

Psychological Effects of Repetitive Online Advertisements on Impulse Buying Behaviour in Online Shopping

Ega Lokesh¹, Dr. Sangeetha²

Post Graduate Diploma in Management, Firebird Institute of Research in Management, Coimbatore, India

Email: ¹egalokesh@firebird.net.in, ²sangeetha.k@firebird.ac.in

Abstract—This study examines the psychological effects of repetitive online advertisements on impulse buying behaviour among digital shoppers. Grounded in the Mere Exposure Theory and the Stimulus-Organism-Response (S-O-R) model, the research investigates how five advertising characteristics repetitive exposure, personalization, format, credibility, and enjoyment influence consumers' unplanned purchase decisions in online shopping environments. Using a quantitative, cross-sectional research design, data were collected from 199 respondents through a structured questionnaire employing a five-point Likert scale, and analysed using descriptive statistics, reliability testing, and multiple regression analysis in SPSS. The results reveal that advertisement credibility and advertisement enjoyment have a significant positive influence on impulse buying behaviour, whereas repetitive exposure, personalization, and advertisement format do not show a statistically significant effect. These findings suggest that emotional engagement and perceived trustworthiness, rather than mere frequency of exposure or visual design, are the primary drivers of impulsive online purchases. The study contributes to the growing body of literature on digital consumer psychology and offers practical implications for marketers designing online advertising strategies.

Keywords—*Impulse buying behaviour; online advertising; repetitive exposure; advertisement personalization; advertisement credibility; advertisement enjoyment; consumer psychology*

I. INTRODUCTION

Digital transformation has fundamentally changed how consumers discover, evaluate, and purchase products. Constant interaction with social media, search engines, and e-commerce platforms exposes consumers to a continuous stream of online advertisements. One-click purchasing, personalized recommendations, and time-limited offers create a sense of urgency and convenience that pushes consumers toward immediate, unplanned buying decisions [1].

According to the Mere Exposure Theory, repeated exposure to a stimulus increases the likelihood of developing a favourable attitude toward it [1]. Applied to digital advertising, consumers who repeatedly encounter the same advertisement are more likely to develop positive attitudes toward the advertised product, even without an initial intention to purchase. Beyond repetition, advertisement personalization, format, credibility, and enjoyment have each been studied individually as drivers of consumer response, but few studies integrate all five characteristics into a single model.

This research addresses that gap by examining the combined psychological effect of repetitive exposure, personalization, format, credibility, and enjoyment of online

advertisements on impulse buying behaviour. The objectives of the study are (1) to identify the factors that influence consumers' impulse buying behaviour in online shopping, and (2) to determine how each of the five advertising characteristics affects that behaviour.

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A. Mere Exposure Theory

The Mere Exposure Theory holds that familiarity, generated through repeated exposure, produces a more favorable attitude toward a stimulus even without conscious processing [1]. In online advertising, repeated display of the same advertisement across channels increases familiarity and reduces perceived risk, which can encourage purchase. However, over-exposure may also cause advertisement fatigue and reduce effectiveness [11], [13].

B. Stimulus–Organism–Response (S–O–R) Model

The S–O–R model explains how an environmental stimulus (S) affects an individual's internal cognitive and emotional state (O), which in turn produces a behavioural response (R) [2]. In this study, online advertisements act as the stimulus; consumers' cognitive responses (awareness, trust, relevance) and emotional responses (enjoyment, excitement) act as the organism; and impulse buying represents the behavioural response.

C. Impulse Buying Behaviour

Impulse buying is defined as an unplanned, spontaneous purchase driven more by emotional reaction than rational evaluation [3]. Online shopping environments are particularly conducive to impulse buying because of their convenience, one-click checkout, and persuasive marketing cues [4]–[7].

D. Hypotheses Development

Building on the theoretical framework and prior empirical work on repetitive exposure [11], [12], [14], personalization [15]–[17], advertisement format [18]–[20], credibility [21]–[23], and enjoyment [24]–[26], the following hypotheses were formulated:

H1: Repetitive exposure to online advertisements significantly influences impulse buying behaviour.

H2: Advertisement personalization significantly influences impulse buying behaviour.

H3: Advertisement format significantly influences impulse buying behaviour.

H4: Advertisement credibility significantly influences impulse buying behaviour.

H5: Advertisement enjoyment significantly influences impulse buying behaviour.

III. RESEARCH METHODOLOGY

A quantitative, descriptive-explanatory, cross-sectional research design was adopted. The target population consisted of active online users aged 18–35 years. A convenience sampling technique was used, and the questionnaire link was distributed through WhatsApp, Instagram, and Telegram. A total of 199 valid responses were collected.

The structured questionnaire consisted of two sections: demographic information (age, gender, education, online usage frequency, time spent online) and study variables measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The independent variables were repetitive exposure, advertisement personalization, advertisement format, advertisement credibility, and advertisement enjoyment; the dependent variable was impulse buying behaviour. A pilot study confirmed acceptable reliability (Cronbach's alpha > 0.6) before full-scale data collection. Data were analysed in SPSS using descriptive statistics, reliability analysis, and multiple regression analysis.

IV. RESULTS AND ANALYSIS

Of the 199 respondents, 76.4% were under 25 years old, 65.3% were female, and 58.8% held a master's or doctorate degree. Over half (54.3%) used online platforms daily, and 49.2% spent more than 1.5 hours online per day, confirming a digitally active sample suited to the study's objectives.

TABLE I. TABLE I. RELIABILITY ANALYSIS (CRONBACH'S ALPHA)

Variable	Items	Alpha
Repetitive Exposure	4	0.747
Ad. Personalization	4	0.682
Advertisement Format	4	0.777
Advertisement Credibility	4	0.781
Advertisement Enjoyment	4	0.761
Impulse Buying Behaviour	8	0.863

All constructs exceeded the 0.6 threshold for acceptable reliability, confirming that the measurement scales were internally consistent and suitable for further analysis.

TABLE II. TABLE II. MULTIPLE REGRESSION COEFFICIENTS

Predictor	B	Sig.
Repetitive Exposure	0.039	0.547
Ad. Personalization	0.123	0.134
Advertisement Format	0.027	0.731
Advertisement Credibility	0.290	0.000
Advertisement Enjoyment	0.349	0.000

The regression model was significant overall, $R = 0.709$, $R^2 = 0.502$, $F(5, 193) = 38.987$, $p < .001$, indicating that the five predictors jointly explained approximately 50.2% of the variance in impulse buying behaviour.

TABLE III. TABLE III. HYPOTHESIS TESTING SUMMARY

Hypothesis	Sig.	Result
H1 Repetitive Exposure	0.547	Not Supported
H2 Personalization	0.134	Not Supported

H3 Advertisement Format	0.731	Not Supported
H4 Advertisement Credibility	0.000	Supported
H5 Advertisement Enjoyment	0.000	Supported

V. DISCUSSION

Consistent with H4 and H5, advertisement credibility and advertisement enjoyment emerged as significant positive predictors of impulse buying behaviour. When advertisements are perceived as trustworthy, consumers experience reduced uncertainty and are more willing to buy without extensive deliberation, supporting prior findings that credibility builds the confidence needed for online transactions [21], [22]. Similarly, advertisements that are entertaining and emotionally engaging capture attention and lower the cognitive barriers to impulsive purchasing, consistent with hedonic consumption theory [25], [26].

In contrast, repetitive exposure, personalization, and advertisement format did not significantly predict impulse buying, despite their theoretical association with awareness and engagement. This suggests that while these factors may build familiarity, relevance, and attention, they do not by themselves generate the emotional urgency required for a spontaneous purchase decision. Excessive repetition may even produce advertisement fatigue [13], and personalization that feels intrusive can undermine rather than support purchase intent [16], [17].

VI. FINDINGS, RECOMMENDATIONS, AND CONCLUSION

The study concludes that emotional engagement and trust, rather than exposure frequency, personalization, or visual design alone, are the strongest drivers of impulse buying behaviour in online shopping. Marketers are advised to prioritize enjoyable, entertaining, and emotionally resonant advertisement content, ensure transparency and accuracy in product claims to build credibility, and avoid excessive repetition that can lead to advertisement fatigue. Personalization strategies should be balanced against consumer privacy concerns.

The study is limited by its convenience sample of 199 digitally active young respondents, its cross-sectional design, and its reliance on self-reported data, which may not generalize to the broader population. Future research could adopt a longitudinal design, expand the sample, and examine additional variables such as social influence, brand loyalty, and platform-specific effects.

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