

The effect of *fear of missing out* and *sales promotion* on *virtual goods impulse buying*: The mediating role of *positive emotion* among Roblox users

Helga Tabina Putri Alifah^{1*}, Bukar Isa Gamawa²

¹ Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

² Yobe State University, Damaturu, Nigeria

*Corresponding Author: helgahelgaa19@gmail.com

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Abstract

The rapid growth of *virtual goods* transactions on digital gaming platforms has increased *impulsive buying* behavior, yet the mediating role of *positive emotion* in the relationship between *Fear of Missing Out* (FOMO), *sales promotion*, and *impulsive buying* remains underexplored. This study aims to examine the direct effects of FOMO and *sales promotion* on Robux *impulsive buying* among Roblox users and to investigate the mediating role of *positive emotion*. A quantitative approach was employed using data from 251 Roblox users who had purchased Robux, which were analyzed through *path analysis* and the *Sobel Test*. The findings reveal that FOMO, *sales promotion*, and *positive emotion* have positive and significant effects on *impulsive buying*, while *positive emotion* significantly mediates the effects of FOMO and *sales promotion* on *impulsive buying*. This study contributes to the digital consumer behavior literature by demonstrating that *positive emotion* serves as the psychological mechanism linking social and marketing stimuli to *impulsive buying* in *virtual goods* consumption.

Keywords: *Fear of Missing Out*; Sales promotion; Positive emotion; Impulsive buying; *Virtual goods*.

Abstrak

Perkembangan transaksi *virtual goods* pada platform permainan digital meningkatkan kecenderungan *impulsive buying*, namun mekanisme yang menjelaskan peran *positive emotion* dalam memediasi pengaruh *Fear of Missing Out* (FOMO) dan *sales promotion* masih belum banyak dikaji. Penelitian ini bertujuan menganalisis pengaruh langsung FOMO dan *sales promotion* terhadap *impulsive buying* Robux pada pengguna Roblox serta menguji peran mediasi *positive emotion*. Penelitian menggunakan pendekatan kuantitatif dengan melibatkan 251 pengguna Roblox yang pernah membeli Robux, kemudian dianalisis menggunakan *path analysis* dan *Sobel Test*. Hasil penelitian menunjukkan bahwa FOMO, *sales promotion*, dan *positive emotion* berpengaruh positif dan signifikan terhadap *impulsive buying*, sedangkan *positive emotion* terbukti memediasi pengaruh FOMO dan *sales promotion* terhadap *impulsive buying*. Penelitian ini berkontribusi pada pengembangan kajian perilaku konsumen digital dengan menegaskan *positive emotion* sebagai mekanisme psikologis yang menghubungkan stimulus sosial dan pemasaran dalam pembentukan perilaku pembelian impulsif pada *virtual goods*.

Kata Kunci: *Fear of Missing Out*; Promosi penjualan; Emosi positif; Pembelian impulsif; *Virtual goods*.

Introduction

The digital gaming industry has transformed consumption patterns from the purchase of physical products toward the acquisition of *virtual goods* that offer symbolic and aesthetic value as well as gaming experiences (Liu et al., 2025). One platform demonstrating this development is Roblox, an ecosystem based on *user-generated content* with rapidly growing digital economic activity. In the second quarter of 2025, Roblox recorded 111.8 million daily active users, 27.4 billion hours of user engagement, 23.4 million monthly paying users, and US\$1.44 billion in *bookings*, indicating the high intensity of transactions using Robux as a virtual currency (Saputra & Mauritsius, 2026). These achievements confirm that *virtual goods* purchases have become an important component of digital consumption behavior, while also demonstrating the substantial market potential driving the increasing incidence of spontaneous purchasing on digital gaming platforms.

The increasing volume of *virtual goods* transactions not only creates economic opportunities for platform developers but also changes how users make purchasing decisions. Unlike physical products, which are generally evaluated based on their functional benefits, *virtual goods* purchases are more strongly influenced by gaming experiences, social interactions, the scarcity of digital items, and various promotional strategies designed to trigger rapid purchasing decisions (Shukla & Drennan, 2018). This condition makes *impulsive buying* an increasingly prevalent phenomenon in digital gaming environments (Rita et al., 2024). Unplanned purchases may increase digital spending, reinforce consumptive behavior, and reduce users' self-control in managing transactions involving virtual currencies. Therefore, understanding the mechanisms underlying *impulsive buying* is essential for explaining consumer behavior dynamics within the rapidly evolving digital gaming ecosystem.

Various factors are believed to contribute to *impulsive buying* in *virtual goods* purchases, with two of the most prominent being *Fear of Missing Out* (FOMO) and *sales promotion*. FOMO encourages users to make immediate purchases because they fear missing opportunities to obtain exclusive items or falling behind other players (Flecha Ortiz et al., 2024), while *sales promotion* increases transaction attractiveness through discounts, bonuses, bundled packages, and time-limited offers (Park & Yi, 2023). Nevertheless, impulsive purchasing decisions do not necessarily emerge directly after users encounter these two stimuli. The emotional responses that arise during the consumption process may serve as a mechanism explaining how psychological impulses and marketing strategies develop into spontaneous purchasing decisions. Therefore, understanding the role of *positive emotion* is essential for providing a more comprehensive explanation of the formation of *impulsive buying*.

Research on *impulsive buying* in digital environments has extensively examined various determinants of consumer behavior. Research has shown that FOMO can

increase spontaneous purchasing tendencies by encouraging consumers to follow trends and maintain engagement within digital communities (Habib & Almamy, 2025). Other research has found that *sales promotion* is an effective strategy for increasing purchase decisions by strengthening consumers' perceptions of benefits and value (Hermiyenti & Wardi, 2019). Research has also indicated that emotional factors play an important role in explaining purchasing behavior, but the mechanism linking FOMO and *sales promotion* to *impulsive buying* through *positive emotion* remains relatively underexplored, highlighting the need for a more comprehensive model (Bin, 2023).

Based on this gap, this study aims to analyze the direct effects of *Fear of Missing Out* and *sales promotion* on Robux *impulsive buying* among Roblox users and to examine the role of *positive emotion* as a mediating variable. This study is important because it not only explains the relationships among the variables but also reveals the psychological mechanism linking social stimuli and marketing strategies to *virtual goods* purchasing behavior. Theoretically, this study is expected to extend research on digital consumer behavior by integrating consumer psychology and marketing perspectives within a single analytical model. Practically, the findings are expected to provide a basis for gaming platform developers and digital marketers to design promotional strategies that enhance user experiences while encouraging more effective and sustainable purchasing decisions.

Method

This study employed a quantitative approach to analyze the direct and indirect effects of *Fear of Missing Out* (FOMO) and *sales promotion* on Robux *impulsive buying* among Roblox users, with *positive emotion* serving as a mediating variable (Creswell & Poth, 2016). The respondents were Roblox users who had previously purchased Robux. A quantitative approach was selected because it enables the objective examination of causal relationships among variables through numerical data analysis based on previously formulated hypotheses. The relationships among the variables were established based on a digital consumer behavior framework, which explains that purchasing behavior is formed through interactions among psychological stimuli, marketing stimuli, and emotional responses before resulting in purchasing decisions. The data were analyzed using *path analysis* to identify the magnitude of the direct and indirect effects among the variables within an integrated research model, thereby providing a comprehensive representation of the relationships among FOMO, *sales promotion*, *positive emotion*, and *impulsive buying*.

The mediating role of *positive emotion* was examined using the *Sobel Test* to determine the significance of the indirect effect of the independent variables on the dependent variable through the mediating variable. This method estimates the magnitude of the *indirect effect* by multiplying the path coefficient between the independent variable and

the mediator by the path coefficient between the mediator and the dependent variable, thereby determining whether the resulting mediation effect is statistically significant. Sample size determination was based on the adequacy of the sample for multivariate analysis, with five to ten times the total number of research indicators. With 24 indicators, the ideal sample size ranged from 120 to 240 respondents. In addition, because the population of Roblox users was unknown and considered very large, sample determination also employed the Cochran formula for an infinite population with a 95% confidence level and an approximately 5% *margin of error*. Based on these two approaches, 251 respondents were considered sufficient to test the research model and produce representative estimates.

Results and Discussion

Formation of *positive emotion* in *virtual goods* purchases

Positive emotion is one of the psychological factors that plays an important role in shaping consumer behavior in digital environments, particularly in *virtual goods* purchases. Before analyzing the effects of *Fear of Missing Out* (FOMO) and *sales promotion* on the formation of *positive emotion*, this study first presents the characteristics of the respondents and evaluates the quality of the research instruments as a basis for model testing. The presentation of these two aspects aims to ensure that the data used adequately represent Roblox users' behavior while meeting the statistical assumptions required for regression analysis. Subsequently, model testing was conducted to identify the extent to which FOMO and *sales promotion* contribute to the formation of *positive emotion* as a mediating variable in *impulsive buying* behavior involving *virtual goods*.

Table 1. Respondent characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	91	36.3
	Female	160	63.7
Occupation	School student	47	18.7
	University student	125	49.8
	Employed	79	31.5
Total Robux expenditure	Rp0-Rp100,000	79	31.5
	Rp100,000-Rp500,000	95	37.9
	Rp500,000-Rp2,000,000	67	26.7
	>Rp2,000,000	10	3.9

Source: Authors' survey data processing.

The characteristics of the respondents provide an overview of the Roblox users examined in this study while strengthening the context for analyzing *virtual goods*

purchasing behavior. As shown in Table 1, the majority of respondents were female, accounting for 63.7%, while males accounted for 36.3%. In terms of primary occupation, university students constituted the largest group at 49.8%, followed by employed respondents at 31.5% and school students at 18.7%. Meanwhile, the largest proportion of Robux expenditure was in the Rp100,000–Rp500,000 range at 37.9%, followed by Rp0–Rp100,000 at 31.5%. This composition indicates that the majority of active Roblox users in the sample belonged to groups with experience conducting digital transactions repeatedly, making them relevant for explaining the formation of *positive emotion* in *virtual goods* purchasing activities.

The dominance of university students and users with moderate levels of expenditure indicates that Robux purchases have become part of routine digital consumption rather than merely occasional transactions. These characteristics also indicate that users have substantial exposure to various forms of promotion and social dynamics within the game, such as limited-time offers, item updates, and community activities. Such conditions may generate stronger emotional responses when users interact with the various marketing stimuli provided by the platform. Therefore, the characteristics of the respondents in this study are considered capable of representing consumers who are actively engaged in the *virtual goods* ecosystem, providing an adequate basis for examining the factors that shape *positive emotion* before *impulsive buying* behavior occurs.

Table 2. Research instrument quality

Variable	Cronbach's Alpha	Description
Positive Emotion	0.818	Reliable
Fear of Missing Out	0.833	Reliable
Sales Promotion	0.841	Reliable
Impulsive Buying	0.822	Reliable
Normality (Asymp. Sig.)	0.060	Normal

Source: Authors' survey data processing.

The quality of the research instruments was evaluated through reliability and normality testing to ensure that the data used met the requirements for statistical analysis. As presented in Table 2, all variables had Cronbach's Alpha values above 0.80, indicating a good level of internal consistency. In addition, the normality test produced an Asymp. Sig. value of 0.060, which is greater than the 0.05 significance level, indicating that the model residuals were normally distributed. These findings indicate that each research construct was measured consistently and met the basic assumptions of regression analysis. Therefore, the data obtained were considered suitable for examining the relationships among FOMO, *sales promotion*, *positive emotion*, and *impulsive buying* in accordance with the proposed research model.

Table 3. Regression results for the *positive emotion* model

Variable	β	t	Sig.
Fear of Missing Out	0.249	4.988	0.000
Sales Promotion	0.655	13.098	0.000
R ²	0.739	—	—

Source: Authors' survey data processing.

The regression results show that FOMO and *sales promotion* both had positive and significant effects on the formation of *positive emotion*. As shown in Table 3, *sales promotion* had a beta coefficient of 0.655, which was higher than the coefficient for FOMO at 0.249. Both variables also had significance levels below 0.001, indicating that all tested relationships were statistically significant. In addition, the coefficient of determination (R²) of 0.739 indicates that 73.9% of the variation in *positive emotion* could be explained by the two independent variables in the research model. These results demonstrate that the combination of marketing stimuli and psychological factors has a strong capacity to shape users' positive emotional responses when making *virtual goods* purchases.

These findings indicate that *sales promotion* was the most dominant factor in shaping *positive emotion* compared with FOMO. Various forms of promotion, such as discounts, purchase bonuses, and time-limited offers, can generate feelings of enjoyment, enthusiasm, and interest before users make a transaction. Meanwhile, FOMO continues to make a positive contribution through the psychological drive to follow trends, obtain exclusive items, or maintain engagement within the gaming community. The interaction between these two factors creates a positive emotional experience in response to the various stimuli encountered by users. Therefore, *positive emotion* can be viewed as an affective response formed through the combination of marketing strategies and psychological factors within the *virtual goods* purchasing ecosystem, while also providing the foundation for the subsequent analysis of *impulsive buying* in the next model.

Formation of *impulsive buying* in *virtual goods* purchases

After the first model demonstrated that *Fear of Missing Out* (FOMO) and *sales promotion* significantly affect *positive emotion*, the next stage was to analyze the formation of *impulsive buying* as the dependent variable in this study. The analysis was conducted to identify the direct effects of FOMO, *sales promotion*, and *positive emotion* on impulsive purchasing behavior among Roblox users while also evaluating the role of *positive emotion* as a mediating variable. Thus, the second model not only explains the strength of the relationships among the variables but also demonstrates how psychological stimuli and marketing strategies simultaneously contribute to *virtual goods* purchasing decisions. The regression analysis and mediation effect testing are presented in Tables

4 and 5 as the basis for the empirical discussion of *impulsive buying* behavior among Roblox users.

Table 4. Regression results for the *impulsive buying* model

Variable	β	t	Sig.
Fear of Missing Out	0.321	6.348	0.000
Sales Promotion	0.413	6.579	0.000
Positive Emotion	0.204	3.325	0.001
R ²	0.758	—	—

Source: Authors' survey data processing.

As shown in Table 4, all independent variables had positive and significant effects on *impulsive buying*. The coefficient of determination of 0.758 indicates that the research model explains 75.8% of the variation in impulsive purchasing behavior, while the remaining variation is attributable to factors outside the model. This finding indicates that the model has strong explanatory power in accounting for consumer behavior in *virtual goods* purchases. From a marketing perspective, Kotler and Keller (2016) explain that purchasing decisions result from the interaction between marketing stimuli and consumers' responses to the value offered. This perspective is reinforced by Donthu and Gilliland (1996), who argue that promotions can accelerate decision-making because consumers tend to focus more on perceived benefits than on an extended evaluation process. The present findings indicate that this mechanism also operates in digital transactions within the Roblox ecosystem.

The beta coefficient indicates that FOMO had a positive effect of 0.321 on *impulsive buying*. This finding indicates that the greater users' concern about missing trends, losing access to exclusive items, or failing to participate in community activities, the greater their tendency to make spontaneous purchases. This result supports the concept proposed by Przybylski et al. (2013), who explain FOMO as a psychological condition that motivates individuals to remain connected to experiences shared by others. In the Roblox context, this experience is manifested through ownership of *virtual goods* that are perceived as capable of enhancing players' identity or social status. Rook (1987) further explains that impulse purchases often emerge from sudden emotional urges without rational planning. Thus, the findings demonstrate that FOMO is one of the psychological triggers underlying spontaneous purchasing decisions in digital gaming environments.

Among all the variables examined, *sales promotion* had the strongest effect on *impulsive buying*, with a beta coefficient of 0.413. This finding indicates that various promotional forms, such as discounts, Robux bonuses, bundled packages, and time-limited offers, can increase users' tendency to complete transactions immediately. This result reinforces the view of Kotler and Keller (2016) that sales promotion is a marketing

instrument designed to generate short-term purchasing responses by providing incentives to consumers. This view is also consistent with Donthu and Gilliland (1996), who explain that the attractiveness of promotional offers can reduce rational deliberation, making purchasing decisions more strongly influenced by perceptions of immediate benefits. Notably, the present study shows that the effect of *sales promotion* is stronger than that of FOMO, indicating that marketing strategies make a more dominant contribution than psychological pressure in shaping *virtual goods* purchasing behavior.

Table 5. Mediation effect testing results

Mediation pathway	Result
FOMO → Positive Emotion → Impulsive Buying	Significant
Sales Promotion → Positive Emotion → Impulsive Buying	Significant

Source: Authors' survey data processing.

In addition to having direct effects on *impulsive buying*, FOMO and *sales promotion* were also found to influence this behavior through *positive emotion* as a mediating variable. This finding indicates that feelings of enjoyment, enthusiasm, and satisfaction arising during the purchasing process constitute an important mechanism that strengthens spontaneous purchasing decisions. This phenomenon is consistent with the model proposed by Mehrabian and Russell (1974), which explains that environmental stimuli generate emotional responses before ultimately producing particular behaviors. From a broader perspective, Lazarus (1991) argues that emotions emerge through individuals' appraisal of the stimuli they encounter. Thus, promotions and FOMO do not automatically produce purchasing behavior but first generate affective experiences. Beatty and Ferrell (1998) further explain that *positive emotion* is an important antecedent of *impulsive buying*, while Verplanken and Herabadi (2001) add that individuals with stronger impulsive tendencies are more susceptible to positive emotional states when making consumption decisions. The present findings strengthen the dialogue among these perspectives by demonstrating that *positive emotion* is not merely a consequence of purchasing activity but also a mechanism linking psychological factors and marketing strategies to impulsive purchasing behavior.

Overall, the findings demonstrate that the formation of *impulsive buying* among Roblox users involves an interaction between marketing stimuli, psychological factors, and consumers' emotional responses. The dominant effect of *sales promotion* indicates that marketing strategies remain the most effective instrument for encouraging *virtual goods* purchases, while FOMO reinforces users' internal drive to remain connected to the dynamics of the gaming community. The mediating role of *positive emotion* further confirms that purchasing decisions are not determined solely by economic considerations but are also shaped by the emotional experiences users encounter.

during transactions. This finding extends the perspective of Lemon and Verhoef (2016), who argue that customer experience develops through a sequence of interactions across various *customer touchpoints*, including promotions, digital environments, and consumption experiences.

The role of *positive emotion* in mediating the effects of *fear of missing out* and *sales promotion* on *impulsive buying*

The phenomenon of *impulsive buying* of *virtual goods* is increasingly difficult to explain through psychological or marketing perspectives alone. Some studies position individual characteristics as dominant factors driving spontaneous purchasing decisions, whereas others emphasize the effectiveness of promotional strategies as the primary determinant of consumer behavior. This difference indicates that the mechanism underlying *impulsive buying* in digital environments remains open to discussion, particularly on gaming platforms that integrate social interaction, emotional experiences, and transactional activities within a single ecosystem. From the perspective of the *Stimulus–Organism–Response* (SOR) framework, Jacoby (2002) explains that behavioral responses do not emerge directly after consumers receive a stimulus but rather through psychological processes occurring within the individual. This view is reinforced by Eroglu et al. (2001), who argue that consumer experiences in digital environments are shaped by interactions among environmental stimuli, affective states, and users' behavioral responses. This framework provides a basis for understanding that the relationship between *Fear of Missing Out*, *sales promotion*, and *impulsive buying* in this study operates through *positive emotion* as the psychological mechanism linking the two stimuli.

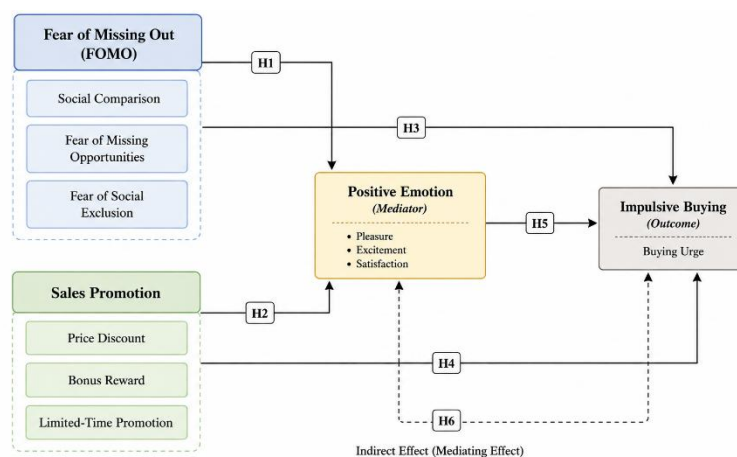


Figure 1. The mediating role of *positive emotion* in the relationships between *fear of missing out*, *sales promotion*, and *impulsive buying*

Source: Developed by the authors (2025).

Figure 1 presents a conceptual synthesis of the mechanism underlying *impulsive buying* based on the integration of the study's empirical findings and developments in digital consumer behavior theory. Unlike the conceptual model presented in the previous

section, which serves to illustrate the relationships among the research variables, this figure positions *positive emotion* at the center of the mechanism linking psychological and marketing stimuli to impulsive purchasing decisions. The structure begins with two sources of stimuli: *Fear of Missing Out*, representing psychological pressure, and *sales promotion*, representing marketing stimuli. These two stimuli subsequently operate through *positive emotion* before producing *impulsive buying*. This mechanism follows the *Stimulus–Organism–Response* framework proposed by Jacoby (2002), meaning that Figure 1 not only illustrates the direction of the relationships among the variables but also explains the psychological process underlying impulsive purchasing behavior among *virtual goods* users. Thus, the figure serves as a synthesis framework that clarifies the conceptual contribution of this study to the development of digital consumer behavior research.

The first mechanism in Figure 1 indicates that *Fear of Missing Out* does not merely encourage individuals to acquire *virtual goods* immediately but also generates positive emotional experiences before a purchasing decision is made. This explanation is consistent with research by Marder et al. (2019), which shows that individuals' tendency to compare themselves with other players increases emotional attachment to digital items perceived as valuable. Within *Social Comparison Theory*, Festinger (1954) explains that individuals naturally evaluate themselves by comparing themselves with others, making ownership of certain attributes a symbol of social acceptance or status within a group. However, this process does not end with the fear of being left behind. Deci and Ryan (2000) explain that when psychological needs such as competence, autonomy, and relatedness are fulfilled, individuals experience increased intrinsic motivation that generates positive emotional experiences. This study extends the findings of Morsi et al. (2025) by demonstrating that FOMO develops into *positive emotion*, meaning that purchasing decisions are driven not only by the fear of missing an opportunity but also by the desire to obtain enjoyable experiences, social recognition, and psychological satisfaction within the digital gaming environment.

The next pathway in Figure 1 demonstrates that *sales promotion* functions not only as an instrument for increasing transactions but also as a stimulus that shapes consumers' emotional experiences before purchasing decisions are made. Research by Niu et al. (2024) shows that promotions can increase purchase intention through higher perceptions of benefits, whereas this study demonstrates that these benefits are first translated into *positive emotion*. Blattberg and Neslin (1990) argue that promotional strategies are designed to alter consumer responses by providing incentives that increase the attractiveness of an offer in the short term. This mechanism is reinforced by Zeithaml (1988), who explains that consumers evaluate the balance between benefits and sacrifices before forming perceptions of product value. Sheth et al. (1991) further emphasize that consumption decisions are influenced not only by functional value but also by the emotional and social value perceived by consumers. This study

demonstrates that discounts, Robux bonuses, and limited-time offers do more than increase perceived value; they also generate feelings of enjoyment, enthusiasm, and satisfaction that ultimately increase the tendency toward *impulsive buying*.

The mediating role of *positive emotion* indicates that *impulsive buying* of *virtual goods* is not formed merely because psychological or marketing stimuli are present, but because these stimuli are first internalized as pleasurable emotional experiences. Guo et al. (2020) explain that positive emotions play an important role in accelerating purchasing decisions, but their study does not explain why this mechanism may become more pronounced in digital environments. From the perspective of hedonic consumption, Hirschman and Holbrook (1982) explain that consumption behavior is often driven by hedonic orientations in which pleasure, fantasy, and affective experiences become important reasons for consuming a product. This explanation is reinforced by Csikszentmihalyi's (1990) concept of *flow*, which describes a state in which individuals become fully immersed in an activity, intensifying their emotional involvement. In the context of digital gaming, Hamari and Lehdonvirta (2010) emphasize that the value of *virtual goods* does not lie in their physical utility but in the gaming experiences, status symbols, and social interactions associated with them. This study extends the findings of Pangestu et al. (2025) by demonstrating that *positive emotion* functions as a key mechanism linking FOMO and *sales promotion* to *impulsive buying* among Roblox users, indicating that purchasing decisions are driven more by the experience generated by consumption than by the characteristics of the product itself.

An evaluation of Figure 1 indicates that the mediation mechanism developed in this study offers a broader perspective on digital consumer behavior, particularly regarding *virtual goods* purchases. Whereas Pereira et al. (2023) primarily emphasize the direct relationship between stimuli and purchasing behavior, this study demonstrates that the effectiveness of FOMO and *sales promotion* depends substantially on their ability to generate *positive emotion*. This perspective is consistent with the concept of the *experience economy* proposed by Pine and Gilmore (1998), who argue that the value of a product is increasingly determined by the experience consumers obtain during the consumption process. Such experiences can subsequently develop into forms of consumer engagement, as explained by Brodie et al. (2011), through ongoing emotional, cognitive, and behavioral interactions. Vivek et al. (2012) further extend this perspective by emphasizing that positive experiences generated through interactions with a platform can strengthen long-term relationships between consumers and service providers. Therefore, Figure 1 functions not only as a synthesis of the study's empirical findings but also as a conceptual framework explaining how psychological and marketing stimuli interact through *positive emotion* to form *impulsive buying*. This model contributes theoretically to the development of digital consumer behavior research while also providing practical implications for gaming platforms in

designing promotional strategies that focus not only on increasing transactions but also on creating sustainable emotional experiences.

Conclusion

This study demonstrates that *Fear of Missing Out* and *sales promotion* are two primary stimuli that contribute to the formation of *impulsive buying* in *virtual goods* purchases on the Roblox platform, both directly and through *positive emotion* as a mediating mechanism. This relationship indicates that impulsive purchasing decisions are not driven solely by psychological pressure or promotional strategies in isolation but by an emotional process that connects these two factors. *Positive emotion* functions as a mechanism that transforms perceptions of limited opportunities, social pressure, and promotional attractiveness into spontaneous purchasing decisions. Accordingly, *impulsive buying* in the context of digital consumption is better understood as the result of an interaction among psychological stimuli, marketing stimuli, and emotional experiences formed throughout the *virtual goods* consumption process.

The findings provide a theoretical contribution by extending research on digital consumer behavior through emphasizing the role of *positive emotion* as a mediating mechanism that explains the relationship between *Fear of Missing Out*, *sales promotion*, and *impulsive buying* in *virtual goods* purchases. Practically, the findings can serve as a basis for gaming platform developers and digital marketers to design promotional strategies that not only increase transactions but also foster positive emotional experiences among users. Nevertheless, this study has limitations because it employed a cross-sectional design, focused specifically on Roblox users, and involved only four main constructs, which may not fully capture the complexity of digital consumer behavior. Future research should therefore employ longitudinal or experimental designs to identify behavioral changes over time, extend the research context to other digital gaming platforms, and develop the model by incorporating variables such as *customer engagement*, *perceived enjoyment*, *self-control*, or *game immersion* to obtain a more comprehensive understanding of the mechanisms underlying *impulsive buying* in digital ecosystems.

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