

MARKETING | RESEARCH ARTICLE

Mirror, Likes, and Loot: The Interplay of Narcissism, FOMO, and Digital Marketing on Compulsive Buying Behavior

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Abstract

Background: The growth of fashion e-commerce has intensified the use of affiliate marketing, user-generated content, and gamification to improve engagement. These strategies influence consumer psychology, particularly narcissism, increasing susceptibility to Fear of Missing Out (FOMO) and compulsive shopping.

Purpose: This study aimed to investigate the effects of digital strategies on narcissism and their role in driving FOMO as well as compulsive fashion purchases in e-commerce.

Method: This study conducted a quantitative online survey of 458 e-commerce customers selected via purposive sampling, and analyzed the data using structural equation modeling (SEM) in SmartPLS.

Findings: The results showed that affiliate marketing, user-generated content (UGC), and gamification significantly impacted narcissism. Furthermore, narcissism could trigger FOMO and compulsive buying behavior, and FOMO significantly affected compulsive buying. Both narcissism and FOMO played significant roles as positive mediators and moderators in the relationship between exogenous variables and compulsive buying.

Conclusions: This study concluded that affiliate marketing, UGC, and gamification significantly increased narcissism, triggering FOMO and compulsive fashion buying in Indonesian e-commerce. The results identified narcissism as a key psychological link between digital marketing strategies and excessive consumption, underscoring the need for ethical marketing practices and stronger consumer self-control.

Research implication: This study theoretically showed that affiliate marketing, UGC, and gamification triggered narcissism, leading to FOMO and compulsive buying. Practically, it emphasized the need for the ethical use of these strategies to foster sustainable consumer relationships.

Keywords: affiliate marketing, compulsive buying, Fear of Missing Out (FOMO), gamification, narcissism, user-generated content (UGC)

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PUBLIC INTEREST STATEMENT

E-commerce fashion is growing rapidly, and digital strategies such as affiliate marketing, UGC, and gamification are increasingly shaping how people shop online. This study on Indonesian consumers showed the strategies did more than boost engagement, as they also produced psychological effects. The strategies can increase narcissism, triggering FOMO and leading to compulsive shopping. Therefore, digital marketing can unintentionally push consumers toward overbuying. The results emphasized that while digital innovation was powerful, e-commerce platforms should adopt it responsibly, balancing customer engagement with ethical practices that promote healthier and more sustainable shopping habits.

This study faced several challenges. First, the cross-sectional design limited the ability to track behavioral changes over time, making it difficult to capture the evolving nature of digital engagement. Second, since the data were collected from purposively sampled e-commerce consumers, the results might not be fully generalizable across all demographics and platforms. Finally, rapid changes in digital marketing trends, such as the rise of AI-driven personalization, present challenges in ensuring that the results remain relevant for future e-commerce practices.



1. Introduction

The rapid expansion of fashion e-commerce has prompted firms to adopt digital engagement strategies, such as affiliate marketing, User-Generated Content (UGC), and gamification, to stimulate consumer interaction and purchasing behavior. Transcending their functional role in increasing sales, these strategies increasingly shape consumer psychology by reinforcing self-presentation, social comparison, and the pursuit of exclusivity, particularly among individuals with narcissistic tendencies. Narcissism heightens sensitivity to trends and social validation, making consumers more vulnerable to Fear of Missing Out (FOMO), consequently accelerating compulsive buying behavior in online shopping environments (Anggarawati et al., 2023; Crusius et al., 2022).

Compulsive buying has become a growing concern due to its multidimensional consequences. Although it can provide short-term emotional relief and stress management (Williams, 2012), excessive consumption contributes to serious environmental and social challenges, including pollution, biodiversity loss, and climate change (Hu et al., 2020; Net Impact, 2024). The fashion industry is a major contributor to these issues, driven by fast-fashion cycles, microtrends amplified by influencers, and urgency-based promotions such as flash sales and limited-time offers (Hagerborn et al., 2024; Lau, 2024). These dynamics normalize overconsumption through social media practices such as fashion haul culture, encouraging frequent purchases and premature disposal of clothing (Net Impact, 2024).

Understanding compulsive buying behavior in fashion e-commerce is therefore essential for identifying the psychological and social mechanisms that drive impulse purchases while addressing their broader sustainability implications (Panasea, 2024; Chauhan et al., 2023). From a theoretical perspective, this phenomenon can be comprehensively explained by integrating the Theory of Planned Behavior (TPB), Social Comparison Theory, and Consumer Culture Theory (CCT). TPB explains how attitudes, subjective norms, and perceived behavioral control shape purchase intentions in response to online marketing stimuli (Cheng, 2019). Social Comparison Theory emphasizes how social media intensifies self-evaluation and FOMO, particularly among narcissistic consumers (Crusius et al., 2022). Meanwhile, CCT emphasizes that fashion consumption reflects identity construction, status signaling, and symbolic meaning rather than purely functional needs (Hungara & Nobre, 2021).

Previous studies have identified numerous drivers of compulsive buying, including sales promotions, Buy-Now-Pay-Later schemes, influencer marketing, live streaming, digital payments, knowledge, and platform convenience across various country contexts (Ah Fook & McNeill, 2020; Al Mutanafisa & Retnaningsih, 2021; Lee & Wan, 2023; Doan et al., 2024; Hagerborn et al., 2024). However, these studies largely emphasize transactional and technological factors, while the psychological mechanisms linking digital engagement strategies to compulsive behavior remain underexplored, particularly in emerging markets such as Indonesia.

Similarly, some studies have examined antecedents of narcissism and FOMO in e-commerce separately, emphasizing factors such as materialism, website design, social norms, influencer content, and promotional cues (Mulyono & Rusdarti, 2020; Yoo et al., 2023; Nasr et al., 2023; Kao & Huang, 2024). However, limited empirical work has integrated affiliate marketing, UGC, and gamification as coordinated digital triggers that simultaneously activate narcissism and FOMO, typically driving compulsive buying in fashion e-commerce.

Addressing this gap, the current study offered novelty by integrating digital marketing strategies (affiliate marketing, UGC, and gamification) with psychological mechanisms (narcissism and FOMO) within a unified conceptual framework grounded in TPB, Social Comparison Theory, and CCT. It also aimed to analyze the influence of affiliate marketing, UGC, and gamification on narcissism, and to examine the mediating role of narcissism and the moderating role of FOMO in shaping compulsive buying behavior in fashion e-commerce. Consequently, this study contributed to the consumer behavior literature while providing insights for more responsible and sustainable digital marketing practices.

2. Literature Review

2.1 Compulsive Buying

Compulsive buying is characterized by repetitive, emotionally driven purchasing beyond actual needs, often leading to overconsumption and stock shortages (Bentall et al., 2021). In e-commerce contexts, this behaviour is intensified by psychological drivers such as materialism, hedonism, FOMO, and social comparison, as well as by live streaming and short-video commerce leveraging social proof and scarcity cues within the S-O-R framework (Ismail & Siddiqui, 2025). Transcending financial and psychological harm, compulsive buying also contributes to environmental problems such as food waste, despite not being formally classified as a distinct mental disorder by the APA (Kayser & Simpson, 2024).

2.2 Affiliate marketing

Affiliate marketing is a performance-based digital marketing strategy in which merchants collaborate with affiliates who promote products through online channels and earn commissions only when predefined outcomes, such as clicks or purchases, are achieved (Syrdal et al., 2023). The effectiveness of affiliate marketing lies in the credibility and authenticity of affiliates, which strengthen customer-brand relationships, improve engagement, and foster emotional attachment, satisfaction, and repeat purchasing (Merdiaty & Aldrin, 2022). Conceptually, affiliate marketing operates through interactions among merchants, affiliates, and customers, and is characterized by key dimensions such as self-promotion, social validation, status incentives, and public exposure, which collectively drive consumer participation and sales performance (Esperanza et al., 2024).

2.3 User-Generated Content (UGC)

UGC refers to original content published online by users, typically created by non-professionals using simple production tools, and includes activities such as creating, sharing, commenting, and editing digital content (Banerjee et al., 2018). In e-commerce, UGC encompasses reviews, ratings, photos, videos, comments, and live interactions, which improve social proof, community engagement, and psychological ownership among consumers (Zhang & Hu, 2024; Alamyar, 2025). The presence, quality, and authenticity of UGC significantly influence purchase intentions, sales performance, and brand reputation, with effects shaped by product category, customer characteristics, and the emotional tone of content (Kaur, 2024). Key dimensions of UGC include authenticity, engagement, and visual appeal, which collectively strengthen trust, loyalty, and decision-making in digital commerce (Wagan & Sidra, 2024; Zhang & Luo, 2023).

2.4 Gamification

Gamification involves integrating game design principles into non-game platforms to motivate users, improve engagement, and influence behavior toward specific objectives (Hsu & Chen, 2018). In e-commerce, gamification is widely used to encourage repeat purchases, sustain customer loyalty, and increase platform engagement by satisfying users' motivational needs (Aparicio et al., 2021). Its effectiveness is further strengthened when combined with high-quality, consistent UGC, which improves trust and purchase intentions through authentic, emotionally engaging interactions, particularly in live commerce environments (Kaur, 2024; Alamyar, 2025; Zhang & Hu, 2024).

2.5 Fear of Missing Out (FOMO)

FOMO is a psychological state rooted in Self-Determination Theory, arising from unmet needs for social relatedness and intrinsic motivation, and is characterized by anxiety that others are experiencing rewarding events without the individual's participation (Gupta & Sharma, 2021). FOMO drives individuals to remain constantly connected to social trends, particularly through social media, to avoid feelings of exclusion (Brailovskaia & Margraf, 2024). In consumer behavior contexts, FOMO serves as a powerful trigger of impulsive and compulsive buying, particularly under urgency-based marketing tactics such as flash sales, limited-time offers, viral products, and live-streaming formats that emphasize social validation (Huang & Suo, 2021; Zhang & Rosli, 2025). Younger consumers, particularly Generation Z, are specifically susceptible to FOMO-driven e-commerce marketing strategies (Mardhiana, 2024).

2.6 Narcissism

Narcissism is a personality orientation centered on maintaining and improving self-image, driven by the pursuit of attention, admiration, and social status (Gubik & Vörös, 2023). It is characterized by grandiosity, a strong need for recognition, and limited empathy toward others, and is reflected in dimensions such as attention seeking, admiration, prestige, and the desire to be the center of attention (Poushneh et al., 2024). In digital contexts, e-commerce environments may intensify narcissistic tendencies by encouraging individualistic self-presentation and social comparison, particularly through features such as live streaming, promotions, and UGC that amplify visibility and social validation (Veny et al., 2024).

2.7 The Effect of Affiliate Marketing on Narcissism

Narcissistic traits such as the need for admiration, materialism, and intensive social media engagement make individuals both effective affiliate marketers and highly receptive consumers in digital commerce environments (Cai et al., 2022). Affiliate marketing features on social media and e-commerce platforms encourage self-promotion, personal branding, and public visibility, thereby reinforcing attention-seeking and validation-oriented behaviors associated with narcissism (Fegan & Bland, 2021). The commission-based structure and performance recognition mechanisms, such as leaderboards, badges, and public acknowledgment, further strengthen narcissistic tendencies by offering status incentives and social validation (Esperanza et al., 2024). Empirical evidence from Canada and China confirmed that these affiliate marketing features significantly amplified narcissistic behaviors by fulfilling individuals' needs for admiration, recognition, and prestige (Liu et al., 2025).

H1: Affiliate marketing has a significant effect on narcissism

2.8 The Effect of User-Generated Content (UGC) on Narcissism

UGC features encourage narcissistic behavior by providing social rewards such as likes, comments, ratings, and visibility, which motivate individuals to engage in continuous self-promotion and achievement sharing (Paridar et al., 2023). These reward mechanisms offer validation, status, and social recognition, aligning closely with narcissistic needs for admiration and perceived superiority (Colaljo et al., 2024). In e-commerce contexts, highly visible UGC, such as popular reviews, testimonials, and visually engaging content, serves as both a decision-making reference for others and a trigger for narcissistic users to demand further recognition and prestige (Alamyar, 2025). Empirical evidence from the United Kingdom and Iceland confirms that UGC and social media engagement significantly reinforce narcissistic traits by facilitating self-image construction, attention-seeking, and social validation, particularly in luxury and social commerce settings (Ozuem et al., 2024; Fegan & Bland, 2021).

H2: UGC has a significant effect on narcissism

2.9 The Effect of Gamification on Narcissism

Gamification systems reinforce narcissistic behavior by offering public recognition, visible achievements, and status-based rewards that satisfy the need for admiration and external validation (Reed et al., 2024). Features such as leaderboards, badges, and public reward shows promote competitiveness, self-enhancement, and attention-seeking tendencies, making them particularly attractive to individuals with high levels of narcissism (Gandrita et al., 2024). In e-commerce, gamification elements that enable self-expression, such as avatar personalization, achievement sharing, and social competition, further strengthen self-promotion and validation-seeking behaviors (Jia & Yu, 2024). Empirical evidence from platforms such as Shopee and Alflagift confirms that gamified rewards, loyalty points, and ranking systems improve narcissistic tendencies and brand engagement by encouraging users to pursue higher status and comparative self-pride within digital communities (Stratopoulos & Ye, 2024).

H3: Gamification has a significant effect on narcissism

2.10 The Effect of Narcissism on Fear of Missing Out (FOMO)

Narcissism positively influences FOMO by heightening sensitivity to social comparison, exclusion, and status signals, particularly in digital environments (Barberis et al., 2023). Empirical studies across China, Pakistan, Malaysia, Turkey, Spain, and Indonesia consistently show that narcissistic traits are associated with higher FOMO, often mediating problematic social media use and compulsive behaviors among adolescents and young adults (Anjum, 2024; Tan & Fauzi, 2024). In e-commerce contexts, elevated FOMO drives narcissistic consumers to engage in flash sales, exclusive deals, and popularity-based promotions to avoid perceived inferiority and maintain social status (Servidio et al., 2021). However, this amplified FOMO also intensifies anxiety and maladaptive outcomes, including compulsive buying, excessive platform use, and reduced well-being, as evidenced in Turkey, Jakarta, and China (Mert & Tengilimoğlu, 2023; Wu-Ouyang, 2023).

H4: Narcissism has a significant effect on FOMO

2.11 The Effect of Narcissism on Compulsive Buying

Empirical evidence consistently shows that narcissism has a positive and significant effect on compulsive buying behavior, as individuals prioritize validation, self-esteem enhancement, and social status through consumption (Du, 2024). In digital contexts, e-commerce and social media amplify narcissistic tendencies by promoting aspirational lifestyles, consequently increasing compulsive buying aimed at standing out or gaining social approval, as observed in Indonesia and India (Rastogi & Chandra Kumari, 2024). Similarly, in China, narcissistic consumers engage in excessive purchasing to project an ideal self-image and achieve social recognition, reflecting culturally shaped expressions of superiority and entitlement (Lim et al., 2021).

H5: Narcissism has a significant effect on compulsive buying

2.12 The Effect of Fear of Missing Out (FOMO) on Compulsive Buying

Previous studies have shown that FOMO significantly and positively drives compulsive buying by creating urgency and social pressure in social media-based and digital marketplace environments (Sagotra & Panwar, 2025). However, mixed results remain, as financial literacy may intensify rather than mitigate FOMO's effects among adolescents in Jakarta, while gender-specific dynamics, such as cosmetic purchasing among Muslim women, remain underexplored (Putri et al., 2024). Existing studies have also largely concentrated on TikTok and live-streaming platforms and urban contexts in Indonesia and China, limiting cross-platform and geographical generalizability (Kao & Huang, 2024; Sijabat, 2024). Generally, higher FOMO levels increase the tendency of compulsive buying as individuals demand short-term social satisfaction.

H6: FOMO has a significant effect on compulsive buying

2.13 The Effect of Affiliate Marketing on Compulsive Buying Mediated by Narcissism

Previous studies have shown that social media use mediates the relationship between narcissism and compulsive buying by amplifying narcissistic tendencies and increasing exposure to impulsive purchasing opportunities, particularly among adolescents in India (Dhewi et al., 2024). Cross-country evidence suggests contextual differences: in Turkey, narcissism moderates the relationship between social exclusion and FOMO, while in Denmark it moderates the relationship between FOMO and compulsive buying, showing that narcissism strengthens but does not directly mediate compulsive buying in e-commerce settings (Mert & Tengilimoğlu, 2023). However, other studies have shown that narcissism can indirectly drive compulsive buying through heightened needs for validation and status, leading individuals to engage in self-enhancing consumption behaviors (Chen et al., 2024).

H7: Narcissism has a significant effect in mediating the effect of affiliate marketing on compulsive buying

2.14 The Effect of User-Generated Content (UGC) on Compulsive Buying Mediated by Narcissism

Narcissistic behaviour mediates the effects of emotional satisfaction, materialism, and exclusivity-oriented marketing on purchasing decisions. Evidence from Indonesia shows that emotional gratification and the desire to impress others strengthen compulsive buying among narcissistic consumers (Chen et al., 2024). Similarly, narcissism mediates the relationship between materialism and online or conspicuous consumption in Thailand and Indonesia, and also influences eco-friendly purchasing through materialism and green conspicuousness in Korea (Somtawinpongsai et al., 2022; Lee, 2024).

H8: Narcissism has a significant effect in mediating the effect of UGC on compulsive buying

2.15 The Effect of Gamification on Compulsive Buying Mediated by Narcissism

Studies have shown that social media amplifies the effects of narcissism and envy on conspicuous consumption behaviors in the United States (Reed et al., 2024). Narcissism serves as a significant mediator in impulsive buying in Turkey, where narcissistic individuals frequently demand social validation through impulsive purchases (Karahana, 2024). Among millennials, positive emotions play a crucial role in triggering spontaneous purchasing decisions that reinforce narcissistic behaviors (Ni'mah & Hasan, 2024). In China, online shopping experiences and marketing strategies further strengthen the mediating effect of narcissism, making narcissistic individuals more vulnerable to impulsive buying (Xu & Chen, 2024).

H9: Narcissism has a significant effect in mediating the effect of gamification on compulsive buying.

2.16 The Effect of Narcissism on Compulsive Buying Moderated by FOMO

FOMO significantly strengthens compulsive buying by heightening urgency, social anxiety, and sensitivity to exclusivity cues in digital environments (Charandas & Tiwari, 2022). Empirical evidence from Indonesia, China, and Germany shows that FOMO intensifies impulsive and excessive purchasing in response to social media exposure, influencer marketing, and limited-time offers (Koren, 2024). Moreover, FOMO moderates consumer responses to social exclusion and e-commerce promotions, encourages conspicuous consumption, and mediates impulsive fashion purchases driven by peer pressure and online visibility (Mert & Tengilimoğlu, 2023; Oktavia, 2024).

H10: FOMO has a significant effect in moderating the effect of narcissism on compulsive buying.

3. Conceptual Framework

This study proposed an integrated model linking affiliate marketing, UGC, and gamification to compulsive buying through narcissism, with FOMO as a moderator, in Indonesian fashion e-commerce, contributing both theoretically and practically. Based on Figure 1, the hypotheses in this study are formulated as follows:

- H1: Affiliate marketing has a significant effect on narcissism
- H2: UGC has a significant effect on narcissism
- H3: Gamification has a significant effect on narcissism
- H4: Narcissism has a significant effect on FOMO
- H5: Narcissism has a significant effect on compulsive buying

- H6: FOMO has a significant effect on compulsive buying
- H7: Narcissism has a significant effect in mediating the effect of affiliate marketing on compulsive buying
- H8: Narcissism has a significant effect in mediating the effect of UGC on compulsive buying
- H9: Narcissism has a significant effect in mediating the effect of gamification on compulsive buying.
- H10: FOMO has a significant effect in moderating the effect of narcissism on compulsive buying

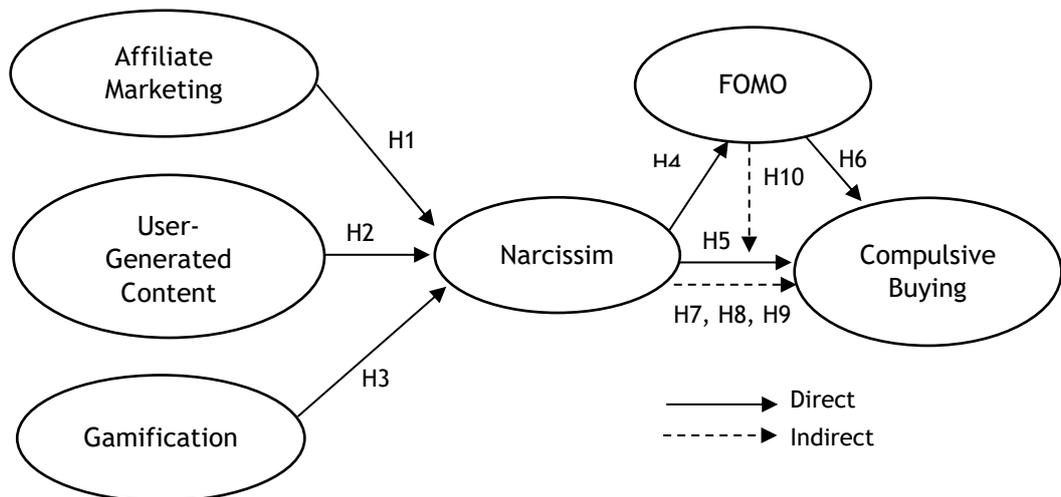


Figure 1. Conceptual model of the influence of affiliate marketing, UGC, and gamification on narcissism and its impact on compulsive buying in FOMO moderation in e-commerce

4. Methods

4.1 Research Design

This study used a quantitative online survey method distributed through popular social media platforms to e-commerce customers in Indonesia who have purchased fashion products.

4.2 Sampling

A purposive sampling technique was used to select respondents based on specific criteria, ensuring that participants were customers who had purchased fashion items on Indonesian e-commerce platforms such as Shopee, Tokopedia, Lazada, and Zalora. Screening questions were used to ensure that only respondents who had engaged with affiliate marketing, UGC, and gamification, and had shared content on e-commerce platforms, proceeded. This purposive sampling method targeted relevant participants, thereby improving the validity of the results (Cantone & Maselli, 2022). Of 604 respondents, 458 valid participants who purchased fashion products on Indonesian e-commerce platforms and reported excessive buying were included; the others were excluded. This sample met the minimum requirements for PLS-SEM, which recommends a 1:10 statistical power ratio (Hair & Alamer, 2022), and exceeded the minimum of 190 participants for 12-item constructs. G*Power analysis further confirmed adequacy, requiring at least 107 participants for multiple regression with fixed effects, $f^2 = 0.15$, $\alpha = 0.05$, and 95% power (Barta et al., 2023). Additional robustness was ensured by following the recommendation to add 100 extra

participants. Measurement and structural models were evaluated, and Harman's single-factor test showed that common method bias was not a concern, with the first factor explaining 38.36% of the variance (Podsakoff et al., 2024).

4.3 Measurement

This study measured six key constructs using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree): affiliate marketing including self-promotion, social validation, status incentives, public exposure (Esperanza et al., 2024); UGC including content/visual quality, emotional appeal, community recognition, social validation, self-credibility, self-expression (Zhang & Hu, 2024); gamification including achievement, status recognition, self-expression, social influence/interaction, enjoyment, perceived engagement (Colaljo et al., 2024; Reed et al., 2024); narcissism including grandiosity, exhibitionism, desire to stand out, feelings of superiority (Poushneh et al., 2024); compulsive buying, including lack of control, spontaneity, unplanned purchases, guilt (Ah Fook & McNeill, 2020), and FOMO, including anxiety about missing out, social comparison, fear of being left out, envy of peers' purchases (Hodkinson, 2019).

4.4 Data Collection

Data were collected through an online survey using Google Forms from August to December 2024, distributed on Instagram, Facebook, X (Twitter), and WhatsApp. A pilot study with 30 participants ensured the instrument's validity and reliability. Two screening questions, namely (1) whether participants had purchased products on e-commerce platforms, and (2) whether they had ever regretted a purchase, were used to select appropriate respondents. Only those answering "yes" to the first question continued with the survey.

4.5 Data Analysis

Data were analyzed using PLS-SEM to assess both the measurement and structural models, testing validity, reliability, and causal relationships between latent variables. Thresholds included CR and Cronbach's alpha >0.7, factor loadings >0.7, AVE >0.5, HTMT <0.85, $t > 1.96$ for significance, and $R^2 > 0.25$, confirming acceptable explanatory power (Henseler et al., 2015; Hair & Alamer, 2022).

5. Findings

5.1 Respondents Characteristics

Most respondents (90%) shopped on Shopee, mainly using mobile banking (46%) and cash-on-delivery (COD) (42%). Furthermore, the majority were well-educated, employed in the private or public sector, and aged 29-34 or 41-46, confirming that fashion e-commerce in Indonesia was driven by educated consumers who valued affordability, fast delivery, and trends (Table 1).

Table 1. Respondent characteristics

Classification	n	%
Gender		
Female	275	61
Male	183	39
Age	56	12
17-22		
23-28	93	20
29-34	102	22
35-40	85	19
41-46	101	22
47-52	9	2
53-58	6	1
≥59	6	1
Job type		
University student	104	23
Government employees	148	32
Private sector employees	154	34
Self-employment	52	11
Formal education level		
High School	54	12
Bachelor's degree	303	66
Magister	86	9
Doctoral	15	3
The name of the e-commerce platform that is often used for online shopping		
Lazada	3	1
Tokopedia	39	9
Shopee	414	90
Zalora	2	0
The choice of payment method that is always used		
Cash on Delivery	192	42
e-Wallet	44	10
Mobile Banking	210	46
Credit card	12	3

5.2 Measurement Model

The measurement model was valid and reliable, where all factor loadings > 0.7, AVE > 0.5, and CR & Cronbach's alpha > 0.7, confirming strong construct validity and internal consistency (Table 2).

Table 2. Indicator loadings factor, composite reliability, average variance extracted

Construct Variable	Dimension	LF	CR	AVE
Affiliate Marketing	AM1. I feel proud when others purchase products through my affiliate link.	0.805		
	AM2. I feel satisfied when my affiliate posts receive many likes, comments, or shares	0.889		
	AM3. I am interested in affiliate programs that offer not only financial benefits but also opportunities to enhance social status.	0.927	0.926	0.759
	AM4. I am interested when e-commerce platforms showcase me as a top affiliate or influential customer.	0.859		

Table 2. Indicator loadings factor, composite reliability, average variance extracted (Continue)

Construct Variable	Dimension	LF	CR	AVE
UGC	UGC1. The UGC feature in e-commerce makes it easy for me to upload high-quality photos and videos.	0.855		
	UGC2. I enjoy sharing my experiences on UGC platforms for e-commerce.	0.828		
	UGC3. I feel proud when my reviews or content are featured on the homepage or social media of the e-commerce platform.	0.911	0.926	0.738
	UGC4. I feel satisfied when my content on e-commerce receives likes, comments, or positive responses	0.840		
Gamification	GMI1. I am motivated to use gamification features because I want to earn points, levels, or badges.	0.858		
	GMI2. I am driven to continue using the e-commerce platform to maintain my status or level.	0.712		
	GMI3. I feel free to express myself through the avatar, badges, or profile I build within the e-commerce platform.	0.901	0.916	0.691
	GMI4. I am motivated to shop more frequently due to the influence of friends or communities actively participating in gamification.	0.883		
	GMI5. I feel happy when I successfully complete challenges or receive rewards from gamification features.	0.886		
FOMO	Fm1. I often feel anxious when I miss promotions or discounts on e-commerce platforms.	0.913		
	Fm2. I want to own trending products so I won't fall behind others.	0.906		
	Fm3. I constantly check notifications and social media to stay updated on e-commerce deals.	0.907	0.938	0.791
	Fm4. I am driven to buy something after seeing that my friends have already purchased it.	0.829		
Narcissism	Nc1. I often feel that I deserve to be the centre of attention in e-commerce or social media communities.	0.765		
	Nc2. I frequently showcase my lifestyle through my online shopping activities.	0.913	0.910	0.718
	Nc3. I use e-commerce features such as photo reviews or UGC to present myself.	0.827		
	Nc4. I feel proud when I own products that others have not yet acquired.	0.876		
Compulsive Buying	CB1. I often find it difficult to control my desire to shop on e-commerce platforms.	0.824		
	CB2. I feel that my purchases often happen spontaneously and uncontrollably.	0.736		
	CB3. I like to buy items just because I come across them accidentally while browsing e-commerce.	0.819	0.882	0.601
	CB4. I feel guilty when I realize I have bought something unimportant.	0.757		
	Moderating effect 1	0.912		
	Standardized Root Mean Square Residual (SRMR)	0.07	0.912	0.912
	Normed Fit Index (NFI)	0.90		

Note: CR= Composite Reliability; AVE= Average Variance Extracted; LF= Loadings Factor

Discriminant validity was confirmed as each construct's square root of AVE exceeded cross-loadings, and all inter-construct correlations remained below 0.90 (Table 3).

Table 3. Squared roots of AVEs discriminant validity (Fornell-Larcker Criterion)

Variables	UGC	Affiliate marketing	FOMO	Gamification	Moderating Effect 1	Narcissism	Compulsive Buying
UGC	0.859						
Affiliate marketing	0.388	0.871					
FOMO	0.352	0.233	0.889				
Gamification	0.539	0.725	0.263	0.831			
Moderating Effect 1	0.104	0.211	0.099	0.101	0.912		
Narcissism	0.556	0.283	0.490	0.387	0.055	0.847	
Compulsive Buying	0.397	0.098	0.514	0.209	0.041	0.601	0.776

Discriminant validity via HTMT showed all latent variables below 0.85 and higher than others, confirming the model's adequacy for the next stage (Table 4).

Table 4. Heterotrait-monotrait ratio (HTMT)

Variables	UGC	Affiliate marketing	FOMO	Gamification	Moderating Effect 1	Narcissism	Compulsive Buying
UGC							
Affiliate marketing	0.430						
FOMO	0.389	0.248					
Gamification	0.606	0.809	0.285				
Moderating Effect 1	0.242	0.200	0.036	0.257			
Narcissism	0.631	0.321	0.546	0.447	0.092		
Compulsive buying	0.429	0.107	0.567	0.229	0.119	0.670	

5.3 Evaluation of the Structural Model

The structural model was tested using bootstrapping (n = 458, 5,000 subsamples) with R² and path coefficients. R² values were 0.320 for Narcissism, 0.290 for FOMO, and 0.430 for compulsive buying, confirming good explanatory power. Relationships were significant when t > 1.96 (α = 0.05). Model fit indices showed SRMR = 0.07 (<0.08) and NFI = 0.90, confirming a good fit (Figure 2).

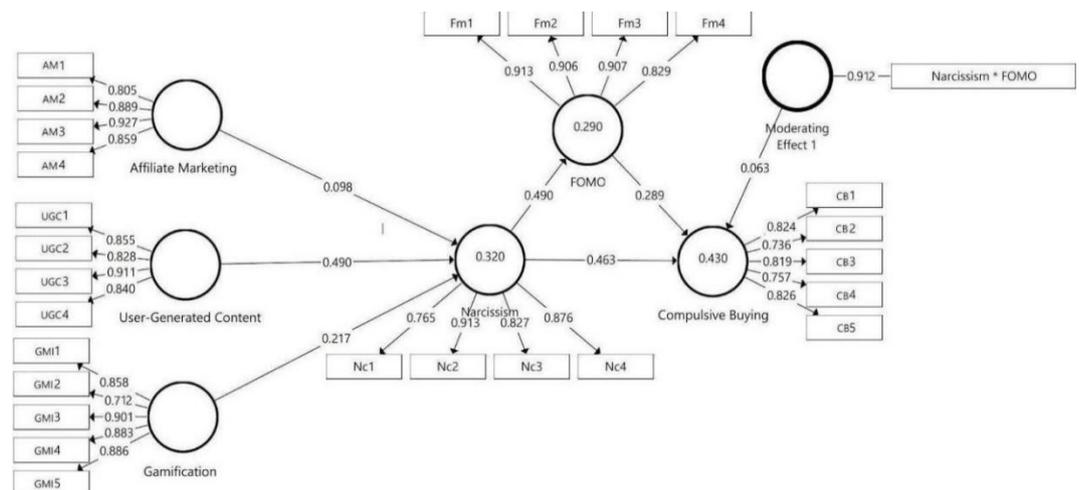


Figure 2. The SEM test showed that compulsive buying was influenced by UGC, affiliate marketing, gamification, FOMO, and narcissism, with narcissism as a mediating factor and FOMO as a moderating factor.

The model showed that narcissism contributed 46% to compulsive buying, followed by FOMO at 29%. The factors influencing narcissism were UGC (49%), gamification (21%), and affiliate marketing (9%). Narcissism positively affected both FOMO and compulsive

buying, while FOMO also directly drove compulsive buying. In addition, narcissism mediated the effects of affiliate marketing, UGC, and gamification on compulsive buying, and FOMO moderated the narcissism-compulsive buying relationship (Table 5).

Table 5. Bootstrapping results hypothesis test direct, mediation and moderation

Hypothesis	Direct effect, Moderation, Mediation	IV/ β	TS	PV	Conclusions
H1	Affiliate Marketing → Narcissism	0.098	1.700	0.040*	Acceptable
H2	UGC → Narcissism	0.490	8.621	0.000*	Acceptable
H3	Gamification → Narcissism	0.217	1.987	0.021*	Acceptable
H4	Narcissism → FOMO	0.490	7.592	0.000*	Acceptable
H5	Narcissism → Compulsive Buying	0.463	8.274	0.000*	Acceptable
H6	FOMO → Compulsive Buying	0.289	4.272	0.000*	Acceptable
H7	Affiliate Marketing → Narcissism → Compulsive Buying	0.120	2.021	0.024*	Acceptable
H8	UGC → Narcissism → Compulsive Buying	0.227	5.705	0.000*	Acceptable
H9	Gamification → Narcissism → Compulsive Buying	0.212	3.112	0.000*	Acceptable
H10	Moderating effect 1 (FOMO) → Narcissism → Compulsive Buying	0.201	3.103	0.000*	Acceptable

Note: IV=Influence Value (β), TS= T Statistics, PV= P Values

6. Discussion

6.1. The Effect of Affiliate Marketing on Narcissism

This study contributed to theory by showing that affiliate marketing in Indonesian e-commerce not only functions as a performance-based marketing strategy but also as a psychological mechanism fostering narcissistic behavior. Affiliate marketing features such as product reviews, unboxing videos, and recommendations influenced attitudes and perceived social norms, aligning with the TPB (Cheng, 2019), while public exposure, likes, and follower engagement intensified self-evaluation and status-seeking, consistent with Social Comparison Theory (Crusius et al., 2022). Moreover, affiliate marketing enabled symbolic consumption and identity construction, supporting CCT (Hungara & Nobre, 2021), where social validation and status signaling become primary motivators. The results extended previous studies (Cai et al., 2015; Fegan & Bland, 2021; Esperanza et al., 2024; Liu et al., 2025) by showing that affiliate programs amplified narcissistic tendencies among Gen Z users through self-presentation, social recognition, and reward mechanisms. Therefore, affiliate marketing was both a sales tool and a driver of psychological and social behaviors, enriching the literature on digital consumer behavior and narcissism.

6.2 The Effect of User-Generated Content (UGC) on Narcissism

This study contributed to theory by showing that UGC in Indonesian e-commerce not only served as a medium for sharing experiences but also acted as a psychological mechanism reinforcing narcissistic behavior. Active participation in UGC, such as posting reviews, photos, or videos, improved self-presentation and social validation, consistent with Social Comparison Theory (Crusius et al., 2022), where attention, likes, comments, and follower engagement amplified status-seeking behavior. In addition, UGC facilitated identity construction and symbolic consumption, supporting CCT (Hungara & Nobre, 2021), as individuals leveraged online content to express lifestyle, fashion, and personal achievements. The results extended previous studies (Paridar et al., 2023; Colaljo et al., 2024; Alamyar, 2025) by showing UGC reinforced narcissism through social recognition and symbolic rewards in the Southeast Asian context.

Cross-national studies (Ozuem et al., 2024; Fegan & Bland, 2021) provided further support that UGC encouraged self-promotion, admiration-seeking, and improved social status. Therefore, this study enriched the literature on digital consumer behavior by emphasizing UGC as both a social and psychological driver of narcissism.

6.3 The Effect of Gamification on Narcissism

This study contributed to theory by showing that gamification in Indonesian e-commerce not only improved consumer engagement but also reinforced narcissistic behavior. Engagement with game elements such as leaderboards, points, badges, and rewards encouraged self-promotion, social recognition, and status-seeking, consistent with Social Comparison Theory (Crusius et al., 2022), where competitive visibility amplified narcissistic tendencies. In addition, gamification supported identity signaling and achievement-driven consumption, aligning with CCT (Hungara & Nobre, 2021), as individuals leveraged digital accomplishments to construct self-image and convey social status. The results extended previous studies (Reed et al., 2024; Jia & Yu, 2024; Gandrita et al., 2024; Stratopoulos & Ye, 2024) by showing that gamification features functioned as psychological mechanisms that triggered narcissistic behavior through social validation, competition, and public recognition within Southeast Asian e-commerce. The results emphasized that gamification was more than a marketing strategy, as it acted as a social-psychological driver of narcissism.

6.4 The Effect of Narcissism on Fear of Missing Out (FOMO)

This study showed that narcissism significantly increased FOMO in Indonesian e-commerce, emphasizing a psychological mechanism whereby self-image concerns and status-seeking drove FOMO. Narcissistic consumers were particularly sensitive to social cues, trends, and exclusive promotions, intensifying impulsive purchasing behaviors, consistent with Social Comparison Theory (Crusius et al., 2022), where upward comparisons exacerbate FOMO. The results also aligned with the TPB (Cheng, 2019), as narcissistic traits shaped attitudes and perceived social norms influencing purchase intentions. The results extended previous studies (Anjum, 2024; Servidio et al., 2021; Barberis et al., 2023; Tan & Fauzi, 2024) by showing that narcissism functioned as a key psychological driver of FOMO in Southeast Asian e-commerce contexts, reinforcing impulsive consumption while also potentially amplifying negative psychological outcomes such as anxiety and compulsive behaviors. This study contributed theoretically by positioning narcissism as a predictor of FOMO, emphasizing its dual role in driving consumer engagement and the risk of maladaptive outcomes.

6.5 The Effect of Narcissism on Compulsive Buying

This study confirmed that narcissism positively influenced compulsive buying in Indonesian e-commerce, with self-image concerns and status-seeking motivating consumers to repeatedly purchase fashion, cosmetics, or branded goods for social recognition rather than functional needs. The results extend previous studies (Mulyono & Rusdarti, 2020; Du, 2024; Rastogi & Kumari, 2024) by showing that, in Southeast Asian contexts, digital platforms and social media amplified narcissistic tendencies, reinforcing compulsive buying as a form of identity expression and social validation. Theoretically, these results integrated CCT, emphasizing consumption as a symbolic act for status signaling and identity construction (Hungara & Nobre, 2021), and the TPB, as narcissistic traits shaped attitudes and perceived social norms toward excessive purchasing (Cheng, 2019). Therefore, this study contributed to the literature by positioning narcissism as a central psychological driver of compulsive buying, emphasizing both its symbolic and social dimensions.

6.6 The Effect of Fear of Missing Out (FOMO) on Compulsive Buying

This study showed FOMO positively influenced compulsive buying in Indonesian e-commerce, confirming that urgency, social pressure, and exposure to influencer or UGC drove impulsive purchases beyond functional needs. The results extended previous studies (Sijabat, 2024; Kao & Huang, 2024; Putri et al., 2024) by showing that FOMO acted as a psychological mechanism reinforcing compulsive shopping behavior, particularly among younger, socially active consumers. Theoretically, the results integrated Cognitive-Behavioral Theory, emphasizing how perceived social threats and anxiety triggered maladaptive consumption behaviors, and the TPB, showing how attitudes and perceived social norms influenced by FOMO shaped purchase intentions (Cheng, 2019). Therefore, this study contributed to the literature by establishing FOMO as a central determinant of compulsive buying, emphasizing both its cognitive and social dimensions.

6.7 The Effect of Mediates Narcissism between Affiliate Marketing and Compulsive Buying

This study showed that narcissism positively mediated the relationship between affiliate marketing and compulsive buying in Indonesian e-commerce. Affiliate programs on platforms like Shopee, Tokopedia, and TikTok Shop not only promoted product engagement but also fostered narcissistic traits such as self-promotion, social validation, and the desire for exclusivity, consequently driving compulsive purchasing behavior. The results extended previous studies (Chen et al., 2024) by emphasizing narcissism as a key psychological mechanism linking digital marketing strategies to excessive consumption. Theoretically, this corresponded to Cognitive-Behavioral Theory and Social Comparison Theory, emphasizing self-image concerns and social validation mediated the impact of marketing stimuli on consumer behavior. Cross-national evidence (Mert & Tengilimoğlu, 2023) further supported narcissism as a critical mediator in digital consumption contexts. Therefore, the study contributed to the literature by establishing narcissism as a central pathway where affiliate marketing reinforced compulsive buying.

6.8 The Effect of Mediated Narcissism between User-Generated Content (UGC) and Compulsive Buying

This study showed that narcissism positively mediated the relationship between UGC and compulsive buying in Indonesian e-commerce. UGC on platforms like TikTok, Instagram, and Shopee not only informed consumers but also provided opportunities for self-presentation, social validation, and status signaling, fostering narcissistic traits. Consequently, these traits influenced compulsive purchasing behavior, as individuals demanded maintaining their self-image and following trends. Theoretically, the results extended Cognitive-Behavioral Theory and Social Comparison Theory by identifying narcissism as a key psychological mechanism linking digital content creation to excessive consumption (Chen et al., 2024). Cross-national evidence (Somtawinpongsai et al., 2022; Anggarawati et al., 2023; Xu & Chen, 2024; Karahan, 2024) further supported the mediating role of narcissism in digital marketing contexts. Therefore, this study contributed to the literature by confirming that UGC not only informed or entertained but also reinforced compulsive buying through narcissistic tendencies.

6.9 The Effect of Mediates Narcissism between Gamification and Compulsive Buying

This study showed that narcissism significantly mediated the relationship between gamification and compulsive buying in Indonesian e-commerce. Gamification features such as points, badges, leaderboards, and exclusive rewards encouraged consumers to showcase achievements, fostering narcissistic tendencies. Consequently, narcissistic consumers engaged in compulsive buying to maintain self-image, status, and social validation. Theoretically, the results extended Cognitive-Behavioral Theory and Social Comparison Theory by identifying narcissism as a key psychological mechanism linking gamification with excessive consumption (Chen et al., 2024). Cross-national evidence (Somtawinongsai et al., 2022; Anggarawati et al., 2023) supported the mediating role of narcissism in digital marketing contexts, while Lee (2024) showed that its function as a mediator was more relevant than as a moderator in similar settings. Therefore, the study contributed to the literature by showing that gamification, beyond improving engagement, could drive compulsive buying through the activation of narcissistic traits.

6.10 The Effect of Fear of Missing Out (FOMO) as a Moderator between Narcissism and Compulsive Buying

This study showed FOMO significantly moderated the relationship between narcissism and compulsive buying in Indonesian e-commerce. Narcissistic consumers tended to engage in compulsive shopping to maintain self-image and social validation, and this effect intensified under high FOMO, triggered by flash sales, limited-time discounts, and viral trends. Theoretically, the results extended Cognitive-Behavioral Theory and Social Comparison Theory by showing FOMO acted as a contextual amplifying mechanism that heightened the compulsive tendencies of narcissistic consumers (Charandas & Tiwari, 2022; Li et al., 2021). Previous studies support showed that FOMO increased the influence of social media, peer pressure, and influencer marketing on impulsive consumption (Koren, 2024; Oktavia, 2024; Martiza & Hadi, 2025). Therefore, this study contributes to the literature by showing that FOMO not only motivated immediate consumption but also reinforced narcissism-driven compulsive buying through social, emotional, and validation mechanisms.

6.11 Managerial Implication

This study offered several practical implications for e-commerce businesses, particularly in the Indonesian fashion sector. First, marketers should recognize that affiliate marketing, UGC, and gamification are not merely tools to increase engagement or sales but also psychological drivers that could reinforce narcissistic tendencies in consumers. Strategically leveraging these features through well-designed affiliate programs, interactive content campaigns, and gamified experiences could improve consumer engagement and brand loyalty while maintaining ethical marketing practices. Second, understanding that narcissism amplified FOMO emphasized the importance of creating personalized and socially validated shopping experiences, where features such as real-time social proof, trend notifications, or limited-time offers could motivate purchases among users prone to FOMO, specifically younger generations active on TikTok, Instagram, and Shopee.

Third, recognizing that narcissism mediated the relationship between digital marketing strategies and compulsive buying behavior suggested that campaigns emphasizing social recognition, status, and consumers' self-image could significantly influence purchasing behavior. Brands could use content that emphasizes exclusivity, peer acknowledgment, and achievements to maximize engagement while responsibly avoiding negative

psychological effects. Finally, the moderating role of FOMO showed that urgency-based strategies, such as flash sales, limited-time discounts, and trending products, could strengthen the influence of narcissism on compulsive buying. E-commerce platforms should therefore balance promotional strategies to encourage engagement and conversion without triggering regret or negative consequences for consumers.

6.12 Theoretical Contribution

This study provided insights for fashion e-commerce managers in Indonesia to design marketing strategies aligned with consumers' psychological traits, supporting the TPB, Social Comparison Theory, and CCT. The results showed that affiliate marketing, UGC, and gamification not only influenced intentions and self-image (TPB) but also reinforced social comparison and status orientation (Social Comparison Theory), as well as symbolic consumption (CCT). Strategies such as exclusive badges, leaderboards, UGC content, reward systems, and flash sales could increase engagement and social recognition, but ethical practices were necessary to avoid triggering compulsive buying. Consumers were advised to be aware of their narcissistic tendencies and FOMO, manage shopping impulses, and improve digital literacy. Generally, the results supported the theories by showing the interaction of psychological and social factors in compulsive buying behavior in Indonesian fashion e-commerce.

6.13 Limitations

This study had several limitations worth considering. First, the study design was cross-sectional, capturing data at a single point in time and preventing analysis of changes in consumer behavior over time. Second, the data were collected through a self-report survey, which could introduce social desirability bias, as respondents tended to provide answers perceived as more socially acceptable. Third, the study focused solely on fashion consumers in Indonesian e-commerce; hence, the results might not be generalizable to other product categories, such as electronics, household necessities, or digital services. Fourth, the psychological variables studied, namely narcissism and FOMO, did not account for demographic and cultural variables in depth. Fifth, this study examined only affiliate marketing, UGC, and gamification, while other factors, such as live streaming, social commerce, and artificial intelligence (AI), were not explored.

7. Conclusions

In conclusion, this study showed that affiliate marketing, UGC, and gamification significantly increased narcissism, consequently triggering FOMO and compulsive buying among fashion e-commerce consumers in Indonesia. FOMO also strengthened the effect of narcissism on excessive purchasing. These results extended digital consumer behavior theory by identifying narcissism and FOMO as psychological mechanisms and provided practical implications for e-commerce managers to implement these strategies ethically, while encouraging consumers to increase awareness and self-control.

8. Recommendations

Future studies were recommended to adopt a longitudinal design to capture the dynamics of consumer behavior over time, and to use data triangulation or experimental methods to reduce self-report bias. It was also important to investigate other product categories and e-commerce sectors, as well as demographic and cultural variables, to better understand differences in consumer behavior. Furthermore, future

studies could explore additional digital marketing factors, such as live streaming, social commerce, and AI, to examine their effects on narcissism, FOMO, and compulsive buying, thereby contributing more broadly to digital marketing theory and practice.

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References

- Ah Fook, L., & McNeill, L. (2020). Click to buy: The impact of retail credit on over-consumption in the online environment. *Sustainability*, 12(18), 7322. <https://doi.org/10.3390/su12187322>
- Al Mutanafisa, T., & Retnaningsih, R. (2021). The effect of sales promotion and knowledge on impulsive buying of online platform consumers. *Journal of Consumer Sciences*, 6(1), 77-91. <https://doi.org/10.29244/jcs.6.1.77-91>
- Alamyar, I. H. (2025). The role of user-generated content in Shaping Consumer Trust: A communication psychology approach to e-commerce. *Medium*, 12(2), 175-191. <https://doi.org/10.25299/medium.v12i2.19963>
- Anggarawati, S., Armelly, A., Salim, M., Odilawati, W., Saputra, F. E., & Atmaja, F. T. (2023). The mediating role of narcissistic behavior in the relationship between materialistic orientation and conspicuous online consumption behavior on social media. *Cogent Business & Management*, 10(3). <https://doi.org/10.1080/23311975.2023.2285768>
- Anjum, S. (2024). Narcissism fear of missing out and phubbing the moderating role of mindfulness. *CARC Research in Social Sciences*, 3(3). <https://doi.org/10.58329/criss.v3i3.158>
- Aparicio, M., Costa, C. J., & Moises, R. (2021). Gamification and reputation: Key determinants of e-commerce usage and repurchase intention. *Heliyon*, 7(3). <https://doi.org/10.1016/j.heliyon.2021.e06383>
- Banerjee, S., Dellarocas, C. N., & Zervas, G. (2018). Interacting user-generated content technologies: How questions and answers affect consumer reviews. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3240885>
- Barta, ., Belanche S, D., Fernández, A., & Flavián, M. (2023). Influencer marketing on TikTok: The effectiveness of humor and followers' hedonic experience. *Journal of Retailing and Consumer Services*, 70, 103149. <https://doi.org/10.1016/j.jretconser.2022.103149>
- Barberis, N., Sanchez-Ruiz, M. J., Cannavò, M., Calaresi, D., & Verrastro, V. (2023). The dark triad and trait emotional intelligence as predictors of problematic social media use and engagement: the mediating role of the fear of missing out. *Clinical neuropsychiatry*, 20(2), 129.
- Bentall, R. P., Lloyd, A., Bennett, K., McKay, R., Mason, L., Murphy, J., McBride, O., Hartman, T. K., Gibson-Miller, J., Levita, L., Martinez, A. P., Stocks, T. V., Butter, S., Vallières, F., Hyland, P., Karatzias, T., & Shevlin, M. (2021). Pandemic buying: Testing a psychological model of compulsive buying and panic buying using data from the United Kingdom and the Republic of Ireland during the early phase of the COVID-19 pandemic. *PLOS ONE*, 16(1). <https://doi.org/10.1371/journal.pone.0246339>
- Brailovskaia, J., & Margraf, J. (2024). From fear of missing out (FoMO) to addictive social media use: The role of social media flow and mindfulness. *Computers in Human Behavior*, 150, 107984
- Cai, H., Shi, Y., Fang, X., & Luo, Y. L. (2022). Narcissism predicts impulsive buying:

- Phenotypic and genetic evidence. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00881>
- Cantone, G. G., & Tomaselli, V. (2022). Hybrid Probabilistic-Snowball Sampling. *arXiv Preprint arXiv:2204.01887*.
- Charandas, B. R., & Tiwari, D. (2022). Social media marketing strategies and their effects on consumer engagement and buying behavior in the fashion industry. *Innovative Research Thoughts*, 8(1), 174-180. <https://doi.org/10.36676/irt.v8.i1.1431>
- Chauhan, S., Banerjee, R., & Dagar, V. (2023). Analysis of impulse buying behavior of consumer during COVID-19: An empirical study. *Millennial Asia*, 14(2), 278-299.
- Chen, S., van Tilburg, W. A., Mahadevan, N., & Leman, P. J. (2024). Narcissists don't care about approval: The role of narcissism and status motives in explaining the relationship between self-objectification and approval motivation. *Current Psychology*, 43(31), 25809-25819. <https://doi.org/10.1007/s12144-024-06141-y>
- Cheng, E. W. (2019). Choosing between the theory of planned behavior (TPB) and the technology acceptance model (TAM). *Educational Technology Research and Development*, 67(1), 21-37.
- Colaljo, J. M., Moreno, D. E. L., Dalisay, R., Casas, P. S., & Santos, J. L. D. (2024, August). The Role of User-Generated Content on Customers' Purchase Intent and Behavior: A Basis for E-Commerce Content Strategy for Micro and Small Enterprises. In *2024 8th International Conference on Business and Information Management (ICBIM)* (pp. 59-63). IEEE.
- Crusius, J., Corcoran, K., & Mussweiler, T. (2022). Social comparison: Theory, research, and applications. *Theories in Social Psychology, Second Edition*, 165-187.
- Dhewi, T. S., Sumarsono, H., Narmaditya, B. S., & Ridzuan, A. R. (2024). Narcissism, self-esteem, and compulsive buying: Unraveling the role of social media usage. *Journal of Management World*, 2024(4), 146-151. <https://doi.org/10.53935/jomw.v2024i4.310>
- Doan, L. T. M., Rahman, M., & Vo, X. V. (2024). Mitigating overconsumption through mindfulness: The role of cashless payments in impulsive buying and sustainable consumer behavior. *Journal of Chinese Economic and Business Studies*, 1-24. <https://doi.org/10.1080/14765284.2024.2415728>
- Du, Y. (2024). Study on the psychological motivations of Chinese queer individuals who dare to expose and come out under the guise of identity concealment: Centered on social media. *Advances in Education, Humanities and Social Science Research*, 12(1), 496. <https://doi.org/10.56028/aehtsr.12.1.496.2024>
- Dwivedi, YogeshK., Rana, NripendraP., & Alryalat, M. A. (2017). Affiliate marketing: An overview and analysis of emerging literature. *The Marketing Review*, 17(1), 33-50. <https://doi.org/10.1362/146934717x14909733966092>
- Esperanza, C., Amatuloh, D. N., Utama, I. D., Nathaniel, K., & Sudirman, I. D. (2024, December). How Affiliate Marketing Impacts Buying Behavior in E-Commerce. In *2024 International Conference on Information Technology Systems and Innovation (ICITSI)* (pp. 138-144). IEEE.
- Fegan, R. B., & Bland, A. R. (2021). Social media use and vulnerable narcissism: The differential roles of oversensitivity and egocentricity. *International journal of environmental research and public health*, 18(17), 9172.
- Gandrita, D. M., Gandrita, A., & Rosado, D. P. (2024). Challenges and strategies of gamification in family businesses: The moderating effects of supervision and engagement. *European Business Review*, 37(3), 397-416. <https://doi.org/10.1108/eb-06-2024-0187>
- Gubik, A. S., & Vörös, Z. (2023). Why narcissists may be successful entrepreneurs: The role of entrepreneurial social identity and overwork. *Journal of Business Venturing Insights*, 19. <https://doi.org/10.1016/j.jbvi.2022.e00364>
- Gupta, M., & Sharma, A. (2021). Fear of missing out: A brief overview of origin,

- theoretical underpinnings and relationship with Mental Health. *World Journal of Clinical Cases*, 9(19), 4881-4889. <https://doi.org/10.12998/wjcc.v9.i19.4881>
- Hagerborn, Cecilia, Ivarsson, Isabella, & Linde, Samuel. (2024). *Trending towards overconsumption: The role of social media in shaping Swedish gen Z's buying patterns*. Jönköping University, IHH, Företagsekonomi.
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hodkinson, C. (2019). 'Fear of Missing Out'(FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications*, 25(1), 65-88.
- Hu, G., Can, M., Paramati, S. R., Doğan, B., & Fang, J. (2020). The effect of import product diversification on carbon emissions: New Evidence for Sustainable Economic Policies. *Economic Analysis and Policy*, 65, 198-210. <https://doi.org/10.1016/j.eap.2020.01.004>
- Huang, Y., & Suo, L. (2021). Factors affecting Chinese consumers' impulse buying decision of live streaming e-commerce. *Asian Social Science*, 17(5), 16. <https://doi.org/10.5539/ass.v17n5p16>
- Hungara, A., & Nobre, H. (2021). A consumer culture theory perspective of the marketplace: An integrative review and agenda for research. *International Journal of Consumer Studies*, 45(4), 805-823
- Hsu, C. L., & Chen, M.-C. (2018). How does gamification improve user experience? an empirical investigation on the antecedences and consequences of user experience and its mediating role. *Technological Forecasting and Social Change*, 132, 118-129. <https://doi.org/10.1016/j.techfore.2018.01.023>
- Ismail, S., & Siddiqui, D. A. (2025). How intrinsic stimuli affect consumers' impulsive and compulsive buying behavior in e-commerce live streaming marketing: The role of regret and rejoice emotions complemented by scarcity message. *Social Science Review Archives*, 3(2). <https://doi.org/10.2139/ssrn.5074604>
- Jia, F., & Yu, J. (2024). Disentangling e-commerce gamification affordances on recommendation acceptances from a perceived value perspective. *Information Technology & People*, 38(4), 1843-1870. <https://doi.org/10.1108/itp-03-2023-0242>
- Kao, C.-Y., & Huang, C. (2024). Investigating the impact of fear of missing out on inaction inertia in live streaming purchase intention. *Aslib Journal of Information Management*. <https://doi.org/10.1108/ajim-01-2024-0030>
- Karahan, M. O. (2024). Online impulsive buying behavior of mobile site shoppers in Turkey: A mediation analysis. *Revista de Gestão Social e Ambiental*, 18(4). <https://doi.org/10.24857/rgsa.v18n4-131>
- Kaur, H. (2024). The influence of user-generated content on e-commerce sales: a meta-analysis. *Innovative Research Thoughts*, 10(3), 33-40. <https://doi.org/10.36676/irt.v10.i3.1418>
- Kayser, R., & Simpson, H. (2024). Treatment of obsessive-compulsive disorder. *The American Psychiatric Association Publishing Textbook of Psychopharmacology*. <https://doi.org/10.1176/appi.books.9781615375523.as52>
- Koren, M. (2024). The influence of social network on forecasting in Fashion Industry. *Journal of Textile Science & Fashion Technology*, 11(1). <https://doi.org/10.33552/jtsft.2024.11.000752>
- Lau, D. (2024, December 27). *The convenience and the curse of online shopping: How e-commerce is fuelling addiction, wastage*. CNA. <https://www.channelnewsasia.com/today/big-read/online-shopping->

- convenience-addiction-wastage-4826366
- Lee, D., & Wan, C. (2023). The impact of *mukbang* live streaming commerce on consumers' overconsumption behavior. *Journal of Interactive Marketing*, 58(2-3), 198-221. <https://doi.org/10.1177/10949968231156104>
- Lee, H. (2024). The effect of narcissism on intention to purchase green products: The dual mediating effect of materialism and green conspicuousness and the moderating effect of need for uniqueness. *Korean Corporation Management Review*, 31(4), 63-87. <https://doi.org/10.21052/kcmr.2024.31.4.63>
- Lim, W., Lee, Y., & Mamun, A. A. (2021). Delineating competency and opportunity recognition in the Entrepreneurial Intention Analysis Framework. *Journal of Entrepreneurship in Emerging Economies*, 15(1), 212-232. <https://doi.org/10.1108/jeee-02-2021-0080>
- Liu, X., Lai, I. K., Zhang, Y., Lu, Y., & Wang, X. (2025). How four aspects of narcissism prompt tourists to make landmark check-in: The mediating role of perceived enjoyment and perceived status attainment. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/apjml-11-2024-1723>
- Mardhiana, H. R. (2024). Gen Z's impulse buying behavior of shopping through live-streaming social commerce platforms: *Journal Of Social Sciences And Humanities*, 29-50. <https://doi.org/10.56943/jssh.v3i3.588>
- Martiza, S. R., & Hadi, E. D. (2025). Why do k-pop fans buy impulsively? a study on perceived scarcity, fomo, and self-control. *Journal of Consumer Sciences*, 10(2), 299-316. <https://doi.org/10.29244/jcs.10.2.299-316>
- Mert, M., & Tengilimoğlu, D. (2023). The mediating role of Fomo and the moderating role of narcissism in the impact of social exclusion on compulsive buying: A cross-cultural study. *Psicologia: Reflexão e Crítica*, 36(1). <https://doi.org/10.1186/s41155-023-00274-y>
- Merdiaty, N., & Aldrin, N. (2022). Effect of brand experience on customer engagement through Quality Services of online sellers to students in Bekasi. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.801439>
- Mulyono, K. B., & Rusdarti, R. (2020). How psychological factors boost compulsive buying behavior in digital era. *International Journal of Social Economics*, 47(3), 334-349. <https://doi.org/10.1108/ijse-10-2019-0652>
- Nasr, S., Sunitiyoso, Y., & Suhaimi, H. (2023). The effect of fear of missing out on buying and post-purchasing behavior toward Indonesia's Generation Z Online Shoppers (Case Study: E-commerce indonesia). *International Journal of Current Science Research and Review*, 06(09). <https://doi.org/10.47191/ijcsrr/v6-i9-15>
- Net Impact. (2024, August 9). *Consequences of overproduction and overconsumption*. <https://www.netimpact.org/blog/overproduction-overconsumption-consequences>
- Ni'mah, Z., & Hasan, I. (2024). The influence of Diversity Product, tagline, and store atmosphere on impulsive buying through positive emotion as a mediation variable (study on Gen z and Millennial customers of mr. DIY products in Malang). *Social, Humanities, and Educational Studies (SHES): Conference Series*, 7(2). <https://doi.org/10.20961/shes.v7i2.84521>
- Oktavia, D. Y. (2024). The effect of fear of missing out (FOMO), hedonic shopping, and online shopping anxiety on purchasing decisions. *International Conference of Business and Social Sciences*, 1233-1241. <https://doi.org/10.24034/icobuss.v4i1.607>
- Ozuem, W., Willis, M., Ranfagni, S., Rovai, S., & Howell, K. (2024). The nature and determinants of user-generated content for dissatisfied customers: Evidence from second-hand luxury fashion brands. *Qualitative Market Research: An International Journal*, 27(5), 866-891. <https://doi.org/10.1108/qmr-01-2024-0016>
- Panasea, I. G. N. O. (2024). The Effect of Fashion Involvement, Peer Pressure, and Self-

- Esteem on Compulsive Buying:(Study on Generation Z as Consumers of H&M Stores in Badung Regency, Bali). *American Journal of Economic and Management Business (AJEMB)*, 3(8), 254-271.
- Paridar, M., Ameri, M., & Honka, E. (2023). More, faster, and better? effects of rewards on incentivizing the creation of user-generated content. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4580732>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Poushneh, A., Vasquez-Parraga, A., & Gearhart, R. S. (2024). The effect of empathetic response and consumers' narcissism in voice-based Artificial Intelligence. *Journal of Retailing and Consumer Services*, 79, 103871. <https://doi.org/10.1016/j.jretconser.2024.103871>
- Putri, N. S., Widyastuti, U., & Mahfirah, T. F. (2024). Unraveling the interplay between financial knowledge and Fomo in shaping adolescent consumptive behavior in Jakarta. *International Student Conference on Business, Education, Economics, Accounting, and Management (ISC-BEAM)*, 1(1), 20-36. <https://doi.org/10.21009/isc-beam.011.02>
- Rastogi, N., & Chandra Kumari. (2024). "the way you feel can either get in the way or get you on the way" a systematic review of Emotional Intelligence. *International Journal of Scientific Research in Science and Technology*, 11(2), 491-499. <https://doi.org/10.32628/ijrst52411293>
- Reed, L. I., Cooke, L., Kasaba, I., Harrison, E., & Hooley, J. M. (2024). Narcissistic and dependent traits and behavior in four archetypal 2-person, 2-choice games. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1275403>
- Sagotra, V., & Panwar, Dr. D. (2025). A study on the influence of Fomo (fear of missing out) on consumer spending. *International Journal of Research Publication and Reviews*, 6(4), 404-409. <https://doi.org/10.55248/gengpi.6.0425.1352>
- Servidio, R., Griffiths, M. D., & Demetrovics, Z. (2021). Dark Triad of personality and problematic smartphone use: A preliminary study on the mediating role of fear of missing out. *International Journal of Environmental Research and Public Health*, 18(16), 8463. <https://doi.org/10.3390/ijerph18168463>
- Sijabat, R. (2024). The impact of parasocial relationships and self-congruity on online purchasing decisions: The mediating role of fear of missing out. *Journal of Ecohumanism*, 3(7), 437-450. <https://doi.org/10.62754/joe.v3i7.4215>
- Somtawinpongsai, C., Abdul Hamid, A. B., Raza, M., Sawangchai, A., & Leonardo Cavaliere, L. P. (2022). Impact of brand experience, narcissism and materialism on luxury purchase behavior mediated by online buying intentions. *Advanced Series in Management*, 65-80. <https://doi.org/10.1108/s1877-636120220000029005>
- Syrdal, H. A., Myers, S., Sen, S., Woodroof, P. J., & McDowell, W. C. (2023). Influencer marketing and the growth of affiliates: The effects of language features on engagement behavior. *Journal of Business Research*, 163, 113875. <https://doi.org/10.1016/j.jbusres.2023.113875>
- Stratopoulos, T. C., & Ye, H. (Jonathan). (2024). Engagement and crowding-out effects of leaderboard gamification on medical crowdfunding. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4890880>
- Tan, C. N.-L., & Fauzi, M. A. (2024). Unravelling late adolescents' addiction to social media: A unified theory perspective. *Global Knowledge, Memory and Communication*. <https://doi.org/10.1108/gkmc-02-2024-0099>
- Veny, V., Budiharjo, R., Hariani, S., & Samee Malik, H. A. (2024). Evaluating the impact of social media on consumers' online shopping behavior: A mediated-moderation model. *International Journal of Social Science Research and Review*, 7(9), 112-

131. <https://doi.org/10.47814/ijssrr.v7i9.2298>
- Wagan, S. M., & Sidra, S. (2024). Unraveling purchase intentions: The interplay of cognitive dissonance, seller reputation, and user-generated content in social e-commerce. *International Journal of Business Reflections*, 5(2), 169-199. <https://doi.org/10.56249/ijbr.03.01.56>
- Williams, A. D. (2012). Evaluation of the mood repair hypothesis of compulsive buying. *Open Journal of Psychiatry*, 2(2), 83-90
- Wu-Ouyang, B. (2023). More mobile connectedness, less well-being? *Journal of Media Psychology*, 35(5), 291-302. <https://doi.org/10.1027/1864-1105/a000388>
- Xu, P., & Chen, Y. (2024). The impact of avatar identification on impulsive buying tendency in mobile games: The Serial Mediation Effect of mindfulness and self-control. *Proceedings of the 2nd International Conference on Educational Knowledge and Informatization*, 473-479. <https://doi.org/10.1145/3691720.3691802>
- Yoo, S., Lee, D.-J., & Atamja, L. (2023). Influence of online information quality and website design on user shopping loyalty in the context of e-commerce shopping malls in Korea. *Sustainability*, 15(4), 3560. <https://doi.org/10.3390/su15043560>
- Zhang, N., & Hu, W. (2024). Do psychological ownership and communicative presence matter? examining how user-generated content in e-commerce live streaming influences consumers' purchase intention. *Behavioral Sciences*, 14(8), 696. <https://doi.org/10.3390/bs14080696>
- Zhang, M., & Luo, L. (2023). Can consumer-posted photos serve as a leading indicator of restaurant survival? evidence from yelp. *Management Science*, 69(1), 25-50. <https://doi.org/10.1287/mnsc.2022.4359>
- Zhang, X., & Rosli, N. (2025). Fomo, social validation and impulse buying in live streaming e-commerce. *Journal of Ecohumanism*, 4(1). <https://doi.org/10.62754/joe.v4i1.6278>