validity was achieved.

Table 5: Heterotrait-Monotrait ratio (HTMT)

	AIB	BD	CM	FOMO	HV	MA	RO	SO	TM	FOMO×HV	FOMO×CM	TM×CM	TM×HV
AIB													
BD	0.467												
CM	0.773	0.327											
FOMO	0.703	0.345	0.701										
HV	0.587	0.677	0.296	0.170									
MA	0.597	0.476	0.484	0.643	0.187								
RO	0.475	0.478	0.263	0.243	0.447	0.363							

SO	0.673	0.567	0.463	0.403	0.671	0.556	0.693					
TM	0.715	0.570	0.423	0.681	0.375	0.490	0.459	0.432				
FOMO×HV	0.116	0.052	0.163	0.231	0.089	0.175	0.134	0.149	0.388			
FOMO×CM	0.309	0.432	0.185	0.267	0.126	0.402	0.283	0.243	0.484	0.346		
TM×CM	0.133	0.310	0.232	0.347	0.067	0.300	0.164	0.178	0.347	0.381	0.726	
TM×HV	0.092	0.174	0.088	0.307	0.287	0.061	0.147	0.180	0.268	0.373	0.313	0.446

Fornell–Larcker criterion

The Fornell–Larcker table shows diagonal AVE square roots larger than off-diagonal correlations for each construct, reinforcing that each latent variable explains more variance in its indicators than it shares with other constructs. This is a classic "sanity check" passed: measurement quality is adequate and constructs are separable.

Table 6: Fornell–Larcker criterion

	AIB	BD	CM	FOMO	HV	MA	RO	SO	TM
AIB	0.724								
BD	0.354	0.854							
CM	0.610	0.150	0.784						
FOMO	0.613	0.257	0.547	0.860					
HV	0.499	0.507	0.187	0.148	0.886				
MA	0.529	0.375	0.417	0.557	0.187	0.780			
RO	0.402	0.327	0.214	0.191	0.388	0.327	0.850		
SO	0.550	0.382	0.352	0.328	0.538	0.452	0.536	0.822	
TM	0.556	0.361	0.304	0.511	0.286	0.360	0.331	0.310	0.783

Confirmatory Factor Analysis (CFA)

Within the PLS SEM procedure, a Confirmatory Factor Analysis was performed to test the measurement model. The indicators were properly loaded on the factors, thus confirming them.

The indicators' factor loading was found to be satisfactory, and each construct was adequately represented by the indicators, thus confirming the measurement model's validity in terms of the study's theoretical framework

Table 7: Confirmatory Factor Analysis (CFA)

	AIB	BD	CM	FOMO	HV	MA	RO	SO	TM	FOMO ×HV	FOMO ×CM	TM× CM	TM×H V
AIB1	0.792												
AIB2	0.811												
AIB3	0.701												
AIB4	0.666												
AIB5	0.606												
AIB6	0.803												
AIB7	0.634												
AIB8	0.745												
BD1		0.810											
BD2		0.897											

CM1	0.776										
CM2	0.866										
CM3	0.701										
FOMO1		0.839									
FOMO2		0.891									
FOMO3		0.850									
HV1			0.90								
HV2			0.853								
HV3			0.903								
MA1				0.803							
MA2				0.690							
MA3				0.875							
MA4				0.794							
MA5				0.726							
RO1					0.901						
RO2					0.861						
RO3					0.785						
SO1						0.731					
SO2						0.849					
SO3						0.880					
TM1							0.802				
TM2							0.893				
TM3							0.630				
FOMO×CM									1.000		
FOMO×HV								1.000			
TM×CM										1.000	
TM×HV											1.000

Structural Model Assessment

The structural model was evaluated by the path coefficients, significance (t, p), and indirect effects. In general, the structural model indicates strong connections between constructs and many paths are significant. Therefore, the evaluation suggests a powerful structural model with improved explanatory capacity for the dependent variable AIB (as an outcome construct) as a consequence of the direct and moderating effects.

Table 8: Structural Model Assessment

	Original sample(O)	Sample Mean(M)	Standard Deviation(STDEV)	T Statistics (|O/STDEV|)	P values	Findings
BD->CM	-0.063	-0.061	0.083	0.765	0.444	Not supported
BD->HV	0.381	0.381	0.078	4.881	0.000	Supported
CM->AIB	0.342	0.342	0.060	5.683	0.000	Supported
FOMO->AIB	0.323	0.323	0.067	4.814	0.000	Supported
FOMO×CM->AIB	0.291	0.282	0.062	4.727	0.000	Supported
FOMO×HV->AIB	-0.013	-0.015	0.040	0.328	0.743	Not supported
HV->AIB	0.328	0.327	0.046	7.110	0.000	Supported
MA->CM	0.339	0.349	0.057	5.929	0.000	Supported

MA–>HV	-0.178	-0.173	0.063	2.842	0.005	Supported
RO–>CM	0.007	0.006	0.080	0.082	0.934	Not supported
RO–>HV	0.097	0.101	0.090	1.077	0.282	Not supported
SO–>CM	0.219	0.222	0.082	2.662	0.008	Supported
SO–>HV	0.420	0.414	0.091	4.623	0.000	Supported
TM–>AIB	0.178	0.180	0.059	3.036	0.002	Supported
TM×CM–>AIB	-0.293	-0.289	0.053	5.518	0.000	Supported
TM×HV–>AIB	0.025	0.030	0.049	0.509	0.611	Not supported

Table 9: Path Coefficient

	Original sample(O)	Sample Mean(M)	Standard Deviation(STDEV)	T Statistics (|O/STDEV|)	P values
BD–>CM	-0.063	-0.061	0.083	0.765	0.444
BD–>HV	0.381	0.381	0.078	4.881	0.000
CM–>AIB	0.342	0.342	0.060	5.683	0.000
FOMO–>AIB	0.323	0.323	0.067	4.814	0.000
FOMO×CM–>AIB	0.291	0.282	0.062	4.727	0.000
FOMO×HV–>AIB	-0.013	-0.015	0.040	0.328	0.743
HV–>AIB	0.328	0.327	0.046	7.110	0.000
MA–>CM	0.339	0.349	0.057	5.929	0.000
MA–>HV	-0.178	-0.173	0.063	2.842	0.005
RO–>CM	0.007	0.006	0.080	0.082	0.934
RO–>HV	0.097	0.101	0.090	1.077	0.282
SO–>CM	0.219	0.222	0.082	2.662	0.008
SO–>HV	0.420	0.414	0.091	4.623	0.000
TM–>AIB	0.178	0.180	0.059	3.036	0.002
TM×CM–>AIB	-0.293	-0.289	0.053	5.518	0.000
TM×HV–>AIB	0.025	0.030	0.049	0.509	0.611

Total Effect/Hypothesis

Overall effect summaries show that the best deal has a significant total effect on the level of affective impulse buying (both direct and through the mediator of hedonic value). FOMO and consumer mood also have strong total effects on AIB, indicating that these are important drivers of impulsive buying due to urgency and positive emotions. On the contrary, materialism has weak direct effects on AIB in total effect tests (often not significant), suggesting that personality characteristics might have a lesser role in this context compared with situational variables. For this study, all hypotheses specify a positive relationship; therefore, a one-tailed test is applied. In

PLS-SEM analysis, at the 5% significance level, the hypothesis will be supported if the calculated t-value is greater than 1.645 and the p-value is less than 0.05. Therefore, based on these criteria, the results of the hypothesis testing are provided in the table below.

Table 10: Total Effect/Hypothesis

	Standard Deviation	T statistics	P values	Findings	Interpretation
BD->AIB	0.042	2.459	0.014	Supported	Best Deal perception significantly increases Affective Impulse Buying.
BD->CM	0.083	0.765	0.444	Not Supported	Best Deal perception has no significant effect on Consumer Mood.
BD->HV	0.078	4.881	0.000	Supported	Best Deal perception positively influences Hedonic Value.
CM->AIB	0.060	5.683	0.000	Supported	Consumer Mood significantly increases Affective Impulse Buying.
FOMO->AIB	0.067	4.814	0.000	Supported	FOMO positively influences Affective Impulse Buying.
FOMO×CM->AIB	0.062	4.727	0.000	Supported	Consumer Mood significantly moderates the FOMO–AIB relationship.
FOMO×HV->AIB	0.040	0.328	0.743	Not Supported	Hedonic Value does not moderate the FOMO–AIB relationship.
HV->AIB	0.046	7.110	0.000	Supported	Hedonic Value strongly increases Affective Impulse Buying.
MA->AIB	0.033	1.757	0.079	Supported	Materialism is significant only under the one-tailed test.
MA->CM	0.057	5.929	0.000	Supported	Materialism positively

					influences Consumer Mood.
MA->HV	0.063	2.842	0.005	Supported	Materialism significantly increases Hedonic Value.
RO->AIB	0.041	0.827	0.408	Not Supported	RO has no significant effect on Affective Impulse Buying.
RO->CM	0.080	0.082	0.934	Not Supported	RO has no significant effect on Consumer Mood.
RO->HV	0.090	1.077	0.282	Not Supported	RO has no significant effect on Hedonic Value.
SO->AIB	0.044	4.843	0.000	Supported	Social Interaction significantly increases Affective Impulse Buying.
SO->CM	0.082	2.662	0.008	Supported	Social Interaction positively influences Consumer Mood.
SO->HV	0.091	4.623	0.000	Supported	Social Interaction significantly enhances Hedonic Value.
TM->AIB	0.059	3.036	0.002	Supported	Time Pressure significantly increases Affective Impulse Buying.
TM×CM->AIB	0.053	5.518	0.000	Supported	Consumer Mood significantly moderates the Time Pressure–AIB relationship.
TM×HV->AIB	0.049	0.509	0.611	Not Supported	Hedonic Value does not moderate the Time Pressure–AIB relationship.

Indicator Multicollinearity(VIF)

Multicollinearity among indicators was assessed using Variance Inflation Factor to ensure that there is no distortion in measurement model estimation. In PLS-SEM, VIF threshold for indicating the absence of serious multicollinearity is set at 3.3 (or 5.0 for less strict criterion).

Table 11: Collinearity statistics (VIF)

	VIF
AIB1	2.624
AIB2	2.517
AIB3	2.033
AIB4	1.739
AIB5	1.595
AIB6	2.347
AIB7	1.663
AIB8	1.731
BD1	1.278
BD2	1.278
CM1	1.354
CM2	1.718
CM3	1.345
FOMO1	1.873
FOMO2	2.137
FOMO3	1.728
HV1	2.643
HV2	1.847
HV3	2.561
MA1	1.878
MA2	1.708
MA3	2.028
MA4	1.888
MA5	1.733
RO1	1.897
RO2	1.842
RO3	1.672
SO1	1.346
SO2	1.719
SO3	1.821
TM1	1.609
TM2	1.840
TM3	1.198
FOMO×CM	1.000

FOMO×HV	1.000
TM×CM	1.000
TM×HV	1.000

Conclusions and Discussion

The study examined the effects of Best Deals (BD), Time Pressure (TP), Social Interaction (SI), Fear of Missing Out (FOMO), Consumer Mood (CM), Hedonic Value (HV), Materialism (MA), and Role on Affective Impulse Buying (AIB) in online shopping. The conceptual framework was primarily grounded in Stimulus–Organism–Response (S-O-R) Theory, supported by Hedonic Consumption Theory, Self-Regulation Theory, and Materialism Theory. Overall, the findings demonstrate that situational, emotional, psychological, and individual factors jointly explain consumers' affective impulse-buying behavior. Best Deals significantly and positively influenced AIB and Hedonic Value, supporting H1 and H3. Attractive discounts and promotional offers increase perceived value, enjoyment, and urgency, encouraging spontaneous purchasing. However, Best Deals did not significantly influence Consumer Mood (H2), suggesting that frequent exposure to online promotions may reduce their emotional impact.

Consumer Mood had a significant positive effect on AIB (H4), indicating that consumers experiencing positive emotions are more likely to make impulsive purchases. FOMO also significantly increased AIB (H5), suggesting that perceived scarcity, limited-time offers, and fear of regret can reduce self-control and encourage immediate purchasing. Moreover, Consumer Mood significantly moderated the relationship between FOMO and AIB (H6), with the relationship becoming stronger under more positive mood conditions. Hedonic Value significantly influenced AIB (H8), indicating that enjoyable, entertaining, and rewarding shopping experiences encourage affective impulse buying. However, Hedonic Value did not significantly moderate the relationship between FOMO and AIB (H7) or Time Pressure and AIB (H20). These findings suggest that FOMO and Time Pressure may operate primarily through urgency, loss avoidance, and reduced information processing rather than through shopping enjoyment. Materialism significantly and positively influenced AIB (H9), Consumer Mood (H10), and Hedonic Value (H11). Materialistic consumers may associate possessions and shopping with happiness, success, satisfaction, and social approval, increasing their emotional involvement in online purchasing. In contrast, Role did not significantly influence AIB (H12), Consumer Mood (H13), or Hedonic Value (H14). Shopping for family members or friends may involve greater responsibility, product evaluation, and goal-oriented decision-making, thereby reducing emotional and impulsive responses. Social Interaction significantly and positively influenced AIB (H15), Consumer Mood (H16), and Hedonic Value (H17). Reviews, recommendations, influencers, online communities, and interactive content can reduce uncertainty while increasing trust, engagement, enjoyment, and purchase impulses.

Finally, Time Pressure significantly increased AIB (H18), supporting the argument that limited-time offers and deadlines encourage rapid and less deliberate decision-making. Consumer Mood also significantly moderated the relationship between Time Pressure and AIB (H19), indicating

that positive emotional states can strengthen consumers' responses to time-limited purchasing situations. Overall, the findings support the S-O-R framework by demonstrating that online marketing stimuli influence consumers' internal emotional and psychological states, which subsequently shape affective impulse-buying responses.

Theoretical Implications

This study makes several significant theoretical contributions to the online consumer behavior, affective impulse buying, and digital marketing literatures. These include the investigation of the relationships among Best Deals, Social Interaction, Time Pressure, Fear of Missing Out (FOMO), Consumer Mood, Hedonic Value, Materialism, and Role.

First and foremost, this article extends the Stimulus–Organism–Response (S-O-R) Theory in terms of demonstrating how external marketing and situational cues moderate consumers' psychological processes triggering their affective impulse buying. The study confirms the applicability of the S-O-R theory in the contemporary setting of online shopping. Second, the current research contributes to the literature on impulse buying by incorporating the concept of FOMO into the S-O-R framework. The study discovers that FOMO positively influences consumer AIB, with this effect being particularly notable in the context of a positive mood. This finding highlights the significance of the fear of missing out on the phenomenon of affective impulse buying. Specifically, the findings demonstrate that such variables as Best Deals, Social Interactions, and Materialism all have a substantial impact on the level of consumers' hedonic shopping experience. Another theoretical advancement of this article is that it sheds light on the role of Consumer Mood as both a direct and a moderating variable. The study finds that Consumer Mood is a strong driver of AIB. Moreover, in the case of FOMO and Time Pressure, a positive mood increases the impact of these variables on consumers' AIB.

By investigating the impact of Materialism on Consumer Mood, Hedonic Value, and Affective Impulse Buying, the current research makes an important contribution to the Materialism Theory. The finding that Materialism positively predicts all three variables extends and supports the existing theoretical framework related to materialistic consumers' preferences. In addition, this article contributes to the literature on social commerce by providing evidence of the positive effect of Online Social Interactions on Consumer Mood, Hedonic Value, and Affective Impulse Buying. As a result, it offers empirical support for the inclusion of social interactions in the S-O-R framework.

From a methodological perspective, this study contributes to scientific literature by testing an integrated theoretical framework with a large sample of 200 participants. The analysis of the direct and moderating effects of the variables included in the study offers valuable practical implications for online marketers aiming to identify the major drivers of consumers' AIB. In addition, the methodological contributions of this research allow its results to be generalized across diverse populations and settings.

Practical Implications

The results of the study have several implications for e-commerce companies, online sellers, marketers, website designers, and policymakers. The study's results indicated that a consumer's affective impulse buying is determined by promotional strategies, consumer emotions, and psychological factors, which means that companies should consider using integrated marketing approaches. The study revealed that Hedonic Value had the strongest direct influence on the consumer's affective impulse buying. Hence, the companies should strive to create pleasure and positive experiences through eye-catching websites, using multimedia, interactive displays, personalization, and other tools. The study also showed that Best Deals had a considerable indirect influence on the consumer's affective impulse buying through Hedonic Value, but the same variable had no influence on Consumer Mood. Therefore, the companies should complement promotional offers with positive experiences to maximize impulse buying.

The substantial indirect impact of FOMO and Time Pressure on consumer's affective impulse buying, along with the moderating role of Consumer Mood, suggest that the online retailers can implement scarcity-based marketing to create a sense of urgency among customers. At the same time, the companies should not engage in deceptive practices to induce buying behavior by manipulating consumers, provoking buyer's guilt, and lowering their credibility. Besides, the study revealed that Consumer Mood plays a critical role in online shopping. Hence, the companies should focus on providing positive emotions by introducing intuitive interfaces, personalization, exceptional customer service, convenient payment systems, and easy returns. Similarly, the results showed that Social Interaction has an extraordinary influence on impulse buying, mood, and Hedonic Value, meaning that online retailers should invest in social networks, online communities, influencer marketing, reviews, and ratings. The study's results showed that Materialism has a positive influence on all variables; therefore, the marketers should consider targeting this population by emphasizing the status and exclusclusivity of their items, providing unique experiences, and implementing other luxury positioning strategies. Nevertheless, the companies should mitigate the risk of excessive consumption by using responsible marketing practices and promoting sustainability. Moreover, Time Pressure, along with other scarcity-based marketing strategies, should be complemented with convenient websites, honest pricing, and overall pleasant experiences.

Since Role had no statistical influence on Consumer Mood, Hedonic Value, and Affective impulse buying, the marketers and retailers should consider using alternative approaches when targeting these populations. For instance, the companies could introduce role-specific products, focusing on convenience, quality, and other attributes fitting the chosen role rather than a generic approach.

The abovementioned findings can be instrumental in developing effective strategies for e-commerce companies, online sellers, and marketers. First, the online retailers and website designers should provide an elevated user experience by implementing intuitive interfaces, multiple personalization options, cutting-edge technologies, such as artificial intelligence, augmented and virtual reality, and other interactive displays. Policymakers should promote financial literacy, responsible impulse buying, and protect consumers from dishonest marketing

practices. Therefore, the study's results can help online shops, marketplaces, e-commerce companies, policymakers, and consumers fit into the growing market by maximizing the benefits of online shopping while eliminating some of its severe risks.

Recommendations

Based on the research results, some recommendations can be proposed for online retailers, digital marketers, e-commerce operators, and policymakers. As Hedonic Value appeared as the greatest predictor of Affective Impulse Buying, an emphasis on providing enjoyable shopping experiences through pleasant website interfaces, recommendation systems, interactive tools, appealing content, and convenient navigation (Babin et al., 1994; Lemon & Verhoef, 2016). At the same time, the FOMO and Time Pressure influences can be capitalized on by implementing various limited-time-time offers, promotions, flash discounts, and other special sales programs during the customers' shopping sessions while ensuring their ethical use (Przybylski et al., 2013; Hodkinson, 2019). As for the critical role of Consumer Mood, user-friendly interfaces, tailored approaches, convenient payment systems, efficient customer service, and flexible return policies, among others, should be provided to ensure pleasant emotions throughout the buying process.

Finally, as the study revealed the crucial role of Social Interactions for the success of impulse buying, online retailers can capitalize on this factor by introducing customer reviews, ratings, live streaming, video reviews, influencer marketing, user-generated content, forums, and other interactive features to build relations with consumers and establish their trust (Hajli, 2015; Kim & Park, 2013). As for the significant impact of Materialistic Values on the studied construct, marketers should consider this factor when designing marketing campaigns, emphasizing the unique aspects of the proposed products, and using responsible selling approaches (Belk, 1985; Richins & Dawson, 1992). Role-related shopping did not appear to impact the consumers' emotional responses; thus, online retailers should offer high-quality products, provide the necessary personalization and customization, and ensure the most relevant options for buyers (e.g., holiday shopping). Finally, policymakers can provide the necessary consumer education to ensure that regular consumers are aware of the risks and can avoid impulsive purchasing. Thus, it can be concluded that online retailers, marketers, and policymakers should consider multiple aspects to ensure the success of impulse buying. As per the research results, multiple factors should be taken into account to ensure the success of online retailers in terms of satisfying impulse buying customers. In terms of the key aspects of impulse buying, marketers should focus on creating shopping experiences that provide consumers with pleasure and positive emotions and build brand image and customer loyalty through exceptional quality of products and services (Babin et al., 1994; Lemon & Verhoef, 2016).

Contributions of the Study

This research makes several significant contributions to the pool of knowledge on online shopper behavior, emotional impulse buying, and internet marketing. It goes beyond theoretical analysis,

providing managers with guidelines and directions for action, and setting a research model that can be employed in similar investigations, thus facilitating further studies in the area. The study contributes to theories by introducing an extended set of consumer behavior analysis, influences practice by offering guidelines for online trade entities, and enriches methodology by validating thoroughly a research model which employs powerful statistical instruments. The research offers practical advice that can enable firms to formulate more effective digital marketing strategies, while at the same time it increases customer satisfaction and long-term prosperity.

Theoretical Contributions

The study makes several important theoretical contributions to the literature on online impulse buying and consumer behavior. First, it extends the application of Stimulus–Organism–Response (S-O-R) Theory by demonstrating how external marketing stimuli influence consumers' internal psychological and emotional states, which subsequently shape affective impulse buying behavior (Mehrabian & Russell, 1974). Second, the study contributes to FOMO literature by confirming its significant influence on affective impulse buying and demonstrating that this effect becomes stronger when consumers experience positive moods (Przybylski et al., 2013; Hodkinson, 2019). Third, the findings strengthen Hedonic Consumption Theory by identifying Hedonic Value as the strongest predictor of affective impulse buying, highlighting the importance of enjoyment and emotional gratification in online shopping (Babin et al., 1994). The study also extends understanding of Consumer Mood by demonstrating its moderating role in the relationships between FOMO and AIB and between Time Pressure and AIB. Furthermore, it supports Materialism Theory by showing that materialistic values positively influence Consumer Mood, Hedonic Value, and Affective Impulse Buying (Belk, 1985; Richins & Dawson, 1992). Finally, the insignificant relationships identified provide additional theoretical insight by highlighting boundary conditions within the S-O-R framework. These findings demonstrate that marketing stimuli do not uniformly influence consumers' psychological responses, emphasizing the need to consider contextual, cultural, and individual factors when explaining online impulse buying behavior.

Limitations of the Study

Although the researchers presented valuable theoretical, practical, and methodological contributions, the current study had a number of significant limitations. Firstly, the study's cross-sectional design was inappropriate to explore the cause-effect relationships and dynamics of consumer emotions and impulsive buying behaviors (Hair et al., 2022). Another limitation was the use of the convenience sampling method that might result in low representativeness and limited external validity of the study findings (Saunders et al., 2019). The convenience sample included only 200 online consumers, which might not be sufficient for the PLS-SEM analysis. Although this volume of data might be adequate for the statistical analysis of the main variables, the power of the multiple group analysis might be insufficient to identify significant differences in subgroups of the population. Only one country was included in the study, which makes the

generalizability of the findings questionable. Indeed, the cultural, economic, and technological contexts might influence consumer behavior, as well as the impact of specific marketing activities.

Finally, the researchers only focused on online shopping, without comparing the differences between online and offline retail stores. The current study might be considered as having conceptual limitations, as the researchers did not include all the moderators and predictors of consumer impulsive buying. For instance, the model included Best Deals, Social Interaction, Time Pressure, FOMO, Materialism, Role, Consumer Mood, and Hedonic Value. Meanwhile, there are other essential factors such as consumer trust, risk perception, impulsivity, locus of control, consumer literacy, website design, convenience, and AI recommendation systems. Finally, the use of self-reported surveys might lead to an inaccurate assessment of consumer behavior due to common method variance, recall bias, or social desirability. In conclusion, although the study had several limitations, it made important contributions to the research field of online consumer behavior.

Suggestions for Future Research

Considering the study's results and limitations, further studies should provide a longitudinal design to explore how consumers' emotions and impulsive buying tendencies evolve over time and with different market circumstances. The study would equally benefit from utilizing a more probable sample, a bigger size sample, and a wider population range.

Further research should be conducted in cross-cultural and country contexts to determine whether cultural factors predict online shoppers' impulsive buying propensities. Further studies can alternatively contrast consumers' emotions and buying behavior on various e-commerce and social commerce platforms to comprehend how technology, its characteristics, and its goods affect impulsive buying. Future studies may build on the current research by considering other variables such as consumer trust, risk perception, shopping satisfaction, website quality, self-control, consumer financial literacy, influencer credibility, eWOM, customer engagement, and the role of recommended items and artificial intelligence. Future studies can also consider the effect of additional moderators such as consumer involvement, personality, shopping motives, impulsivity, emotional intelligence, perceived scarcity, and self-control on consumers' emotions and behavior. In addition, considering the growing importance of digital commerce, future studies might concentrate on the impact of various technologies, including artificial intelligence, Augmented and Virtual Reality, live-stream commerce, recommendation systems, and chatbots, on consumers' emotions and impulsive buying tendencies. Finally, additional future studies should apply mixed-methodology to obtain more in-depth understanding of the causes and consequences of consumer emotions and impulsive buying. For example, the study could use qualitative methods such as interviews or focus groups to get a better comprehension of the phenomenon that survey research would miss. Further research can concentrate on the consequences of affective impulsive buying, such as the likelihood of purchase regret, consumer satisfaction with the impulsive purchase, repurchasing tendencies, brand attachment, financial gains, and sustainability.

In general, further studies on the topic of online consumer emotions and impulsive buying would greatly benefit from the present study's results and conclusions. The researchers could consider including more variables in the framework to illustrate additional buying behaviors and dispositional influences to conduct more empirical works, which could assess the framework's validity and reliability. Moreover, future studies could concentrate on the individual differences in the context of consumer emotions and impulsive buying.

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