

TikTok and Consumer Psychology: How Short Videos Influence Impulse Buying

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Abstract. TikTok has rapidly become one of the most influential short video platforms worldwide, especially among young adults. Its algorithm-driven content delivery and emotionally engaging media environment have created new pathways for psychological influence and consumer persuasion. This study investigates how TikTok's short videos shape users' engagement patterns and impulse buying behavior. Drawing on Uses and Gratification Theory and Social Learning Theory, the research proposes an integrated framework linking emotional involvement, observational learning, motivational engagement, and impulsive consumption. This study adopted a quantitative research approach, consisting of a quantitative survey of more than 150 TikTok users aged over 18. Correlational and regression analyses of the survey data revealed that emotional gratification and social learning are significant predictors of impulse buying. The findings highlight the convergence of entertainment and commerce within short video platforms and contribute to a deeper understanding of media psychology in digital consumption contexts.

Keywords: Consumer Psychology, Short Video, User Engagement, Impulse Buying, TikTok

1. Introduction

Short video platforms have rapidly transformed digital media consumption, with TikTok becoming one of the most influential spaces for entertainment, self-expression, and consumer engagement [1,2]. Existing research on social media has explored emotional gratification, influencer effects, and online consumer behavior; however, most studies focus on long-form content or traditional advertising, leaving a gap in understanding the unique persuasive features of short-form, algorithm-driven videos. Moreover, while scholars recognize that emotional cues, attention dynamics, and observational learning play important roles in digital behavior, few empirical studies have investigated how these mechanisms collectively shape impulse buying within TikTok's fast-paced, visually stimulating environment. This paper focuses on the psychological processes through which TikTok influences consumer decisions. Specifically, it investigates how emotional gratification and social learning cues displayed by creators correlate with users' impulse buying propensities. The research addresses the following research questions:

- (1) How do emotional and motivational factors influence users' responses to TikTok content?
- (2) To what extent does observational learning predict impulse buying behavior on the platform?
- (3) How do TikTok's structural and algorithmic features contribute to consumer persuasion?

To answer these questions, the study employs a quantitative research, which is a quantitative survey measuring media usage, emotional involvement, social learning, and impulse buying. Correlation and regression analyses were used to evaluate relationships among the key psychological variables.

The findings facilitate the anticipation of future trends in media-driven consumer behavior and provide implications for digital literacy, platform governance, and responsible marketing practices.

2. Literature review

Uses and Gratifications Theory (UGT) posits that audiences proactively select media to fulfill psychological and social needs (e.g., entertainment, information, companionship) [3]. In contemporary digital media, these gratifications extend to platform affordances such as interaction, social connectedness, and self-expression [4]. Early evidence on TikTok also points to affective enjoyment and motivational drivers behind use [5]. Building on this stream, this study operationalizes emotional/motivational engagement as immersion/flow, relaxation, information seeking, and connection.

Social learning theory proposes that people acquire attitudes and behaviors by observing others and the outcomes of their actions [6]. On short-video platforms, creators may serve as salient role models, and perceived message value and credibility can increase trust in branded content [7]. Repeated exposure to creator content can also foster parasocial interaction-perceived intimacy with media figures-which can amplify the creators' persuasive influence and elicit purchase-related behavioral intentions [8].

Finally, impulse buying is typically defined as a sudden, compelling urge to buy with limited deliberation [9]. Online contexts can amplify impulse buying by lowering friction and strengthening affective and persuasive cues, as shown in models linking online store beliefs to impulse buying behavior [10]. Accordingly, the current study examines whether emotional/motivational engagement, observational learning, and algorithmic/structural persuasion cues are associated with higher levels of impulse buying behavior, while controlling for self-control and advertising literacy [11].

3. Research design and methodology

3.1. Research framework

This study employs a quantitative research design to investigate how psychological and platform-related factors shape users' responses to TikTok content and their impulse buying behavior. Drawing on Uses and Gratifications Theory and Social Learning Theory, the framework conceptualizes emotional and motivational engagement, observational learning, and algorithmic or structural persuasion cues as key independent variables. Impulse buying behavior serves as the primary dependent variable, while users' immediate responses to content (e.g., perceived likeability and authenticity) are analyzed as an additional outcome variable related to emotional engagement.

To address individual differences, self-control and advertising literacy are incorporated as control variables, alongside demographic covariates (i.e., age, gender, and monthly disposable budget).

3.2. Questionnaire design

The questionnaire consists of multiple sections measuring TikTok usage experiences, psychological engagement, social learning cues, persuasion awareness, and impulse buying tendencies. All

attitudinal items were measured using a 7-point Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”).

Emotional and motivational engagement was assessed via four items capturing flow experience, relaxation, information-seeking motivation, and perceived social connectedness; Observational learning was assessed through three items reflecting imitation of creators, trust in recommendations, and perceived closeness to creators; Algorithmic and structural persuasion cues included perceived content–interest matching, awareness of algorithmic personalization, and susceptibility to persuasive content; Impulse buying behavior was measured using two items capturing impulse triggered by recommendations and unplanned purchases.

Control variables include self-control, advertising literacy, age, gender, and monthly disposable budget.

3.3. Data collection and sample characteristics

Data were collected via an online survey disseminated across multiple social media platforms. Following data cleaning procedures, a total of 156 valid responses were retained for subsequent analysis. All respondents were aged 18 or above and reported prior experience using TikTok or similar short video platforms.

Descriptive statistics for the key variables are reported in Table 1. Overall, respondents reported relatively high levels of emotional engagement with TikTok content (Mean = 5.09) and perceived algorithmic or structural persuasion cues (Mean = 5.01). These distributions suggest sufficient variance for subsequent correlation and regression analyses.

Table 1. Descriptive statistics for the key variables

Variable	N	Mean	SD
Emotional and motivational engagement	156	5.087	1.11
Observational learning	156	4.274	1.221
Algorithmic and structural persuasion cues	156	5.008	1.083

3.4. Data analysis methods

The data analysis proceeded in four steps:

- Descriptive statistics were calculated to summarize the central tendencies and dispersion of all key variables.
- Correlation analysis was conducted to examine bivariate associations among emotional engagement, observational learning, algorithmic cues, content response, and impulse buying.
- Multiple regression analysis was employed to test the research hypotheses by estimating the direct effects of core predictors on impulse buying behavior and content response, while controlling for individual difference variables and demographic covariates.

All analyses were conducted using R.

4. Result

4.1. Descriptive statistics

Table 1 presents the descriptive statistics for the key variables. Emotional and motivational engagement, observational learning, and algorithmic and structural cues all exhibited mean values

above the midpoint of the scale, indicating that participants generally perceived TikTok as emotionally engaging and socially impactful.

Reliability results are reported in Table 2. Cronbach's alpha values ranged from 0.638 to 0.737. The emotional and motivational engagement scale ($\alpha = 0.735$) and algorithmic and structural cues scale ($\alpha = 0.737$) demonstrated acceptable internal consistency. Although the impulse buying scale comprises only two items, its reliability ($\alpha = 0.638$) is considered adequate for exploratory research. Collectively, these results support the use of composite variables in subsequent analyses.

Table 2. Reliability test of questionnaire questions

Scale	Items	Cronbach alpha
Emotional/Motivational (RQ1)	Q5, Q6, Q7, Q8	0.735
Observational Learning (RQ2)	Q10, Q11, Q12	0.687
Algorithm/Structure (RQ3)	Q4, Q14, Q16, Q24, Q26	0.737
Impulse Buying	Q13, Q20	0.638

4.2. Results of correlation and regression analyses

Table 3 reports the Pearson correlation coefficients among the key variables. Emotional and motivational engagement was positively correlated with impulse buying ($r = 0.37$, $p < 0.001$). Observational learning showed a strong positive association with impulse buying ($r = 0.58$, $p < 0.001$). Algorithmic and structural persuasion cues also exhibited a significant positive correlation with impulse buying ($r = 0.54$, $p < 0.001$). These correlations offer preliminary empirical support for all three research hypotheses and warrant further multivariate regression analysis.

The findings indicate that with an increase in emotional and motivational engagement, people may exhibit more impulsive behaviors. As they continue watching short videos, they may become more exposed to persuasive content, which can make impulse buying more likely. In addition, algorithmic and structural persuasion cues may encourage prolonged viewing of short videos, making it more difficult for users to pause and reflect on their consumption decisions. Consequently, users may be less predisposed to rigorously evaluate the necessity of products, thereby contributing to impulsive purchasing behavior. Similarly, higher levels of observational behavior are associated with stronger impulse buying tendencies. From a practical standpoint, integrating anti-addiction interventions between video segments or prompting users to reduce viewing duration and engage in alternative meaningful activities may help mitigate excessive impulsive purchasing.

Table 3. Pearson correlation coefficients among the key variables

	1. Emo	2. Obs	3. Algo	4. Imp	5. Con	6. Q27	7. Q25
1. Emo	1.00	0.61***	0.69***	0.37***	0.57***	0.26**	0.61***
2. Obs		1.00	0.55***	0.58***	0.46***	0.19	0.36***
3. Algo			1.00	0.54***	0.86***	0.24*	0.51***
4. Imp				1.00	0.48***	-0.02	0.20
5. Con					1.00	0.15	0.42***
6. Q27						1.00	0.31***
7. Q25							1.00

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Note: 1. Emo means emotional and motivational engagement; 2. Obs means observational learning; 3. Algo means algorithmic and structural persuasion cues; 4. Imp means impulse buying; 5. Con means content response; The content of Q27 is self-control, and the content of Q25 is advertising literacy.

To address RQ1, content response (measured by perceived likeability and authenticity) was regressed on emotional and motivational engagement while controlling for self-control and demographic variables. As presented in Table 4, emotional and motivational engagement emerged as a robust and significant predictor of content response ($\beta = 0.64$, $p < 0.001$).

Table 4. Combine regression (content response)

Dependent variable	Variable	β	t	R2	F	Significance
Content response	Intercept	1.855***	3.834	0.362	7.417	0.000
	Emotional and Motivational	0.644***	7.569			
	Q27 self-control	0.003	0.057			

Note: Controls included age, gender, budget, self-control, advertising literacy but not shown.

This result suggests that users' emotional gratification and motivational involvement play a central role in shaping their immediate responses to TikTok content, independent of individual differences.

RQ2 examines whether observational learning predicts impulse buying behavior. Table 5 indicates that observational learning has a significant and positive effect on impulse buying ($\beta = 0.57$, $p < 0.001$).

These findings suggest that imitation, trust in creators, and perceived social closeness substantially increase the likelihood of impulsive consumption on TikTok.

To address RQ3, impulse buying was regressed on algorithmic and structural persuasion cues. As shown in Table 5, algorithmic and structural cues exert a significant positive effect on impulse buying ($\beta = 0.60$, $p < 0.001$).

Table 5. Combine regression (impulse buying)

Dependent variable	Variable	β	t	R2	F	Significance
Impulse buying	Intercept	0.268	0.503	0.482	9.364	0.000
	Emotional and Motivational	-0.191	-1.401			
	Observational learning	0.566***	5.786			
	Algorithmic/structural cues	0.599***	4.890			

Note: Controls included age, gender, budget, self-control, advertising literacy but not shown.

These findings demonstrate that TikTok's content-interest alignment, perceived content authenticity, and algorithm-driven personalization serve as persuasive cues that facilitate impulsive purchasing, even among users with awareness of advertising strategies.

From these two tables, we can infer that higher levels of emotional and motivational engagement are associated with more positive responses to TikTok content. When users experience stronger feelings of enjoyment, relaxation, information gratification, and social connection, they are more likely to perceive short videos as likeable and authentic. This indicates that emotional gratification plays an important role in shaping users' immediate evaluations of content. However, emotional

engagement alone does not necessarily translate directly into impulse buying once other factors are taken into account.

In contrast, observational learning shows a clear and positive relationship with impulse buying behavior. When users frequently observe and imitate content creators, trust creator recommendations, or perceive social closeness to creators, they are more predisposed to engage in unplanned purchasing.

5. Conclusion

This study examines how TikTok's short video environment influences users' impulse buying tendencies through emotional gratification and social learning cues. By integrating Uses and Gratification Theory with Social Learning Theory, the research provides a psychological explanation for how entertainment-oriented content becomes a pathway to consumer influence. The quantitative findings demonstrate that emotional involvement with TikTok videos and observational learning of creators' behaviors are salient predictors of impulsive consumption.

The study contributes to media psychology by expanding theoretical understanding of how short video platforms function as persuasive systems. It also offers practical implications for digital marketing, suggesting that emotionally resonant and authentic content may significantly enhance consumer engagement. Furthermore, the findings underscore the necessity of enhanced media literacy education and platform transparency, as users may not always discern the commercial intent embedded in seemingly casual short-video content.

Future research may explore cross-cultural differences, compare TikTok with other short video platforms or investigate the long-term psychological effects of algorithm-driven consumption. As short-video platforms continue to transform digital culture, comprehending their implications for consumer behavior remains a critical domain for both academic scholars and industry practitioners.

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