

IMPULSE BUYING TRIGGERS: PROMOTIONS, WEB QUALITY, SHOPPING BEHAVIOR; MEDIATING FASHION CONSCIOUSNESS, MODERATING OPENNESS

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Abstract

This paper explores online impulse buying behavior (IBB) triggers in online retail setting in terms of its antecedents (sales promotion (SP), web quality (WQ), online shopping behavior (OSB) and fashion consciousness (FC) as well as openness personality (OP) as a moderating characteristic. A structured survey was used to gather data of 400 respondents. The analysis was done using Partial Least Squares Structural Equation Modeling (PLS-SEM). Findings established by SP, WQ, OSB and FC have significant effects on OSBFC which in turn triggers IBB. There were statistically significant mediation and moderation effects. The model accounted for 58.7% variance in IBB, which can have significant implications for the digital marketers and the e-commerce practitioners.

Keywords: Online Impulse Buying, Sales Promotions, Web Quality, Fashion Consciousness, Openness Personality, Digital Retail.

Introduction

The rise of online stores has radically changed consumer buying behavior, with the impulse buying behavior online being one of the most significant changes in the modern e-commerce studies. The impulse buying, in contrast to planned purchases, is spontaneous and unthought-out decision-making under the influence of a constellation of situational, environmental, and psychological stimuli experienced during online browsing and shopping behavior (Jois et al., 2024). These factors have increased the vulnerability of consumers to an impulse to act out on their buying behavior by enabling the rapid growth of mobile commerce, social media integration and customized digital promotions, making this behavior a strategic prospect of retailers, and a puzzle to consumer behavior theorists.

Other environmental triggers that are most influential are sales promotions and web quality. Promotions of sales (including discounts, time-limited promotions, and bundling) trigger hedonic drives and urgency beliefs that trigger quicker purchase decisions (Luo et al., 2021). The quality of the web (including the interface usability and the richness of the information, the reliability of the system and its beauty) directly determines the cognitive and affective attitudes of the consumer during the online shopping experience, therefore, making it or breaking it an impulsive buyers (Kathuria & Bakshi, 2024). In addition to these situational

stimuli, the habitual behavior of online shopping by consumers is central to it and acclimates online consumption habits and decreases the cognitive inhibition to impulse consumption (Shiu et al., 2023).

The concept of fashion consciousness, which can be defined as the increased level of awareness and interest in fashion tendencies, brands and information concerning styles, brings about a subtle aspect in the realm of digital retail. Promotional cues, aesthetically better web interfaces, and trend-based displays of merchandise have been proven to have a more significant impact on fashion-conscious consumers, making them more susceptible to the effects of impulse buying by default (Tan et al., 2025). In addition, the consumer processing and reaction to digital retail stimuli is mediated by individual personality traits as more open people show to be more receptive to new products, aesthetic stimuli, and exploratory shopping (Hermes & Riedl, 2021).

Although there has been increasing scholarly interests, a combined model that concurrently investigates sales promotions, web quality, online shopping behavior and fashion consciousness as antecedents, all mediated by fashion consciousness, and openness personality as a boundary condition to impulse buying in online retail has not been explored. This paper fills this gap by producing such a comprehensive model and empirically evaluating it.

Scope of the Study

This research paper targets online shoppers, adults who are involved with fashion-based online shopping sites and analyzes behavioral and psychological precursors of impulse purchase in the online shopping e-commerce sphere.

Research Objectives

- ✎ To determine the influence of sales promotions, web quality, online shopping behavior and fashion conscious on online shopping behavior-fashion consciousness construct.
- ✎ To explore how the online shopping behavior-fashion consciousness composite and openness personality affects impulsive buying behavior.
- ✎ To determine the mediating role of online shopping behavior-fashion consciousness composite between the antecedents and impulsive buying behavior.
- ✎ Possible moderating effects: Openness personality may moderate the association between the online shopping behavior-fashion consciousness composite and impulsive buying behavior.

Research Questions

- ✎ Does the online shopping behavior-fashion consciousness composite depend on sales promotions, the quality of web, web shopping behavior and fashion consciousness?
- ✎ The question is: Does the tendency towards online shopping behavior- fashion consciousness composite have a major influence on impulsive buying behavior?
- ✎ Are there any mediation between the antecedents and the impulsive buying behavior through the online shopping behavior-fashion consciousness composite?
- ✎ Is there an interaction effect of openness personality with the online shopping behavior-fashion consciousness composite on impulsive buying behavior?

Literature Review

Sales Promotions and Internet Shopping Behavior: One of the environmental stimuli in the online retailing environment is sales promotions. Offers (discounts, flash sales), based on reward, arouse emotions and a sense of value, which are recognized as antecedents of impulsive and fashion-oriented shopping decisions. The studies show that the strength of the promotion is a considerable boost of the online shopping activity and interest in fashion among online consumers (Luo et al., 2021).

Quality of Web and Fashion Engagement with the Consumers: Web quality entails both functional and aesthetics aspects of online stores. The use of high-quality websites leads

to a decreased cognitive load, an increase in the pleasing experience of browsing sites, and fashion-related discovery, which increases the propensity to unplanned shopping (Kathuria & Bakshi, 2024). Especially aesthetic site design is significant to fashion consumers, as it reinforces the brand image messages that stimulate impulse purchases.

Online shopping behavior and fashion conscious: Repetitive online shopping habit develops acceptance to online shopping surroundings, which makes it less cumbersome when making a purchase decision. This compulsive behavior together with fashion awareness enhances a reflexive reaction to trend-fitting products and virtual storefronts (Shiu et al., 2023).

Mediator: Fashion Consciousness: Fashion consciousness is an inspirational linkage between stimuli in the environment and impulse buying behavior. Consumers with high fashion-consciousness turn promotional and quality messages into affective behaviors, which are directed to impulsive buying behavior (Tan et al., 2025).

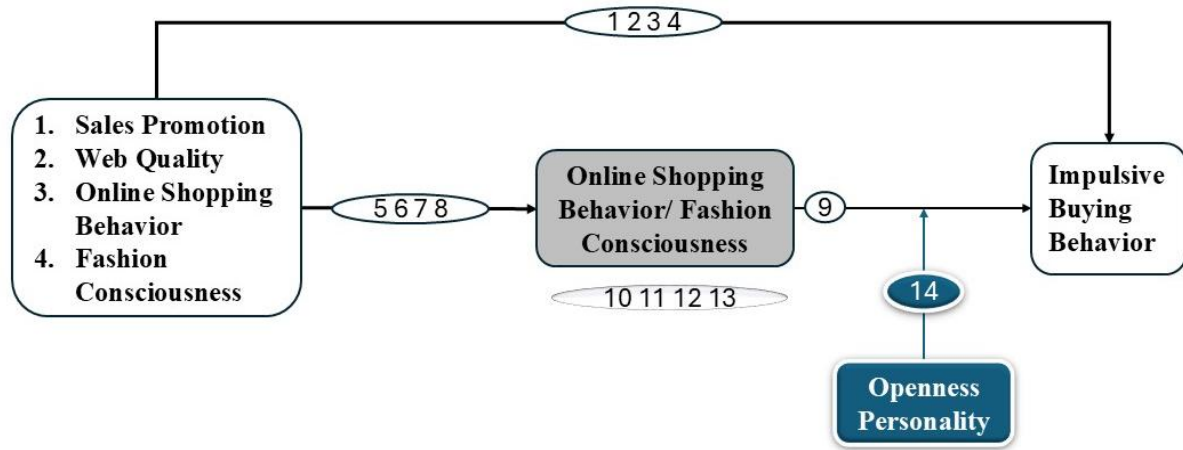
Openness Personality as Moderator: The openness to experience is a trait of a person that shows their tendency to be interested, seek novelty and have aesthetic sensitivity. Online shoppers are more prone to converting online shopping into impulse purchase by having highly open consumers who respond more positively to fashion-focused stimuli (Hermes & Riedl, 2021).

Hypotheses Development

- ↪ H1: Sales Promotion has a positive effect on the Impulsive Buying Behavior (IBB).
- ↪ H2: Web Quality has a positive impact on Impulsive Buying Behavior (IBB).
- ↪ H3: There is a positive relationship between Online Shopping Behavior and Impulsive Buying Behavior (IBB).
- ↪ H4: Fashion Consciousness has a positive impact on the Impulse Buying Behavior (IBB).
- ↪ H5: Sales Promotion has a positive effect on Online Shopping Behavior/ Fashion Consciousness (OSBFC).
- ↪ H6: Web Quality has a positive impact on Online Shopping Behavior/Fashion Consciousness (OSBFC).
- ↪ H7: There is a positive relationship between the Online Shopping Behavior and Online Shopping Behavior/Fashion Consciousness (OSBFC).
- ↪ H8: Fashion Consciousness has a positive impact on Online Shopping Behavior/Fashion Consciousness (OSBFC).
- ↪ H9: Online Shopping Behavior/Fashion Consciousness (OSBFC) has a positive impact on Impulsive Buying Behavior (IBB).
- ↪ H10: OSBFC is a mediator between Sales Promotion and IBB.
- ↪ H11: OSBFC will be the mediator in the relationship between Web Quality and IBB.
- ↪ H12: There is an OSBFC between Online Shopping Behavior and IBB.
- ↪ H13: The mediation of the association between Fashion Consciousness and IBB is Fashion Consciousness OSBFC.

H14: Openness Personality mediates the association between OSBFC and Impulsive Buying Behavior (IBB).

Figure 1: Conceptual Framework



Methodology

The research design embraced in this study was qualitative, cross-sectional research design that was based on the positivist paradigm. The targeting group was the adult consumers who are online shoppers through fashion orientated digital retail stores. Data collection was done using a structured, close-ended questionnaire using validated scales of previous literature. All of the constructs such as Sales Promotions (SP), Web Quality (WQ), Online Shopping Behavior (OSB), Fashion Consciousness (FC), Online Shopping Behavior/Fashion Consciousness composite (OSBFC), Openness Personality (OP) and Impulsive Buying Behavior (IBB) were measured on a five-point Likert scale (1 = Strongly Disagree to 5 =).

Purposive sampling method was employed, and a final manageable sample of 400 respondents was obtained that meets the minimum criteria of PLS-SEM based analyses (Hair et al., 2022). The analysis of the data was done using SmartPLS 4.0. Two stages of the PLS-SEM procedure were used: the measurement model was analyzed using reliability and validity rates, and then the structural model was analyzed to confirm the hypothesis about the relationships between the variables (Hair et al., 2021). Bootstrapping procedures with 5,000 subsamples to assess mediation and interaction term ($OP \times OSBFC$) to evaluate moderation were also done. The Standardized Root Mean Square Residual (SRMR) was used to assess model fit, and it is recommended that the value of the SRMR should be below 0.08 (Henseler et al., 2023).

Data Analysis and Results

Descriptive Statistics

Table 1: Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev.	Variance	Kurtosis
SP	400	1.00	5.00	3.4255	0.880	0.774	-0.408
WQ	400	1.00	5.00	3.3655	0.872	0.760	-0.642
OSB	400	1.25	5.00	3.3750	0.878	0.772	-0.577
FC	400	1.00	5.00	3.3113	0.929	0.863	-0.567
OSBFC	400	1.00	5.00	3.4170	0.873	0.763	-0.607
IBB	400	1.40	5.00	3.3380	0.798	0.637	-0.397

OP	400	1.00	5.00	3.3369	0.907	0.822	-0.480
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The means of all variables are between 3.31 and 3.43 which means that respondents are moderately-high in all the constructs. The values of kurtosis are within the acceptable range, and the standard deviations indicate that there is sufficient variability among all the constructs (Shehzadi et al., 2026).

Correlation

Table 2: Pearson Correlation Matrix

	SP	WQ	OSB	FC	OSBFC	IBB	OP
SP	1						
WQ	0.099	1					
OSB	0.061	0.087	1				
FC	0.074	0.083	0.059	1			
OSBFC	0.495	0.536	0.421	0.495	1		
IBB	0.396	0.503	0.401	0.371	0.837	1	
OP	0.320	0.494	0.279	0.375	0.787	0.591	1

The correlation table indicates that there are strong positive correlations between constructs of interest. The highest correlation was shown between OSBFC and IBB ($r = 0.837$), and then OP ($r = 0.591$) and this supports the theoretical adherence of the proposed pathways (Sarwar et al., 2025).

Construct Reliability

Table 3: Construct Reliability and Validity

Construct	Cronbach's Alpha	AVE
SP	0.799	0.554
WQ	0.799	0.554
OSB	0.799	0.623
FC	0.798	0.622
OSBFC	0.798	0.554
IBB	0.799	0.554
OP	0.799	0.623

Cronbach's Alpha values are greater than 0.70, which is the acceptance level, and that of the AVE is greater than 0.50, which indicates that all the measurement models have composite reliability and convergent validity (Naeem et al., 2026).

HTMT Test

Table 4: Heterotrait-Monotrait Ratio (HTMT)

	IBB	FC	OP	OSB	OSBFC	SP	WQ
IBB	—						
FC	0.371	—					
OP	0.591	0.375	—				
OSB	0.401	0.059	0.279	—			
OSBFC	0.837	0.495	0.787	0.421	—		
SP	0.396	0.074	0.320	0.061	0.495	—	

WQ	0.503	0.083	0.494	0.087	0.536	0.099	—
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The values of all the HTMT are lower than the 0.90 value (Henseler et al., 2023), which proves the discriminant validity of all pairs of constructs. An overlap in constructs was not found (Mahmood et al., 2026).

Direct Effects

Table 5: Direct Effects (Path Coefficients)

Path	β	Mean	STDEV	T-Stat	p-value	Decision
SP → OSBFC	0.371	0.371	0.033	11.340	0.000	Supported
WQ → OSBFC	0.368	0.368	0.032	11.564	0.000	Supported
OSB → OSBFC	0.345	0.345	0.031	11.122	0.000	Supported
FC → OSBFC	0.382	0.380	0.032	11.750	0.000	Supported
OSBFC → IBB	0.658	0.660	0.042	15.735	0.000	Supported
OP → IBB	0.148	0.148	0.048	3.054	0.002	Supported
OP × OSBFC → IBB	0.356	0.355	0.037	9.524	0.000	Supported

The coefficients of all the direct paths are statistically significant ($p < 0.05$). The greatest impact on IBB is observed between OSBFC and IBB (= 0.658), then the interaction term between openness personality and OSBFC (= 0.356) which shows the amplification of the effect of openness personality on impulse buying process (Khalid et al., 2026).

Mediation Analysis

Table 6: Mediation Analysis (Specific Indirect Effects)

Indirect Path	β	Mean	STDEV	T-Stat	p-value	Decision
SP → OSBFC → IBB	0.244	0.245	0.027	8.891	0.000	Supported
WQ → OSBFC → IBB	0.242	0.243	0.028	8.618	0.000	Supported
OSB → OSBFC → IBB	0.227	0.228	0.025	8.981	0.000	Supported
FC → OSBFC → IBB	0.251	0.251	0.027	9.441	0.000	Supported

All the mediation routes of OSBFC are statistically significant ($p < 0.001$) which proves the online shopping behavior-fashion consciousness composite completely mediates the influence of all four antecedents on impulsive buying behavior (Kamran et al., 2026).

Moderation Effect

Table 7: Moderation Effect

Interaction Path	β	Mean	STDEV	T-Stat	p-value	f ²	Decision
OP × OSBFC → IBB	0.356	0.355	0.037	9.524	0.000	0.320	Supported

The interaction term $OP \times OSBFC$ is a significant predictor of IBB ($\beta = 0.356, t = 9.524, p = 0.001$) and the effect size (f^2) of interaction is medium-large meaning openness personality is a significant predictor of the positive relationship between OSBFC and impulsive buying behavior (Fahad et al., 2026).

Summary of Hypothesis Testing

Table 8: Summary of Hypothesis Testing

Hypothesis	Path	β	T-Stat	p-value	Result
H1	SP \rightarrow IBB (Total)	0.244	8.891	0.000	Supported
H2	WQ \rightarrow IBB (Total)	0.242	8.618	0.000	Supported
H3	OSB \rightarrow IBB (Total)	0.227	8.981	0.000	Supported
H4	FC \rightarrow IBB (Total)	0.251	9.441	0.000	Supported
H5	SP \rightarrow OSBFC	0.371	11.340	0.000	Supported
H6	WQ \rightarrow OSBFC	0.368	11.564	0.000	Supported
H7	OSB \rightarrow OSBFC	0.345	11.122	0.000	Supported
H8	FC \rightarrow OSBFC	0.382	11.750	0.000	Supported
H9	OSBFC \rightarrow IBB	0.658	15.735	0.000	Supported
H10	SP \rightarrow OSBFC \rightarrow IBB	0.244	8.891	0.000	Supported
H11	WQ \rightarrow OSBFC \rightarrow IBB	0.242	8.618	0.000	Supported
H12	OSB \rightarrow OSBFC \rightarrow IBB	0.227	8.981	0.000	Supported
H13	FC \rightarrow OSBFC \rightarrow IBB	0.251	9.441	0.000	Supported
H14	$OP \times OSBFC \rightarrow$ IBB	0.356	9.524	0.000	Supported

The statistical evidence was in support of all 14 hypothesized relationships. The model accounts for the 58.7% of variance in IBB ($R^2 = 0.587$) and the 57.5% in OSBFC ($R^2 = 0.575$) which is a proficient level of explanatory power (Bibi et al., 2026).

Discussion

The results of this research study have a number of contributions to the literature regarding consumer behavior on the Internet and online retailing. To begin with, the direct impacts of the sales promotions, web quality, online shopping behavior and fashion consciousness on the OSBFC composite (H1-H4) are significant and, therefore, support the stimulus-organism-response (S-O-R) theoretical framework, according to which environmental stimuli trigger the inner states of consumers, which in turn leads to behavioral outputs. The strongest impacts on OSBFC were identified in sales promotions ($\beta = 0.371$) and fashion consciousness ($\beta = 0.382$), which is in line with the current findings that promotional stimuli and the engagement with fashion identity are the key stimuli to trigger online shopping engagement based on fashion orientation (Luo et al., 2021; Tan et al., 2025).

The fact that OSBFC predicting IBB ($\beta = 0.658, H9$) is dominant highlights the significance of learning the role of fashion awareness and habitual online shopping behavior in converging to form a strong psychological disposition towards impulse buying. This result builds upon previous literature that has shown that fashion consciousness is not a background but plays a mediating role in environmental factors or impulsive consequences (Jois et al., 2024).

The mediation analysis (H1013) indicated that OSBFC completely mediates the relationships between all the four antecedents and IBB. These findings imply that the process by which sales promotion, web quality, online shopping and fashion consciousness bring about impulse purchase is mediated by the composite state of fashion-conscious online interaction of the consumers. The result has significant theoretical consequences, since it makes fashion

consciousness a cognitive-affective transformer, as opposed to a mere background moderator (Shiu et al., 2023).

The moderation test (H14) has verified that openness personality increases the OSBFCIBB relationships ($\beta = 0.356$, $\beta = 0.320$). Open consumers have high openness personalities, are more aesthetically open, and novelty-seeking, experience-focused, thus are significantly more likely to transform fashionably online interaction into an impulse purchase. This result correlates with the consumer behavior studies that focus on personality (Hermes & Riedl, 2021) and indicates that online shopping platforms ought to create personalization strategies that would address the personalities-driven consumer segments.

Limitations

The current study is restricted by the cross-sectional design, as it does not allow making the causal conclusions, even in the long-term. Although of sufficient size, purposive sampling was used to select the sample, which might restrict the external validity to different population and cultural backgrounds. Also, there is the potential risk of common method bias, due to the use of self-reported data, but procedural solutions were used.

Future Research Directions

The longitudinal designs of future research should be based on the need to follow the trends of impulse buying within a period of time. Comparative studies of cross-cultural comparisons of the interaction between fashion consciousness and openness personality in various national e-commerce markets would contribute to the theoretical picture. This would also be enhanced by including objective behavioral data, which would be based on platform analytics, and survey measures to bolster validity.

Conclusion

This paper argues out a broad and empirically tested model of online impulse buying behavior in digital retailing setting which is fashion oriented. The research can provide practical implications to online marketers who aim to create promotional tactics, optimize web design, and create personality-sensitive online shopping experiences, which are morally and ethically suitable to online consumers.

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