

Exploring the Role of Social Comparison: Unraveling the Influence of Malicious Envy and Materialism on Impulse Buying, with Promotional Campaigns as a Moderator

Muhammad Ahsan Ali¹, Zujaj Ahmed², Iftikhar Ahmad³ and Raisham Hayee⁴

<https://doi.org/10.62345/jads.2024.13.3.125>

Abstract

This paper empirically tests the association between social comparison, malicious envy, and materialism in impulse buying, with promotional campaigns as a moderator. The sample was drawn from retail customers who frequently buy shoes and clothing. The sample size was 302, using a convenience sampling technique, and the data was collected through a survey questionnaire containing 28 items, with responses ranging from strongly agree to strongly disagree. SEM-PLS 4.0 was used for data analysis and to determine the construct reliability and validity. After examination, it was established that social comparison is positively linked to materialism, malicious envy, and impulse buying. Promotional campaigns moderate the relationship between social comparison and impulse buying. However, neither materialism nor malicious envy impact impulse buying, nor do these two mediate the link between social comparison and impulse buying. The study is unique as it has utilized promotional campaigns as moderators, which has never been studied in this context. Also, the findings are valuable for both marketers and consumers to better predict and manage consumption behavior.

Keywords: Social Comparison, Materialism, Malicious Envy, Promotional Schemes.

Introduction

The world is transforming, and this transformation is bringing many social and psychological changes. Social comparison is growing due to massive digitalization and excessive use of social media. These trends have increased impulse buying behaviors on traditional and online shopping channels (Yang et al., 2021). The topic has been a favorite for researchers, and multiple studies have highlighted various drivers behind impulse buying. These drivers include physical feelings and desires, emotionality, practicality, availability of wealth and time, and sometimes promotional campaigns also attract consumers to display impulse buying behavior (Iyer et al., 2020). Festinger (1954) conducted the pioneer study to determine the root cause behind impulsive behaviors, and what they found came to be known as social comparative theory. A classical study (Rook & Hoch, 1985) suggested that individuals display impulsive behaviors due to their inclination toward consumerism. They also suggested that human beings who are part of a particular social group

¹Bahauddin Zakariya University, Multan. Email: Imahsanchuhan@gmail.com

²Lecturer, National College of Business Administration & Economics Lahore, Sub-Campus Multan, Punjab, Pakistan. Email: zujaj.ahmed@gmail.com

³Lecturer, National College of Business Administration and Economics (NCBA&E) Lahore, Multan Sub Campus. Email: Iftikhar.mul@ncbae.edu.pk

⁴Lecturer, National Fertilizer Corporation (NFC), Institute of Engineering and Technology Multan, Pakistan. Corresponding Author Email: raisham.hayee@nfciet.edu.pk



compare themselves with others, and this continuous comparison became the base of social comparative theory. Xia et al. (2004) price equity study also highlighted the cause of impulse buying behavior. Individuals are prone to social comparisons, especially upward social comparison, and this leads to the display of impulsive buying behavior (Coyne et al., 2017). All of these researches help in understanding human social behavior (Want & Saiphoo, 2017). Another aspect of impulsive behavior is the materialistic orientation of human beings. Studies indicate that individuals infected with materialism exhibit impulsive buying behavior (Le, 2020; Islam et al., 2018). Similar results were confirmed by another study where materialism was found to be associated with status consciousness and impulsive and compulsive buying behaviors (Tokgoz, 2020). Apart from these, there are some other factors contributing to impulse buying. Malicious envy is a product of social comparison being done through social media, which forces individuals toward impulse buying (Charoensukmongkol, 2018). Moyal et al. (2020) also suggested the presence of malicious envy in social comparison scenarios. Another factor that positively contributes to impulse buying is the use of promotional campaigns by marketers. Nagadeepa et al. (2015) found that rebates and discount offers have been the most successful promotional tactics to increase impulse buying. The study by Jamal and Lodhi (2015) also confirms similar results; in Karachi, the respondents displayed impulse buying of apparel when offered price discounts.

Literature Review

Relationship between Social Comparison and Impulse Buying

Researchers have studied the connection between social comparison and impulse buying extensively. Festinger (1954) first developed a systematic framework for the term "social comparison," although the fundamental concept has existed since the time of social philosophy and scientific study. Social comparison is the procedure of thinking about a factor concerning one or more people (Meier & Schäfer, 2018). Social comparison theory speculates that person need to evaluate themselves by associating their perceptions and aptitudes with others (Usmani & Ejaz, 2020). This comparison process affects individual behavior, dictating what a person thinks they can and should do, and shapes the interpersonal dynamics of social groups (Want & Saiphoo, 2017). Liu et al. (2017) suggest that people are involved in social contrast as they have much information about others. Social comparison influences a person's self-worth, motivation, sense of well-being, and other factors by comparing oneself and one is relative position to others (Suls & Wheeler, 2013). In philosophy, upward social comparisons may cause negative self-evaluations, as they reinforce the belief that others are better off (Buunk & Gibbons, 2007). This form of social comparison can be detrimental to one's self-esteem and elicit unpleasant feelings (Jankowski & Takahashi, 2014).

On the other hand, downward comparisons are generally directed toward self-improvement (Luo et al., 2018) and generate positive feelings (Jankowski & Takahashi, 2014). Lucas and Koff (2017) observed that evaluating a person's looks to another person might foster impulse buying. Moreover, impulse buying could be prompted by social comparisons, i.e., when buyers notice their friends buying some things (Liu et al., 2019; Zafar et al., 2021). The literature suggests that

H1: Social comparison leads to impulse buying.

Relationship between Social Comparison and Materialism

According to Avcı (2024), social comparison significantly influences an individual's materialism. In line with Pahlevan et al. (2022), there exists a significant affirmative relationship between social comparison, materialism, and impulsive buying. Le (2020) also revealed that social comparison is

a basic measure of materialistic things; besides, it is widely established that it can affect compulsive shopping among youngsters. Furthermore, Islam et al. (2018) indicate that social comparison significantly influences the formation of materialistic ideals and compulsive purchasing behaviors in teenagers and young adults. Usmani and Ejaz (2020) observed that materialism mediated the connection between social comparison through social networking sites and impulsive buying of fake goods. Mazli et al. (2023) showed that materialistic customers were attracted by or hooked to spending to reduce their stress or anxiety, and this propensity reflected purchase now–think later behaviors. Tran (2022), in his research determining the relationship between social comparison and materialism, found a similar positive association between the two variables. Furthermore, Mazli et al. (2023) concluded that status-based social comparison and materialism lead customers to impulsively buy counterfeit products. Therefore, based on this review, it can be hypothesized as

H2: Social comparison leads to materialism.

Relationship between Social Comparison and Malicious Envy

Social comparisons can yield several adverse effects in real life and social media. The digital social assessment might adversely affect an individual's evaluation and level of discomfort and create envious feelings in social media consumers (Robinson et al., 2019). Appel et al. (2015) discovered that equating oneself to the authentically cheerful profiles of others on social networking sites might elicit depressive symptoms. Envy had a negative correlation with self-esteem and was linked to higher levels of self-reported inferiority. Nevertheless, this study does not delineate particular social comparisons as upward or downward. Ling et al. (2023) established that upward social comparison on social media platforms correlated with impulsive buying. Also, this connection was strengthened by both materialism and envy. Liu et al. (2019) examined upward social comparison and demonstrated that envy significantly influenced the assessment of upward social comparison in online communication to predict impulse purchases. Adults predicted a stronger correlation than adolescents in their study. Liu et al. (2017) established that upward social comparison on social networking sites significantly predicted depressive symptoms among the participants, including envy. Tran (2022) identified a positive link between social comparison and materialism but no positive association between social comparison and envy; however, it was observed that envy strongly influenced impulse buying. The stark contrast between the findings in empirical studies needs further investigation and, thus, the formulation of the following hypothesis.

H3: Social comparison leads to malicious envy.

Relationship between Materialism and Impulse Buying

Belk (1985) characterizes materialism as the significance an individual devotes to material goods. When seen as a personality trait, materialism involves possessiveness, lack of charity, and the presence of envy. Alternatively, Richins (2004) describes materialism as a value system where goods are considered fundamental to human pleasure. Researchers, such as Wang (2016), have lately investigated the linkages between social hierarchy, materialism, post-materialism, and consuming practices. During the research, subjective social comparison was found to be positively linked to materialism, ultimately influencing consumption behavior. According to Richins and Dawson (1992), materialism has three main dimensions: pursuing happiness via acquisition, measuring success by goods, and making acquisitions central to one's life. In industrialized nations, materialistic ideals are typically mainstream, and consumer culture is built around this worldview. Brown et al. (2016) indicated that throughout the research period, high materialists made more

spontaneous purchases and spent larger sums on necessary items than people with lower materialism, even if their salaries did not change. However, cultural influences can profoundly alter how materialistic ideals develop across different places (Kassim et al., 2016). There are sufficient signals from the existing literature that the relationship between materialism and impulse buying is positive and strong. Individuals who prioritize the importance of material possessions are often motivated to acquire various goods to signal their social prestige, eminence, and influence in society (Belk, 1985). They incline an optimistic attitude to impulsive purchases as these possessions provide them with happiness and serve as a reflection of their self-identity (Featherstone, 2007; Dittmar et al., 1995). Impulsive expenditure behavior may be influenced by situational factors or a temporary psychological state (Vohs & Faber, 2007; Rook & Fisher, 1995) and is related to materialism (Richins & Dawson, 1992).

Highly materialistic individuals are likely to prioritize immediate gratification over the long-term consequences of their actions and take a "purchase now and pay later" approach to impulsive buying, which helps them maintain their social status and fulfill their hedonic goals (Ramanathan & Menon, 2006; Ubel, 2009). It is important to note that the relationship between materialism and impulsive buying may vary across cultures and economies, where self-regulation was found to be negatively correlated to impulsive buying (Pradipto et al., 2016). The findings of the study Tran (2022) confirmed similar results and suggested developing the following hypothesis

H4: Materialism leads to the display of impulse buying.

Relationship between Malicious Envy and Impulse Buying

Envy is frequently felt by people when they think that they miss anything that others have, including goods, improved traits, or accomplishments, especially as a consequence of upward social comparison (Ahn et al., 2021; Li, 2019; Lange & Crusius, 2015; Yang et al., 2021; Zheng et al., 2018). According to Suls and Wheeler (2013), social comparison is a technique that helps one accomplish one's urge for self-improvement. In connection with photo-sharing social commerce platforms, the tempting photos of items and the looks of other consumers, such as prominent individuals and influencers, are crucial variables that naturally encourage upward social comparison. Subsequently conducting upward social comparisons with pictures of regarded superstars, customers may suspect malicious envy that encourages them to invest in self-enhancement to attain the anticipated object comparable to that held by the associated people (Crusius & Mussweiler, 2012; Lin, 2018). Consequently, users of image-sharing SCPs are more prone to participate in impulsive behaviors, such as impulsive shopping, to get the desired things immediately. Loureiro et al. (2020) have recently verified the influence of evil envy on the desire to acquire premium fashion goods. The literature indicates the following theory.

H5: Malicious Envy leads to impulse buying.

Promotional Campaigns as a Moderator between Social Comparison and Impulse Buying

Studies have shown that social comparison can influence impulse buying behavior. For example, individuals may engage in impulse buying to match or exceed the possessions or lifestyles of others they compare themselves to (Piron, 1991). Moreover, social comparison can lead to dissatisfaction with one's possessions, which may in turn lead to impulse buying as a means of compensating for this dissatisfaction (Richins, 1995).

Sales promotions can also impact impulse buying behavior. Research has found that sales promotions can increase impulse buying by creating a sense of urgency and scarcity, and by offering immediate gratification to consumers (Mandolfo et al., 2022). However, the effect of sales

promotions on impulse buying can be moderated by various factors, including individual differences and contextual factors (Bandyopadhyay et al., 2021).

Alimpić et al. (2020) suggest that customers make purchasing decisions based on the prices of products, and promotions play a significant role in influencing their behavior. Consumers often require motivation to buy a product immediately rather than waiting for a later time, as well as to choose one product over a competitor's offering and purchase more of it. Hasim et al. (2018) explains that sales promotion techniques are typically categorized as price-based or non-price-based, with price-based promotions having a greater impact on consumer behavior. Examples of price-based promotions include vouchers, repayments, refunds, and temporary price discounts (Nagadeepa et al., 2015).

H6: Promotional campaign moderates the relationship between social comparison and impulse buying.

Materialism as a Mediator between Social Comparison and Impulse Buying

Materialism posits that the primary objectives in life include the accumulation of possessions, financial achievement, the pursuit of status, and the maintenance of a favorable image (Kasser & Kanner, 2004). Materialism signifies a perceptive style that activates impulse buying (Y. Wang, 2016). Individuals with materialistic standards pursue material fulfillment, and obsessive purchasing may fulfill their emotional desires (Richins, 2004). Previous research investigations have demonstrated that individuals who have an elevated capacity for social comparison are particularly prone to its adverse impacts (Luo et al., 2018). Additionally, they contend that the more material possessions they have, the greater their social standing, and that in turn results in increased materialism (Mazli et al., 2023). Previous scientific research indicates that upward social evaluation significantly contributes to materialism (Hu & Liu, 2020). Consequently, individuals are inclined to view possessions as standard for achievement and utilize the quantity of measurable prosperity to establish upward social judgments with others to emphasize their social position and sense of self (Qu et al., 2023). Therefore, people with great social comparing behaviors might be prone to wish greater material wealth and have a greater level of materialism (Pahlevan Sharif et al., 2022). People with societal comparison beliefs create an insatiable need for material fulfillment, and this leads to impulse buying. Therefore, this study suggests the following hypothesis

H7: Materialism mediates the relationship between social comparison and impulse buying.

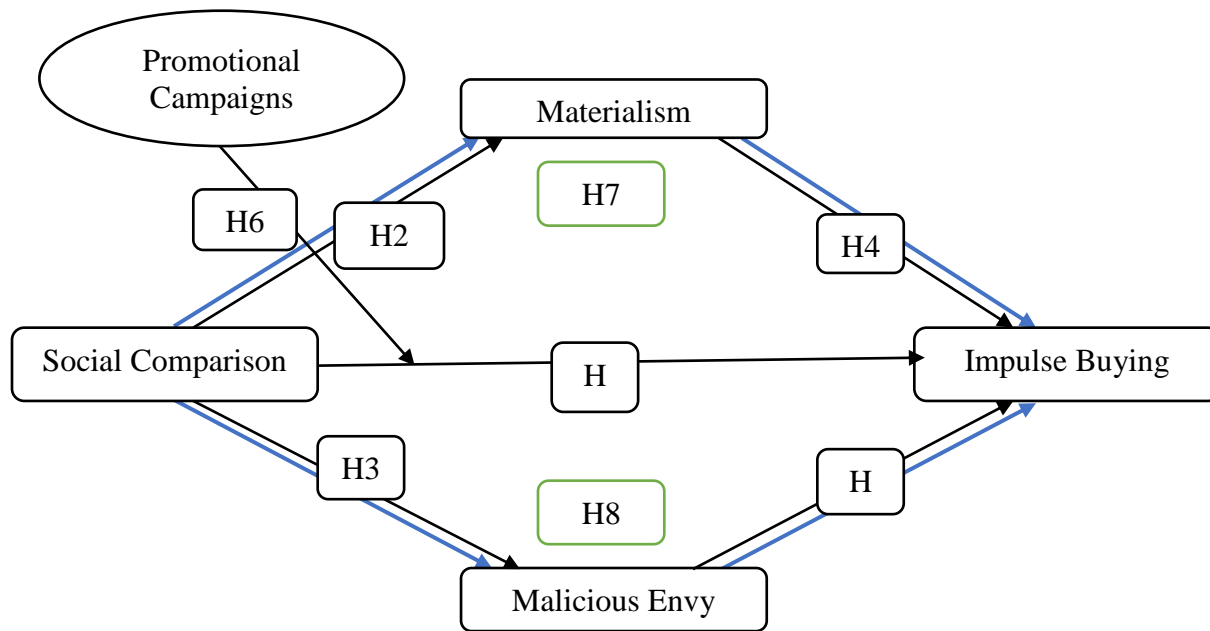
Malicious Envy as a Mediator between Social Comparison and Impulse Buying

Envy is an unpleasant emotion marked by feelings of insufficiency, hostility, and bitterness that arise from the awareness of another individual or group possessing a desirable item (Tran et al., 2023). Ling et al. (2023) conducted extensive empirical research on 568 Chinese consumers and found out that malicious envy completely mediates the relationship between social comparison and impulse buying. I-PACE model suggests that upward social comparisons can trigger emotional replies, such as jealousy which may drive individuals to pursue their desires (Meier et al., 2020). Consequently, people are more prone to engage in difficult behaviors, including online obsessive buying (Ling et al., 2023). Moreover, prior studies indicate that upward social comparisons may result in significant feelings of social isolation, potentially leading to negative emotional outcomes (Wang et al., 2020). Positive messages on social networking sites may elicit feelings of envy in individuals (Moyal et al., 2020). The general tension theory posits that the tension and stress encountered by persons can result in no adaptive behaviors (Li, 2019). Consequently, envy may

contribute to dysfunctional purchasing behavior, including virtual compulsive buying. This study proposes a hypothesis.

H8: Malicious envy mediates the relationship between social comparison and impulse buying.

Figure 1: Research Framework



Underlying Theory

The Social Comparison framework, founded by Festinger (1954), serves as the basic framework for studying the function of spiteful envy and materialism in impulsive buying within this study. According to the hypothesis, individuals prefer to measure their value by comparing themselves to others, particularly when objective criteria are missing. In this setting, upward social comparisons, where people compare themselves to others they view as more prosperous, can elicit unpleasant feelings such as envy, especially when perceived as unattainable.

When envy turns vicious, it generates a drive to undermine the envied people or to bridge the gap through compensating behaviors, such as impulsive shopping, as individuals seek material objects to raise their self-image. This inclination is sometimes exacerbated by high levels of materialism when self-worth is intimately related to things and external displays of status. Promotional campaigns operate as moderators in this connection by boosting envy-driven consumption through creative messaging. Campaigns persuade consumers to feel that possession of marketed items corresponds to greater prestige, driving individuals into impulse purchases. By locating buyer behavior within social comparison theory, the study intends to highlight how advertising tactics exploit comparative inclinations, generating malevolent envy and materialistic wants, eventually encouraging impulsive purchasing behavior.

Research Methodology & Data Collection

The study embraced a quantitative research technique, applying a cross-sectional survey design as it will fit best for research of this nature (Thompson et al., 2005). The target population for this

study comprises retail customers who frequently engage in buying clothes and shoes. A diverse sample of participants was recruited to ensure demonstration through different age clusters, sexes, and economic backgrounds (Barreiro & Albandoz, 2001). The sample size was 302 recommended by (Hair et al., 2011). A convenience sampling technique was used due to obvious advantages (HR & Aithal, 2022). Data was collected through a survey using a convenience sampling technique (Bhardwaj, 2019). A survey questionnaire was designed to assess participants' levels of social comparison, malicious envy, materialism, and impulse-buying tendencies. The questionnaire included established scales and validated measures related to these constructs and they are frequently used and recommended by researchers of social science (Gao, 2024). Participants were recruited from various retail stores specializing in clothing and footwear. They were approached and invited to participate voluntarily in the study. Prior informed consent was obtained from each participant, ensuring their willingness to participate and the confidentiality of their responses. Participants were asked to complete the survey questionnaire, which assessed their demographic information and relevant constructs of interest. Furthermore, participants were exposed to experimental scenarios involving different promotional campaigns within the retail environment. These scenarios simulated real-life situations in which participants encountered promotional offers and incentives while shopping for clothes and shoes. Participants' responses and behaviors were observed and recorded, focusing on impulse buying tendencies and the potential mediation of malicious envy and materialism. The collected data were subjected to statistical analysis using SEM-PLS (Hair et al., 2011). Descriptive statistics helped summarize the sample's demographic features and relevant variables (Sarstedt et al., 2022). Inferential statistics, such as correlation analysis, regression analysis, moderation analysis, and mediation analysis, were employed to examine the relationships between social comparison, malicious envy, materialism, impulse buying, and the moderating effect of promotional campaigns (Hair et al., 2018).

Measurement Instrument

A 5-point Likert scale examination was employed for this study. An often-used psychometric tool, a Likert scale allows respondents to specify their level of agreement or disagreement (Croasmun & Ostrom, 2011). The items were adapted and validated from existing research. Table 1 explains in detail the research instrument with the number of items and scale source.

Table 1: Research Instrument

<i>Variable/Construct</i>	<i>No of Items</i>	<i>Adapted from</i>
Social Comparison	6	(Liu et al., 2019)
Impulse Buying	4	(Sneath et al., 2009)
Materialism	6	(Richins, 2004)
Malicious Envy	5	(Lange & Crusius, 2015)
Promotional Campaigns	3	(Liao et al., 2009)

Statistical Analysis

Response Rate

According to the survey queries, we enable individuals to voice their thoughts. Therefore, people can explain their experiences when filling out the survey. Through this strategy, we assemble precise and correct data for our investigation, thus validating the primary assumption of the study. Of the 520 questionnaires distributed to the participants, 430 (82%) were returned and after screening, the finished sample consisted of 320 (58%).

Table 2: Response Rate

Description	Circulated	%
Total Disseminated Questionnaires	520	100%
Received Questionnaires	430	82%
Finalized Sample	302	58%

Demographic Profile of the Respondents

The analysis revealed that out of 302 finalized responses 14 percent were male and 86 percent were female. The majority 46 percent belonged to the age group 26-35. 22 percent belonged to the income group 75000 and above. The details are given below in the table 3.

Table 3: Demographic profile

Characteristics	Percentage
Gender	
Male	14%
Female	86%
Age Group	
18-25 years	31%
26-35 years	46%
36-45 years	19%
46 years and above	4%
Monthly Income	
45000-55000	11%
56000-65000	45%
66000-75000	20%
75000 and above	22%

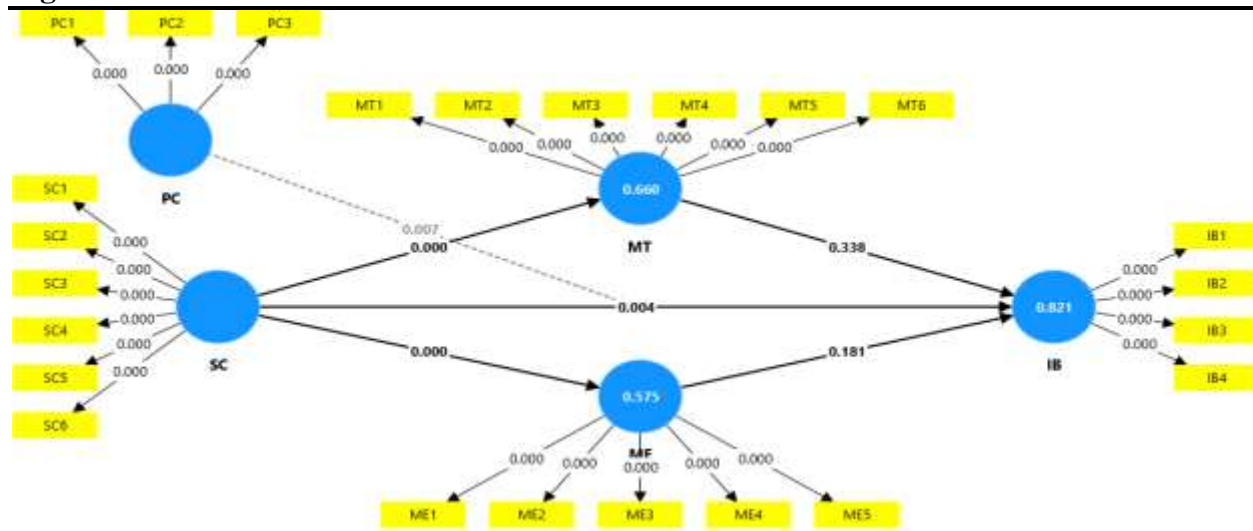
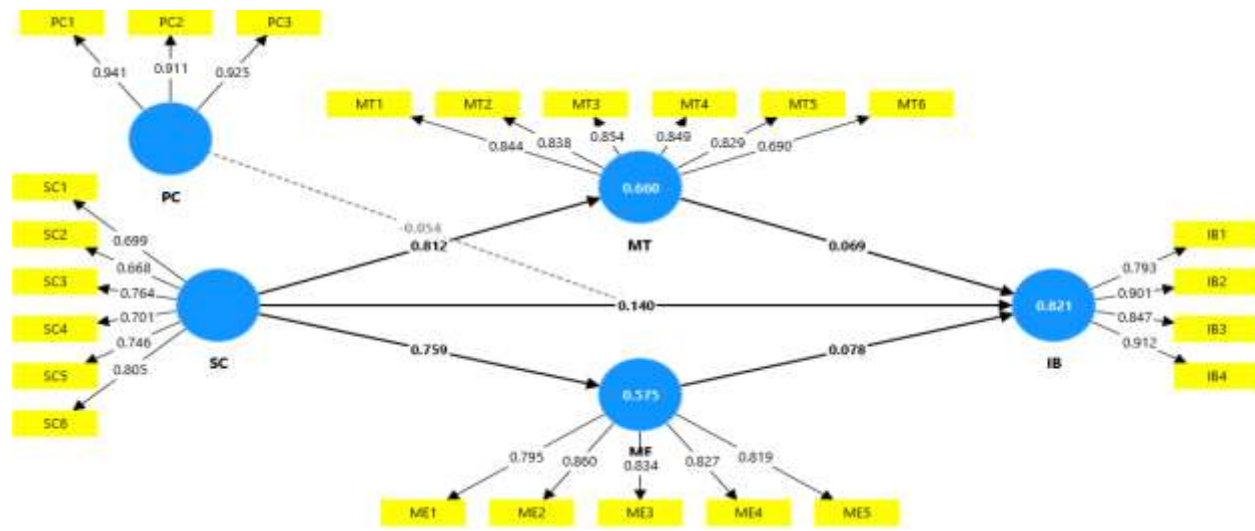
SEM-PLS Models**Figure 2: Measurement Model**

Figure 3: Structural Model

Construct Reliability & Validity

The table presents an overview of several constructions (SC, MT, ME, IB, PC) along with their associated items, factor loadings, VIF (Variance Inflation Factor), Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha. Composite Reliability (ρ_c) scores demonstrate how frequently items assess the same construct. Values above 0.7 are generally deemed satisfactory, demonstrating that the constructions have excellent reliability (Hajjar, 2018). In this case, all constructs in the table demonstrate excellent composite reliability (varying from 0.873 to 0.947), showing that elements inside every construct consistently represent the same underlying theme. Average Variance Extracted (AVE) values greater than 0.5 show that the construct explains more than half of the variance in its elements, demonstrating good convergent validity (Pham et al., 2019). All constructs in the table meet this criterion (e.g., PC has an AVE of 0.857), suggesting that they effectively capture their respective notions. Cronbach's Alpha evaluates internal consistency (Hair et al., 2017). Values above 0.7 show good reliability. The constructions in the table all exceed this threshold (varying from 0.826 to 0.916), corroborating the concept that the items reliably measure the constructs they purport to reflect. Factor loading for all the measurement items exceeds the threshold of 0.5 indicating the reliability of the measurement scales and the same is observed for the VIF values not exceeding the threshold of 5, indicating the scale validity (Hair et al., 2018).

Table 4: Construct Reliability & Validity

Constructs	Items	Factor Loadings	VIF	Average Variance Extracted (AVE)	Composite Reliability (rho_c)	Cronbach's Alpha
SC	SC1	0.699	1.496	0.536	0.873	0.826
	SC2	0.668	1.422			
	SC3	0.764	1.727			
	SC4	0.701	1.479			
	SC5	0.746	1.620			
	SC6	0.805	1.861			
MT	MT1	0.844	2.571	0.671	0.924	0.901
	MT2	0.838	2.536			
	MT3	0.854	2.605			
	MT4	0.849	2.549			
	MT5	0.829	2.243			
	MT6	0.690	1.583			
ME	ME1	0.795	2.065	0.684	0.916	0.885
	ME2	0.860	2.546			
	ME3	0.834	2.153			
	ME4	0.827	2.198			
	ME5	0.819	2.112			
IB	IB1	0.793	1.807	0.747	0.922	0.886
	IB2	0.901	3.283			
	IB3	0.847	2.180			
	IB4	0.912	3.596			
PC	PC1	0.941	3.887	0.857	0.947	0.916
	PC2	0.911	2.835			
	PC3	0.925	3.369			

Acronyms: SC: Social Comparison, **IB**: Impulse Buying, **MT**: Materialism, **ME**: Malicious Envy, **PC**: Promotional Campaigns.

Discriminant Validity

Dirgiamto (2023) asserts that discriminant validity guarantees that a measure of a conception is statistically distinct and effectively represents phenomena that other processes within a structural equation model do not capture. This was evaluated by assessing whether the square root of the (AVE) for a latent construct exceeded all relationships among the concepts (Cheung & Wang, 2017). The findings indicated that the squares of the AVE values for all variables, social comparison, materialism, malicious envy, promotional campaigns, and impulse buying exceeded the inter-construct correlations (refer to Table 5). Table 5 indicates that the outer loading values for all indicators exceeded the cross-loading values associated with the other constructs. Consequently, the results were deemed suitable. Table 5 represents the Fornell-Larcker criterion assessment of the variables under study, and the values lie within the acceptable threshold. Thus discriminant validity is established effectively (Dirgiamto, 2023).

Table 5: Fornell-Larcker criterion

	IB	ME	MT	PC	SC
IB	0.864				
ME	0.732	0.827			
MT	0.791	0.838	0.819		
PC	0.890	0.723	0.806	0.925	
SC	0.766	0.759	0.812	0.754	0.732

Hypothesis Testing

The study uses the specialist statistical application Smart-PLS 4.0 to extensively examine these models. The choice to utilize PLS-SEM as the analytical technique in this investigation was not arbitrary. It was based on its broad use and demonstrated efficacy in current literature (Hair et al., 2017). SEM transcends standard statistical methodologies by boosting the efficiency and rigor of statistical analysis. This sophisticated regression analysis approach combines confirmatory factor analysis (CFA) with multiple linear regression to concurrently employ both measurement and structural models (Hair et al., 2011).

Table 6: Hypothesis Testing

Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P value	β	Results
SC -> IB	0.140	0.138	0.048	2.913	0.004	0.140	Accepted
SC -> MT	0.812	0.813	0.024	33.600	0.000	0.812	Accepted
SC -> ME	0.759	0.760	0.028	26.843	0.000	0.759	Accepted
MT -> IB	0.069	0.073	0.073	0.958	0.338	0.069	Rejected
ME -> IB	0.078	0.077	0.058	1.338	0.181	0.078	Rejected
PC x SC -> IB	-0.054	-0.054	0.020	2.678	0.007	-0.054	Accepted
SC -> MT -> IB	0.056	0.060	0.059	0.952	0.341	0.056	Rejected
SC -> ME -> IB	0.059	0.058	0.045	1.322	0.186	0.059	Rejected

Results

Hypothesis 1 stating that social comparison leads to impulse buying, is accepted on account of ($t=2.913$, $p=0.004$, $\beta=0.140$). Similar findings are observed by Zafar et al. (2021). Hypothesis 2 states that social comparison leads to materialism, which is accepted on account of ($t=33.60$, $p=0.000$, $\beta=0.812$), also confirmed by the existing study of Chatterjee et al. (2019). Hypothesis 3 states that social comparison leads to malicious envy, which is accepted on account of ($t=26.843$, $p=0.000$, $\beta=0.759$), these findings are in contrast to the result drawn by Tran (2022). Hypothesis 4 states that materialism leads to impulse buying, which is rejected on account of ($t=0.958$, $p=0.338$, $\beta=0.069$), these findings are also contrasting with the findings by Moran (2015). Hypothesis 5 states that malicious envy leads to impulse buying, which is rejected on account of ($t=0.958$, $p=0.338$, $\beta=0.078$), contrasting to the findings by Liu et al. (2019). Hypothesis 6 assumed that promotional campaigns moderate the link between social comparison and impulse buying,

which stands accepted on account of ($t=2.678$, $p=0.007$, $\beta=-0.054$). The findings are in line with Hasim et al. (2018). Hypothesis 7 assumes that materialism mediates the connection between social comparison and impulse buying, which stands rejected on account of ($t=0.952$, $p=0.341$, $\beta=0.056$). The findings are contrasting to the study by Ling et al. (2023). Hypothesis 8 assumes that malicious envy mediates the relationship between social comparison and impulse buying, which stands rejected on account of ($t=0.952$, $p=0.341$, $\beta=0.056$). The findings are contrasting to the study by Ling et al. (2023).

Conclusion & Recommendations

This study sheds light on the influence that social comparison has on impulsive purchasing, demonstrating that characteristics such as materialistic tendencies and malicious envy play a role in shaping consumer behavior. This link between social comparison and impulse buying is moderated by promotional campaigns, which highlight the effect that materialism and envy have on impulsive purchasing decisions. Although materialism and envy do not directly contribute to impulse buying, they do affect it. Also, social comparison significantly impacts both materialism and malicious envy. With these insights, businesses can better understand the motivations of their customers, which in turn provides them with direction in developing promotional plans that are successful.

The findings of this study adds guidance for consumers seeking to reduce the negative effects of upward social comparison on impulse buying. Firstly preventive upward social comparisons, whether it is on social media or in our real life, can help control impulsive buying tendencies. The study suggests that consumer focus more on their own strengths and cultivate a sense of contentment. Secondly, to reduce impulsive buying potential, individuals should identify how materialistic beliefs effect their thoughts, feelings, and behaviors and work toward modifying materialism's negative impact. Lastly, reducing envy can also help lessen impulsive purchases. Support from friends and family in redesigning envious spirits into more optimistic psychological responses can be beneficial for controlling impulse buying.

Managerial Implication

From a management standpoint, comprehending the influence of social comparison on impulse purchasing might assist marketers in enhancing advertising strategies. Highlighting social status or peer achievements might affect consumer purchase choices, especially in competitive and social media-influenced contexts. Targeted campaigns can utilize price discounts and scarcity marketing to specifically appeal to people affected by social comparison, hence enhancing impulse purchases.

Theoretical Implications

The study advances social comparison theory by adding malicious envy and materialism in the impulsive purchasing context, contributing to the psychology of consumer literature. The findings disclose nuanced connections between social comparison, materialism, and impulse purchasing, suggesting that materialism and envy alone may not be effective movers without a triggering promotional element, highlighting the significance of contextual marketing strategies.

References

- Ahn, S., Ha, Y.-W., Jo, M.-S., Kim, J., & Sarigollu, E. (2021). A cross-cultural study on envy premium: The role of mixed emotions of benign and malicious envies. *Current Psychology*, 1–10.

- Alimpić, S., Perić, N., & Nikolić, T. M. (2020). Impact of certain sales promotion tools on consumers' impulse buying behavior. *Journal of Applied Economic Sciences*, 15(1), 45–55.
- Appel, H., Crusius, J., & Gerlach, A. L. (2015). Social comparison, envy, and depression on Facebook: A study looking at the effects of high comparison standards on depressed individuals. *Journal of Social and Clinical Psychology*, 34(4), 277–289.
- Avci, İ. (2024). The Effect of Materialism, Conspicuous Consumption and Sense of Shame on Intention to Purchase Counterfeit Products and the Mediating Role of Attitude. *Current Research in Social Sciences*, 10(1), 92–107.
- Bandyopadhyay, N., Sivakumaran, B., Patro, S., & Kumar, R. S. (2021). Immediate or delayed! Whether various types of consumer sales promotions drive impulse buying?: An empirical investigation. *Journal of Retailing and Consumer Services*, 61, 102532.
- Barreiro, P. L., & Albandoz, J. P. (2001). Population and sample. Sampling techniques. *Management Mathematics for European Schools*, 1(1), 1–18.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12(3), 265–280.
- Bhardwaj, P. (2019). Types of sampling in research. *Journal of Primary Care Specialties*, 5(3), 157–163.
- Brown, K. W., Kasser, T., Ryan, R. M., & Konow, J. (2016). Materialism, spending, and affect: an event-sampling study of marketplace behavior and its affective costs. *Journal of Happiness Studies*, 17, 2277–2292.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes*, 102(1), 3–21.
- Charoensukmongkol, P. (2018). The impact of social media on social comparison and envy in teenagers: The moderating role of the parent comparing children and in-group competition among friends. *Journal of Child and Family Studies*, 27(1), 69–79.
- Chatterjee, D., Kumar, M., & Dayma, K. K. (2019). Income security, social comparisons and materialism: Determinants of subjective financial well-being among Indian adults. *International Journal of Bank Marketing*, 37(4), 1041–1061.
- Cheung, G. W., & Wang, C. (2017). Current approaches for assessing convergent and discriminant validity with SEM: Issues and solutions. *Academy of Management Proceedings*, 2017(1), 12706.
- Coyne, S. M., McDaniel, B. T., & Stockdale, L. A. (2017). “Do you dare to compare?” Associations between maternal social comparisons on social networking sites and parenting, mental health, and romantic relationship outcomes. *Computers in Human Behavior*, 70, 335–340.
- Croasmun, J. T., & Ostrom, L. (2011). Using likert-type scales in the social sciences. *Journal of Adult Education*, 40(1), 19–22.
- Crusius, J., & Mussweiler, T. (2012). When people want what others have: The impulsive side of envious desire. *Emotion*, 12(1), 142.
- Dirgiatmo, Y. (2023). Testing The Discriminant Validity and Heterotrait–Monotrait Ratio of Correlation (HTMT): A Case in Indonesian SMEs. In W. A. Barnett & B. S. Sergi (Eds.), *Macroeconomic Risk and Growth in the Southeast Asian Countries: Insight from Indonesia* (Vol. 33A, pp. 157–170). Emerald Publishing Limited. <https://doi.org/10.1108/S1571-03862023000033A011>
- Dittmar, H., Beattie, J., & Friese, S. (1995). Gender identity and material symbols: Objects and

decision considerations in impulse purchases. *Journal of Economic Psychology*, 16(3), 491–511.

- Featherstone, M. (2007). *Consumer culture and postmodernism*. Sage.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
- Gao, N. (2024). Research on the Phenomenon of Frequent Job Changes among Young People in China. *Academic Journal of Management and Social Sciences*, 6(1). <https://doi.org/10.54097/m8aj6s54>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442–458.
- Hair, J., Risher, J., Sarstedt, M., & Ringle, C. (2018). When to use and how to report the results of PLS-SEM. *European Business Review*, 31. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hajjar, S. T. (2018). Statistical analysis: Internal-consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods*, 6(1), 27–38.
- Hasim, M. A., Shamsudin, M. F., Ali, A. M., & Shabi, S. (2018). The relationship between sales promotions and online impulse buying in Malaysia. *Opcion*, 34(16), 295–308.
- Hr, G., & Aithal, P. S. (2022). Deriving right sample size and choosing an appropriate sampling technique to select samples from the research population during Ph. D. program in India. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(2), 288–306.
- Hu, Y.-T., & Liu, Q.-Q. (2020). Passive social network site use and adolescent materialism: Upward social comparison as a mediator. *Social Behavior and Personality: An International Journal*, 48(1), 1–8.
- Islam, T., Sheikh, Z., Hameed, Z., Khan, I. U., & Azam, R. I. (2018). Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults. *Young Consumers*.
- Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. (2020). Impulse buying: a meta-analytic review. *Journal of the Academy of Marketing Science*, 48, 384–404.
- Jamal, M., & Lodhi, S. (2015). Consumer shopping behavior in relation to factors influencing impulse buying: A case of superstores in Karachi, Pakistan. *International Journal of Scientific and Research Publications*, 5(2), 41.
- Jankowski, K. F., & Takahashi, H. (2014). Cognitive neuroscience of social emotions and implications for psychopathology: examining embarrassment, guilt, envy, and schadenfreude. *Psychiatry and Clinical Neurosciences*, 68(5), 319–336.
- Kasser, T. E., & Kanner, A. D. (2004). *Psychology and consumer culture: The struggle for a good life in a materialistic world*. American Psychological Association.
- Kassim, N., Bogari, N., Salamah, N., & Zain, M. (2016). The relationships between collective-oriented values and materialism, product status signaling and product satisfaction: A two-city study. *Asia Pacific Journal of Marketing and Logistics*, 28(5), 807–826.
- Lange, J., & Crusius, J. (2015). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, 41(2), 284–294.

- Le, M. T. H. (2020). Social comparison effects on brand addiction: A mediating role of materialism. *Heliyon*, 6(11), e05460.
- Li, Y. (2019). Upward social comparison and depression in social network settings: The roles of envy and self-efficacy. *Internet Research*, 29(1), 46–59.
- Liao, S., Shen, Y., & Chu, C. (2009). The effects of sales promotion strategy, product appeal and consumer traits on reminder impulse buying behaviour. *International Journal of Consumer Studies*, 33(3), 274–284.
- Lin, R. (2018). Silver lining of envy on social media? The relationships between post content, envy type, and purchase intentions. *Internet Research*.
- Ling, Y., Gao, B., Jiang, B., Fu, C., & Zhang, J. (2023). Materialism and envy as mediators between upward social comparison on social network sites and online compulsive buying among college students. *Frontiers in Psychology*, 14. <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2023.1085344>
- Liu, P., He, J., & Li, A. (2019). Upward social comparison on social network sites and impulse buying: A moderated mediation model of negative affect and rumination. *Computers in Human Behavior*, 96, 133–140.
- Liu, Q.-Q., Zhou, Z.-K., Yang, X.-J., Niu, G.-F., Tian, Y., & Fan, C.-Y. (2017). Upward social comparison on social network sites and depressive symptoms: A moderated mediation model of self-esteem and optimism. *Personality and Individual Differences*, 113, 223–228.
- Loureiro, S. M. C., De Plaza, M. A. P., & Taghian, M. (2020). The effect of benign and malicious envies on desire to buy luxury fashion items. *Journal of Retailing and Consumer Services*, 52, 101688.
- Luo, Y., Eickhoff, S. B., Hetu, S., & Feng, C. (2018). Social comparison in the brain: A coordinate-based meta-analysis of functional brain imaging studies on the downward and upward comparisons. *Human Brain Mapping*, 39(1), 440–458.
- Mandolfo, M., Bettiga, D., Lamberti, L., & Noci, G. (2022). Influence of sales promotion on impulse buying: A dual process approach. *Journal of Promotion Management*, 28(8), 1212–1234.
- Mazli, M. bin, Ishak, M. F. bin, & Muhamed, A. A. bin. (2023). The Role of Status Consumption and Materialism in Influencing Attitude towards Counterfeit Fashion Product. *Information Management and Business Review*, 15(3(SI) SE-Research Paper). [https://doi.org/10.22610/imbr.v15i3\(SI\).3490](https://doi.org/10.22610/imbr.v15i3(SI).3490)
- Meier, A., Gilbert, A., Börner, S., & Possler, D. (2020). Instagram inspiration: How upward comparison on social network sites can contribute to well-being. *Journal of Communication*, 70(5), 721–743.
- Meier, A., & Schäfer, S. (2018). The positive side of social comparison on social network sites: How envy can drive inspiration on Instagram. *Cyberpsychology, Behavior, and Social Networking*, 21(7), 411–417.
- Moran, B. (2015). Effect of stress, materialism and external stimuli on online impulse buying. *Journal of Research for Consumers*, 27, 26.
- Moyal, A., Motsenok, M., & Ritov, I. (2020). Arbitrary social comparison, malicious envy, and generosity. *Journal of Behavioral Decision Making*, 33(4), 444–462.
- Nagadeepa, C., Selvi, J. T., & Pushpa, A. (2015). Impact of sale promotion techniques on consumers' impulse buying behaviour towards apparels at Bangalore. *Asian Journal of Management Sciences & Education*, 4(1), 116–124.

- Pahlevan Sharif, S., She, L., Yeoh, K. K., & Naghavi, N. (2022). Heavy social networking and online compulsive buying: the mediating role of financial social comparison and materialism. *Journal of Marketing Theory and Practice*, 30(2), 213–225.
- Pham, N. T., Tučková, Z., & Phan, Q. P. T. (2019). Greening human resource management and employee commitment towards the environment: An interaction model. *Journal of Business Economics and Management*, 20(3). <https://doi.org/10.3846/jbem.2019.9659>
- Piron, F. (1991). Defining impulse purchasing. *ACR North American Advances*.
- Pradipto, Y. D., Winata, C., Murti, K., & Azizah, A. (2016). Think again before you buy: The relationship between self-regulation and impulsive buying behaviors among Jakarta young adults. *Procedia-Social and Behavioral Sciences*, 222, 177–185.
- Qu, Y., Khan, J., Su, Y., Tong, J., & Zhao, S. (2023). Impulse buying tendency in live-stream commerce: The role of viewing frequency and anticipated emotions influencing scarcity-induced purchase decision. *Journal of Retailing and Consumer Services*, 75, 103534. <https://doi.org/https://doi.org/10.1016/j.jretconser.2023.103534>
- Ramanathan, S., & Menon, G. (2006). Time-varying effects of chronic hedonic goals on impulsive behavior. *Journal of Marketing Research*, 43(4), 628–641.
- Richins, M. L. (1995). Social comparison, advertising, and consumer discontent. *American Behavioral Scientist*, 38(4), 593–607.
- Richins, M. L. (2004). The Material Values Scale: Measurement Properties and Development of a Short Form. *Journal of Consumer Research*, 31(1), 209–219. <https://doi.org/10.1086/383436>
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303–316.
- Robinson, A., Bonnette, A., Howard, K., Ceballos, N., Dailey, S., Lu, Y., & Grimes, T. (2019). Social comparisons, social media addiction, and social interaction: An examination of specific social media behaviors related to major depressive disorder in a millennial population. *Journal of Applied Biobehavioral Research*, 24(1), e12158.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305–313.
- Rook, D. W., & Hoch, S. J. (1985). Consuming impulses. *ACR North American Advances*.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). *Partial Least Squares Structural Equation Modeling BT - Handbook of Market Research* (C. Homburg, M. Klarmann, & A. Vomberg (eds.); pp. 587–632). Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4_15
- Sneath, J. Z., Lacey, R., & Kennett-Hensel, P. A. (2009). Coping with a natural disaster: Losses, emotions, and impulsive and compulsive buying. *Marketing Letters*, 20, 45–60.
- Suls, J., & Wheeler, L. (2013). *Handbook of social comparison: Theory and research*. Springer Science & Business Media.
- Thompson, B., Diamond, K. E., McWilliam, R., Snyder, P., & Snyder, S. W. (2005). Evaluating the quality of evidence from correlational research for evidence-based practice. *Exceptional Children*, 71(2), 181–194.
- Tokgoz, E. (2020). Impact of materialistic values on impulsive and compulsive consumption via status consumption: a research on young consumers. *Business and Economics Research Journal*, 11(1), 261–278.

- Tran, V. D. (2022). Consumer impulse buying behavior: the role of confidence as moderating effect. *Heliyon*, 8(6), e09672.
- Ubel, P. A. (2009). *Free market madness: why human nature is at odds with economics--and why it matters*. Harvard Business Press.
- Usmani, S., & Ejaz, A. (2020). Consumer buying attitudes towards counterfeit and green products: application of social comparison theory and materialism. *South Asian Journal of Management*, 14(1), 82–103.
- Van Tran, D., Nguyen, T., & Nguyen, D. M. (2023). Understanding how upward social comparison stimulates impulse buying on image-sharing social commerce platforms: A moderated mediation model of benign envy and self-esteem. *Current Psychology*, 42(22), 18777–18792. <https://doi.org/10.1007/s12144-022-03042-w>
- Vohs, K. D., & Faber, R. J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. *Journal of Consumer Research*, 33(4), 537–547.
- Wang, W., Wang, M., Hu, Q., Wang, P., Lei, L., & Jiang, S. (2020). Upward social comparison on mobile social media and depression: The mediating role of envy and the moderating role of marital quality. *Journal of Affective Disorders*, 270, 143–149.
- Wang, Y. (2016). Social stratification, materialism, post-materialism and consumption values: an empirical study of a Chinese sample. *Asia Pacific Journal of Marketing and Logistics*, 28(4), 580–593.
- Want, S. C., & Saiphoo, A. (2017). Social comparisons with media images are cognitively inefficient even for women who say they feel pressure from the media. *Body Image*, 20, 1–6.
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, 68(4), 1–15.
- Yang, F., Tang, J., Men, J., & Zheng, X. (2021). Consumer perceived value and impulse buying behavior on mobile commerce: The moderating effect of social influence. *Journal of Retailing and Consumer Services*, 63, 102683.
- Zafar, A. U., Qiu, J., Li, Y., Wang, J., & Shahzad, M. (2021). The impact of social media celebrities' posts and contextual interactions on impulse buying in social commerce. *Computers in Human Behavior*, 115, 106178. <https://doi.org/https://doi.org/10.1016/j.chb.2019.106178>
- Zheng, X., Baskin, E., & Peng, S. (2018). The spillover effect of incidental social comparison on materialistic pursuits: The mediating role of envy. *European Journal of Marketing*, 52(5/6), 1107–1127.

Annexure I**Table 7: Scale development**

Social Comparison		6 items adopted from (Liu et al., 2019)
1	I always compare the way I perform tasks to the way others perform tasks	
2	In social situations, I am prone to comparing how I look to those who are more attractive than me	
3	I frequently compare my achievements in life to others.	
4	I attempt to discover other people's views on things I want to learn more about	
5	I enjoy discussing common interests and experiences with others.	
6	I am always fascinated by what others might do in a similar scenario.	
Materialism		6 items adopted from (Richins & Dawson, 1992)
1	I admire people who own expensive homes, cars, and clothes.	
2	The things I own say a lot about how well I'm doing in life	
3	I like to own things that impress people.	
4	I like a lot of luxury in my life.	
5	My life would be better if I owned certain things I don't have.	
6	It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like	
Impulse Buying		4 items adapted from (Sneath et al., 2009)
1	I buy things that I don't really need	
2	I buy things I normally wouldn't buy	
3	I buy things and later on don't know why I bought them	
4	I buy things I hadn't planned on purchasing	
Malicious Envy		5 items adopted from (Lange & Crusius, 2015)
1	When I envy others on social commerce platforms, I focus on how I can become equally successful in the future.	
2	If I notice that another person on social commerce platforms is better than me, I try to improve myself	
3	Envyng others on image- sharing social commerce platforms motivates me to accomplish my goals.	
4	I strive to reach other people's superior achievements that I saw on image-sharing social commerce platforms.	
5	On image-sharing social commerce platforms, if someone has superior qualities, achievements, or possessions, I try to attain them for myself.	
Promotional Campaigns		3 items adapted from (Liao et al., 2009)
1	I am easily attracted by price promotions.	
2	When it comes to price promotions, I cannot help but buying.	
3	The price promotion gave me a strong impulse to buy.	