

Narcissism, Self-Esteem, and Compulsive Buying: Unraveling the Role of Social Media Usage

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Abstract. This paper aims to examine the effect of social media on compulsive buying among youth in Indonesia, using narcissism and self-esteem as mediators to predict compulsive buying. To obtain the data, a self-administered online survey using a 5-point Likert scale was completed by Indonesian youth. More than 300 online questionnaires were distributed to the targeted respondents with a purposive sampling approach. Structural equation modeling is provided in partial least squares for a visual representation of the linkage between variables. The statistical analysis indicates that narcissism is significantly related to social media usage and compulsive buying, while self-esteem is not linked with compulsive buying among youth in Indonesia. The presence of social media can solely mediate the connection between narcissism and compulsive buying. However, it found that social media failed to mediate the linkage between self-esteem and compulsive buying. The output of this study will provide practical and theoretical implications for considering the primary role of social media. This research guides policy scholars, educational institutions, and governments in Indonesia on how to pay special attention to compulsive buying behavior among youth.

Keywords: Compulsive buying, Narcissism, Self-esteem, Social media usage, Structural equation modeling, Youth behavior.

1 | INTRODUCTION

The phenomenon of compulsive buying (CB) is a concern and has become a demanding topic among scholars in recent years due to its impact from technological sophistication (Mason, Zamparo, Marini, & Ameen, 2022; Nanda, Banerji, & Singh, 2023). CB is often linked to overspending, which has implications for individuals' financial aspects (Olsen, Khoi, & Tuu, 2022). A preliminary study noted that CB has an impact that extends to mental health, family dynamics, and even the broader fabric of society (Nanda et al., 2023). In addition, the constant use of social media and easy access to e-commerce platforms raise the need to understand CB among youth (Lina, Hou, & Ali, 2022).

Recent studies highlight the significant influence between personality traits, such as narcissism (Olsen et al., 2022) and self-esteem (Jalees, Khan, Zaman, & Miao, 2024), and CB. Narcissism (NC) refers to excessive vanity and a desire for attention and praise from peers (Olsen et al., 2022). Previous research shows that high levels of NC are positively correlated with the frequency and intensity of CB for products that are perceived to enhance the buyer's status (Mert & Tengilimoğlu, 2023; Neale & Reed, 2023). Furthermore, self-esteem (SE) can be also a predictor for CB. Jalees et al. (2024) mentions that SE is linked with a person's positive and negative emotions related to their dignity. De Pasquale et al. (2022) also noted this robust role of CB.

In addition to NC and SE, social media usage also influences CB (Li & Ma, 2024). Social media platforms have become powerful in shaping consumer preferences and driving purchasing decisions (Palalic, Ramadani, Mariam Gilani, Gërguri-Rashiti, & Dana, 2021). Ratten (2024) remarked that the intensity of social media use can increase individuals' exposure to commercial content and fast-moving consumption trends. Further, it creates an environment conducive to the development of CB behavior (Sun, Wang, Cao, & Lee, 2022). Social media enables a transition from browsing to purchasing that can reduce the consumer decision cycle (Gao, Shen, Lu, Xu, & Wu, 2024).

Studies in recent years have increased to try and understand CB among consumers. Previous studies have explored this theme with different aspects of these variables separately. For example, a recent work by Olsen et al. (2022) revealed the increasing trend of NC in modern society and its impact on CB. While another work by Jalees et al. (2024) is concerned with the linkage between CB and has been studied among scholars (Elisa, Fakhri, & Pradana, 2022; Zafar, Qiu, Li, Wang, & Shahzad, 2021) but its involvement as a mediator is overlooked.

Therefore, this paper is a comprehensive study and fills the knowledge gaps by combining NC and SE as exogenous variables to predict CB among youth in Indonesia and the role of social media in bridging these relationships. The research questions are as follows:

RQ1: How does narcissism influence compulsive buying?

RQ2: How does self-esteem influence compulsive buying?

RQ3: How does social media usage mediate narcissism, self-esteem, and compulsive buying?

This research makes several essential contributions. First, it provides additional nuances to consumer behavior literature by determining the mediating role of social media usage. Second, research in the Indonesian context is unique because Indonesia is one of the market-targeted countries because it has a high population with the most social media users (Sanny, Arina, Maulidya, & Pertiwi, 2020). Third, this study provides an understanding of the psychological mechanisms underlying CB behavior in the digital era. The paper presents practical implications for the enhancement of effective approaches in addressing the issue of CB among youth in Indonesia.

The rest of the paper is structured as follows: The next section contains a literature review, followed by methods and materials in the third section. The fourth and fifth sections present the findings and discussion. The last section concludes the findings and presents the implications, limitations, and future study directions.

2 | LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The sophistication of technology makes digital marketplaces inevitable and often leads to buying decisions (Tarka, Harnish, & Babaev, 2023). Studies on compulsive buying (CB) are based on diverse meanings and have been directed to online retailing (Adamczyk, 2021). CB is linked with a form of engrossment with buying as a response to unfavorable effects that interfere with everyday functioning and result in financial problems (Pahlevan Sharif, She, Yeoh, & Naghavi, 2022). In this work, the operational definition of CB follows O'Guinn and Faber (1989), who state that it is an uncontrolled urge to buy regularly. Recent literature underlined that individuals with a tendency toward narcissism (NC) are more sensitive to CB behavior, primarily due to easy access to social media usage and e-commerce (Moon, Faheem, & Farooq, 2022; Son, 2022). Neale and Reed (2023) remarked that NC is positively connected with impulsive and compulsive buying in digital markets. Furthermore, Mert and Tengilimoğlu (2023) noted the role of social media in strengthening these relationships, which provides a stage for narcissistic individuals to showcase their lifestyles and purchases. Therefore, this literature leads to the following hypotheses:

H1: *Narcissism has an effect on compulsive buying.*

H2: *Narcissism has an effect on social media usage.*

Previous studies have also mentioned that self-esteem (SE) is highly linked with CB (De Pasquale et al., 2022; Jalees et al., 2024). CB frequently affects the young population, including university students, and is supported by low SE and internet addiction (Jalees et al., 2024). Shopping is no longer dependent on needs and wants; it is based on mood and preference (Yi & Jai, 2020). In this regard, Tran (2022) found that youth used purchase behavior to improve mood or self-esteem, which affects the development of compulsive buying patterns. In addition, preliminary literature documented that students with low SE are more responsive to peer pressure and advertising that targets their psychological weaknesses (Stuppy, Mead, & Van Osselaer, 2020). Research shows that individuals with low SE will use social media more intensively as a means to find validation and improve their self-image (Cingel, Carter, & Krause, 2022). Therefore, this literature leads to the following hypotheses:

H3: *Self-esteem influences compulsive buying.*

H4: *Self-esteem influences social media usage.*

2.1 | Social Media as a Mediator

Social media flourishes as a platform for social interaction and plays a significant role in reaching consumers (Wibowo, Chen, Wiangin, Ma, & Ruangkanjanases, 2020). Today, much time is spent among youth on social media in Indonesia (Aji, Nadhila, & Sanny, 2020; Tarigan & Noverin, 2024). Hence, the advertisement and impact of influencers from social media will affect their economic and CB behavior. Individuals with narcissistic tendencies often use social media to show off and seek attention (Taylor, 2020). Social media provides a large audience and instant validation through likes and comments, which can satisfy a narcissist's need for approval (Savci, Turan, Griffiths, & Ercengiz, 2021). Narcissistic individuals feel the need to constantly update and show off their lifestyle through purchasing new items, leading to CB (Neale & Reed, 2023). In addition, previous studies noted a robust link between social media usage and CB (Li & Ma, 2024). Social media usage can be used to moderate the link between self-esteem and compulsive buying (Zainuddin, Ravichandran, & Md Yusof, 2022). The motivation of involvement social media drives students to find validation through purchasing items that are perceived to enhance their social status. It is argued that people with low SE and who spend more time on social media drive CB behavior. Therefore, this literature leads to the following hypotheses:

H5: *Social media influences compulsive buying.*

H6: *Social media mediates narcissism and compulsive buying.*

H7: *Social media mediates self-esteem and compulsive buying.*

3 | METHOD

3.1 | Design

This study used a quantitative approach with cross-sectional surveys to investigate the connection between narcissism (NC), self-esteem (SE), and compulsive buying (CB) among youth in Indonesia by considering the mediating role of social media usage (SMU). This approach was used for its ability to estimate the relationships between variables and test research hypotheses. In doing so, partial least squares (PLS) structural equation modeling (SEM) with SmartPLS version 4.0 was used to deal with the complex variability.

3.2 | Respondents and Data Collection

The target population is youth who are active on social media. In particular, this study focuses on Instagram users as it's an application that is largely used by young people. The sample criteria are: (1) must be at least 18 years old, (2) actively use at least one social media platform, and (3) have made an online purchase in the last six months. The reason for using these groups of respondents is to understand the behavior of young people in making purchasing decisions. Since the actual number of social media users is not known, this study involved a suggestion from Levy and Lemeshow (2013) by multiplying the number of indicators by five, which identified that the minimum sample should be 170. Some scholars suggest a sample size of at least 200 respondents to obtain a satisfactory mode; therefore, this study distributed more than 300 online questionnaires with a purposive sampling approach and 279 valid responses were returned. Respondents were given information about the purpose of the study and were asked for informed consent before participating. To increase the response rate, an incentive in the form of online shopping vouchers were offered to participants who completed the survey.

3.3 | Measures

All measures in this study were adopted from preliminary relevant works. The questionnaire item responses used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). NC was estimated using a narcissistic personality inventory by Ames, Rose, and Anderson (2006), and the example item is "I am no better or worse than most people". The scale used to measure SE was adopted from Kernis (2003), and the example item is "My overall feelings about myself are robustly affected by how good I look". The variable of SMU refers to the activity or involvement of social media in influencing product preferences and buying activities. It consists of eight items adapted from Aragoncillo and Orus (2018) and Prasad, Garg, and Prasad (2019), and the example item to measure SMU is "I often read online about the brand/products". Lastly, CB was measured by adopting items from O'Guinn and Faber (1989), and the example item to measure compulsive buying is "I buy things even when I do not need them".

4 | RESULTS

4.1 | Measurement Model

The measurement model is pivotal to ensuring the validity and reliability of the variables. As per the literature, the measurement model deals with composite reliability, discriminant validity, and convergent validity. The composite reliability (CR) value should be higher than 0.6, and Cronbach's alpha needs to be higher than 0.7 (accepted) to meet composite reliability, while convergent validity is determined by considering the average variance extracted (AVE), which should meet the minimum threshold of 0.5. As shown in Table 1, the Cronbach's alpha values range from 0.861 to 0.870, and the CR values range from 0.864 to 0.874, indicating a good model. In addition, the AVE values range from 0.763 to 0.807 to show that convergent validity has been accomplished. Table 2 presents the discriminant validity, which is determined using Fornell and Larcker (1981) criteria. The correlation score between the construct should be higher than other constructs in the table to meet discriminant validity. It indicates that the manifest variables in the model have met discriminant validity, which can further be used for structural model analysis.

Table 1: Measurement model.

Variable	Cronbach's alpha	CR	Rho_A	AVE
CB	0.861	0.867	0.866	0.763
SMU	0.864	0.869	0.867	0.778
NC	0.870	0.874	0.870	0.807
SE	0.856	0.864	0.858	0.793

Table 2: Discriminant validity.

Variable	CB	SMU	NC	SE
CB	0.873			
SMU	0.846	0.882		
NC	0.820	0.766	0.898	
SE	0.817	0.753	0.993	0.891

4.2 | Structural Model

The structural model is intended to test the model and hypotheses through path analysis, and also considers the R-squared (R^2), f-squared (f^2), and predictive model (Q^2). Figure 1 shows the final structural model. The R^2 value for CB is 0.848, indicating that the ability of NC, SE, and SMU to explain CB is 84.8% (substantial category). In addition, the R^2 for SMU is 0.590, indicating that the ability of NC and SE to explain SMU is 59% (moderate category). The f^2 values are also used to explain the robustness effect of the manifest variables. The statistical estimation indicates that three effects in the model are categorized as strong, while the effect for $SE \rightarrow CB$ is in the weak category.

To determine the direct effect, this study used p-value and t-value parameters (see Table 3). As shown in the table, three direct effects exist in this paper, while one was rejected as the p-value is more than 0.05 and the t-value is less than the threshold of 1.96. NC was found to have an effect on CB (p-value = 0.000, t-value = 4.025) and SMU (p-value = 0.000, t-value = 4.812). In addition, the linkage between SE and SMU is shown by the p-value of 0.032 and the t-value of 2.864. After identifying the direct effects, the indirect effects and a mediator function were examined, which is illustrated in Table 4.

The statistical estimation indicates that there are two indirect paths tested: $NC \rightarrow SMU \rightarrow CB$ and $SE \rightarrow SMU \rightarrow CB$. For the $NC \rightarrow SMU \rightarrow CB$ path, the indirect effect has a coefficient value of 2.285 with a t-value of 2.747 and a p-value of 0.031. Since the p-value is lower than 0.05, this proposed hypothesis is accepted. Meanwhile, for the $SE \rightarrow SMU \rightarrow CB$ path, the indirect effect has a t-value of 0.825 and a p-value of 0.410, indicating that SMU cannot play a role as a mediator. In addition, since there is no direct effect between SE and CB, the indirect effect cannot be explained.

Table 3: Direct effect.

Path	Original sample (O)	Sample mean (M)	Std. Dev.	T-value	P-value	Decision
NC \rightarrow CB	0.686	0.678	0.170	4.025	0.000	Accepted
NC \rightarrow SMU	1.257	1.245	0.261	4.812	0.000	Accepted
SE \rightarrow CB	0.236	0.244	0.174	1.355	0.175	Rejected
SE \rightarrow SMU	-0.495	-0.482	0.265	2.864	0.032	Accepted

Table 4: Indirect effect.

Path	Original sample (O)	Sample mean (M)	Std. Dev.	T-value	P-value	Decision
NC \rightarrow SMU \rightarrow CB	2.285	2.838	0.101	2.747	0.031	Accepted
SE \rightarrow SMU \rightarrow CB	0.207	0.795	0.101	0.825	0.410	Rejected

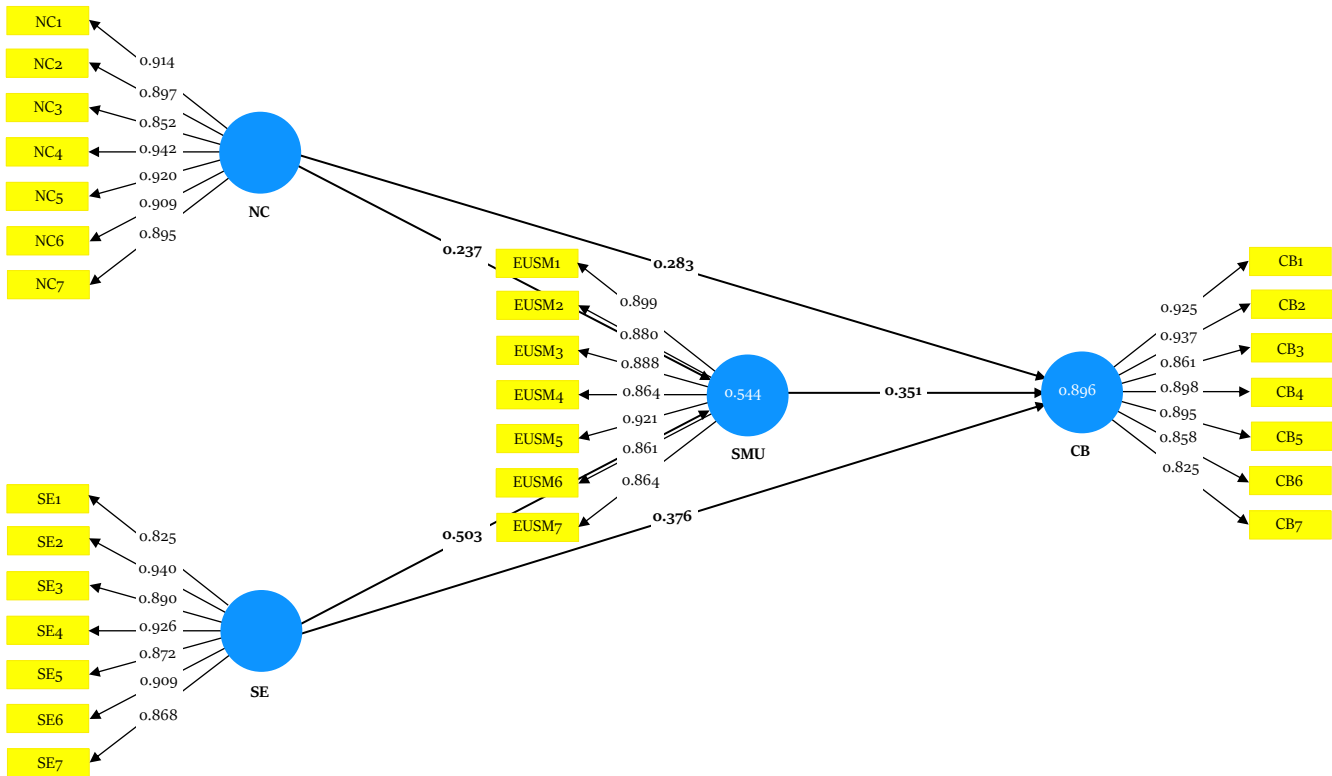


Figure 1: Structural model.

Note: NC = Narcissism, SE = Self-esteem, SMU = Social media usage, CB = Compulsive buying.

5 | DISCUSSION

Compulsive buying among university students has become an increasingly prominent phenomenon in this digital era. To investigate this, this study examined narcissism (NC), self-esteem (SE), and social media usage (SMU) as determinants of compulsive buying (CB).

The first finding indicates that narcissism has an influence on CB among Indonesian youth. This finding raises the need for external recognition and validation, which is often met through purchasing and showing off luxury or trendy items. Concerning Indonesia, social status is still significant, and narcissism can manifest and form a desire to stand out and gain recognition through social media (Aji et al., 2020; Tarigan & Noverin, 2024). CB behavior can be seen as an attempt to fulfill the ideal self-image held by narcissistic individuals. This finding confirms those of several prior studies (e.g., Neale & Reed, 2023; Aji et al., 2020 and Tarigan & Noverin, 2024) on this relationship. Narcissism also influences social media usage as a medium for socialization and a means of showing off to teenagers, confirming previous works (e.g., Moon et al., 2022). This phenomenon can be strengthened by the unique characteristics of Indonesian digital culture, such as high smartphone penetration and the popularity of social media platforms.

The results related to SE show a non-significant direct effect on CB, but it has a robust impact on social media usage, which contradicts prior studies (e.g., De Pasquale et al., 2022; Jalees et al., 2024). This unexpected finding may be explained by social pressure, consumerist culture, or alternative coping mechanisms. The significant influence of SE on social media usage provides essential insight into how Indonesian youth utilize digital platforms for psychological development (Cingel et al., 2022). The aforementioned study states that youth with different levels of SE can use social media in different ways. People with diminished SE are able to use social media for the purpose of pursuing validation and improving self-image, whilst those with high SE can be involved for communication and information purposes.

The next finding confirmed the robust link between social media usage and compulsive buying. This result reinforces previous findings on how increased exposure to social media can lead to compulsive buying (Li & Ma, 2024). The emergence of social media provides images, information, and promotions for various products and services (Hussain, Raza, Haider, & Ishaq, 2023). For producers, social media are designed to personalize influencer advertising to promote targeted marketing. At the same time, it encourages users to interact with products impulsively, which affects CB (Tuten, 2023).

The analysis of the linkage between NC and CB among young people indicates the significant role of social media. Narcissists will use social media to attract attention and validation (Savci et al., 2021). Social media usage also drives unexpected buying behavior, leading to compulsive buying (Neale & Reed, 2023). While this study cannot explain the role of social media usage in the linkage between self-esteem and compulsive buying, it explains that other factors, such as financial stress or anxiety, play a significant role. In addition, individuals with low SE do not always involve social media as a coping mechanism that leads to CB (Olsen et al., 2022).

6 | CONCLUSIONS, IMPLICATIONS, AND FUTURE DIRECTION

The findings illustrated that narcissism has a significant impact on compulsive buying, while self-esteem has no effect on this endogenous variable. The statistical output confirmed that narcissism and self-esteem have a robust link with social media usage. The presence of social media can have a direct effect and indirectly mediate the relationship between narcissism and compulsive buying. The findings provide theoretical implications in the literature of management and recognize the role of social media that often leads to compulsive buying. The results of this research are also essential from a practical perspective. Marketers need to reconsider strategies that target specific personality traits through social media usage. Thus, it raises the need for media literacy education and consumer awareness to deal with the potential negative impacts of compulsive buying. The primary limitation of this work is that it's a cross-sectional study and only captures data at a single point in time, restricting the capability to infer causal relationships.

In addition, the use of social media only focuses on three main social media in Indonesia (Facebook, Instagram, and TikTok). Thus, future scholars can include other platforms to obtain comprehensive findings. Exogenous variability can also be expanded to capture the determinants of compulsive buying among youth.

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Institutional Review Board Statement:

The Ethical Committee of the Universitas Negeri Malang, Indonesia, granted approval for this study on 10 July 2024 (10.7.6/UN32.14/PB/2024).

Transparency:

The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests:

The authors declare that they have no competing interests.

Authors' Contributions:

All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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