Pakistan Journal of Commerce and Social Sciences
2025, Vol. 19(3), 648-672
https://doi.org/10.64534/Commer.2025.577

Addicted to the Fake: Coaction Theory and the Psychology Behind Counterfeit Consumption

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Article History

Received: 07 July 2025 Revised: 15 Sept 2025 Accepted: 21 Sept 2025 Published: 30 Sept 2025

Abstract

This study explores how behavioral addictions, specifically compulsive and addictive buying, shape counterfeit consumption through the mediating roles of hedonic motivation and social comparison. While prior research has explored maladaptive buying behaviors and counterfeit purchasing separately, limited attention has been given to their intersection within emerging markets. Drawing on coaction theory, this study integrates these constructs to explain how psychological dependencies translate into unethical consumption choices.

Data were collected from 944 young urban shopping mall consumers of Pakistan via self-administered questionnaires. The dataset was analyzed using SPSS 23 for preliminary analysis and AMOS 23 for covariance-based structural equation modeling. The findings confirm that both compulsive and addictive buying behaviors significantly influence counterfeit consumption indirectly through heightened hedonic and social comparison motives. These mediating mechanisms highlight that pleasure-seeking and peer conformity jointly sustain counterfeit demand among young consumers.

The study contributes to the literature by extending coaction theory into consumer psychology and demonstrating how behavioral addictions operate within collectivist, price-sensitive contexts. Policy-wise, the results underscore the need for awareness campaigns and regulatory strategies targeting emotional and social triggers of counterfeit consumption. Marketers and brand managers can also use these insights to design interventions that promote authentic consumption habits and reduce counterfeit apparel.

Keywords: Counterfeit buying behavior, compulsive buying behavior, addictive buying behavior, hedonic motivations, social comparison, coaction theory, Pakistan.

1. Introduction

Certain human behaviors are complex and are perceived as harmful to consumers and societies. Psychology expounds these complex and abnormal behaviors as maladaptive.

Maladaptive behaviors are typically classified as dysfunctional behaviors, where the individual feels an inability to adjust in particular situations. Such behaviors are often adopted as coping mechanisms to deal with stress and anxiety (Cachón et al., 2025). Within marketing and consumer research, counterfeit consumption behavior has been studied laboriously. Counterfeiting is referred to as replicating the genuine banded products, in the same design, color, packaging, and under the same trademark and logo (Wilcox, Kim, & Sen, 2009; Moon et al., 2018). Over the last three decades, counterfeiting has grown into a significant economic problem (Butt, et al., 2023; Zampetakis, 2014), impacting industries from apparel and electronics to pirated CDs and counterfeit pharmaceuticals. According to OECD and EUIPO (2025), in 2021, the global imports of counterfeit and pirated goods had a net worth of approximately USD 467 billion, which is expected to reach nearly USD 1.8-1.9 trillion by 2030 (Corsearch, 2025). The apparel industry, in particular, is severely affected, accounting for 62% of counterfeit trade with an estimated value of USD 290 billion (Razmus, Grabner-Kraeuter, & Adamczyk, 2024). The rampant growth of counterfeiting damages brand equity, reduces legitimate sales, and burdens societies with problems such as unemployment, tax evasion, and even the financing of criminal and terrorist activities.

Despite devoting substantial resources by companies, governments, and law enforcement agencies to counteract this phenomenon, counterfeit markets continue to expand. This persistence suggests that the drivers of counterfeit consumption are not only structural but also rooted in psychological and behavioral factors. In particular, counterfeit buying may share underlying dynamics with other maladaptive consumer behaviors that function as a coping mechanism in response to stress and emotional needs. This makes it important to examine counterfeiting within the broader context of behavioral addictions.

Research on behavioral addictions has highlighted maladaptive behaviors such as gambling, binge eating, pornography, internet use, sex, and shopping (Griffiths & Banyard, 2009). Among these behavioral addictions, compulsive buying and addictive buying have been studied extensively in consumer research (Pradhan, Israel, & Jena, 2018). Walters and Gilbert (2000) state that a common theme followed by addictive behaviors is that they are characterized by progression, preoccupations, loss of control, and long-term consequences.

Shopping, in particular, has evolved beyond the functional act of acquiring goods to become a form of entertainment, emotional compensation, and mood regulation (Moon & Attiq, 2018). Over time, habitual buying can escalate into behavioral addiction with harmful psychiatric outcomes (He, Kukar-Kinney, & Ridgway, 2018). While substantial research has examined maladaptive behaviors individually, the relationship between counterfeit consumption and behavioral addictions remains unexplored. This gap raises the question of whether these behaviors may reinforce one another and share common psychological underpinnings.

To address this gap, the current study explores the link between counterfeit consumption and behavioral addictions through the lens of coaction theory (Prochaska, 2008). While prior studies have utilized models such as the stimulus-organism-response (SOR) framework and the theory of planned behavior (TPB) (Ahamed, & Limbu, 2018; Bupalan, Rahim, Ahmi, & Rahman, 2019), this study extends coaction theory, traditionally applied in health sciences, to the domain of consumer behavior. By exploring this paradigm, the study seeks to provide deeper insight into how maladaptive tendencies interact and influence consumer decisions. In the context of developing economies such as Pakistan, this study holds particular importance. Pakistan represents one of the fastest-growing consumer markets in South Asia, where a youthful population, rising fashion consciousness, and limited purchasing power coexist with weak intellectual property enforcement. These factors collectively foster an environment in which counterfeit apparel consumption thrives. Despite the magnitude of the issue, limited scholarly attention has been paid to understanding the psychological and behavioral mechanisms driving counterfeit demand in Pakistan. By investigating how compulsive and addictive buying tendencies influence counterfeit apparel purchasing, this research offers context-specific insights into how hedonic appeal and social conformity shape consumer behavior in emerging markets.

The contribution of this research lies in bridging two domains of maladaptive behaviors: counterfeit consumption behavior and behavioral addictions. By integrating them with a single theoretical framework, the study not only extends the application of coaction theory into consumer research but also provides practical insights for policymakers, regulators, and brand managers. Understanding these behavioral drivers can help design interventions that are beyond supply-side enforcement, focusing instead on consumer education, therapeutic approaches, and preventive strategies.

The remainder of this manuscript is structured as follows. Sections 2 and 3 provide a comprehensive review of the relevant literature and outline the theoretical foundations that underpin the study. Section 4 details the research methodology, including the sampling procedures, measurement instruments, and analytical techniques. Section 5 presents the empirical findings and discusses them in light of existing theories and prior research. Finally, the last chapter concludes the study by summarizing key insights, highlighting theoretical and managerial implications, and suggesting limitations and directions for future research.

2. Conceptual Background

We have employed the coaction theory in the current study. The extent to which the performance of one behavior increases the odds of the performance of another behavior in the presence of some motivation is known as coaction (Johnson, Paiva, Mauriello, Prochaska, Redding, & Velicer, 2014). According to the Coaction theory, the performance of certain maladaptive behaviors will lead to the performance of certain other maladaptive behaviors. In our study, we assume that the performance of compulsive and addictive

buying leads consumers to perform counterfeit consumption in the presence of some motivations. We utilized the McGuire's Theory of Motivation (1976) to identify two broad categories of motivation, i.e., the hedonic motivations and social comparison motives. Hedonic motivations refer to the motivations that initiate those behaviors that enhance the positive experience or feelings and decrease the negative feelings and experience (Singh & Sahni, 2019). Social comparison means the comparison between oneself and others. The primary motive behind social comparison is to evaluate and acquire information about one's own self. Various researchers have suggested that people socially compare themselves with others for three reasons: self-evaluation, self-enhancement, and self-approval (Perinchery, 2023).

We assume that the consumers' behavioral addictions, such as compulsive buying behavior and addictive buying behavior, lead them to purchase counterfeits to fulfill their hedonic and social comparison needs.

3. Literature Review

3.1 Compulsive Buying Behavior

Compulsive buying behavior can be defined as a tendency in which a person experiences powerful repetitive and uncontrollable urges to shop (Yurchisin & Johnson, 2004; Edwards, 1993; Shapira, Goldsmith & McElroy, 2000; Faber & O'Guinn, 1992). Compulsive buyers often use shopping as a coping mechanism to alleviate negative emotions and stress (Tarka, Harnish, & Babaev, 2024; Bhatia, 2019). According to O'Guinn and Faber (1989), compulsive buyers do not buy often to obtain a utility from a product; rather, they purchase a product to experience the sense of gratification through the buying process itself. This is consistent with hedonic consumption theory (Arnold & Reynolds, 2012), which emphasizes pleasure, fun, and excitement as key drivers of consumption. Compulsive buyers love to shop, and the process of shopping gives them immense pleasure for a short period (Tarka & Kukar-Kinney, 2024). Thus, the motivation of compulsive buyers behind shopping in a shopping mall is to enhance positive feelings. Therefore, we posit that:

- H1: Compulsive buying behavior has a positive impact on hedonic motivation.

Compulsive buying refers to a maladaptive spending behavior characterized by persistent, uncontrollable, and repetitive urges to purchase items as a means of coping with stress, anxiety, or other negative emotions (Darrat, Darrat, & Darrat, 2023). Compulsive buying behavior in a particular setting, such as shopping malls, can be explained via the application of social comparison. Literature suggests that compulsive buyers use shopping to enhance their self-image. It can be argued that many individuals engage in increased consumption because products symbolically offer the promise of self-improvement or life enhancement. For example, critics often contend that the apparel and beauty industries perpetuate low self-esteem among women as a means of stimulating product demand (Hossain, Chang, &

Jones, 2025; Jang, Choi, & Seo, 2024). Consumer behavior scholars suggest that individuals exhibiting compulsive buying tendencies often possess low self-esteem and hold a negative self-concept (Faber & O'Guinn, 1992; Dittmar & Drury, 2000). To enhance their self-image and to gain approval from others, the compulsive buyers purchase apparel products (Ridgway et al., 2008; Jalees, Khan, Zaman, & Miao, 2024). Since compulsive buyers need to gain the approval of others, these individuals compare themselves with other people. The compulsive buyers conform to what others are purchasing and try to enhance their self-image by acquiring similar clothes. Bearden and Rose (1990) also suggested that compulsive buyers have a high probability of facing the pressure of other people and therefore, they rely more on social comparison. Therefore, we proposed that social comparison is an important motive for compulsive buyers to purchase apparel products.

- H2: Compulsive buying behavior has a positive impact on social comparison.

3.2 Addictive Buying Behavior and Hedonic Motivations

Addictive buying behavior is defined as a disruptive behavior of a consumer that is repeatedly performed despite the harmful consequences (Zamparo, 2025). Various studies indicate that addictive buying behavior is a response to an individual's feelings of inadequacy (Darrat, Darrat, & Darrat, 2023; Jain, Srivastava, & Shukla, 2023). Just like many other behavioral addictions, such as binge eating, sex addiction, gambling, etc., shopping addiction is also reported to be used as a coping mechanism to alleviate negative feelings by providing the addicts a sense of pleasure and short-term gratification (Basit et al., 2024). Previous studies reveal that the apparel shopping activity reinforces the behavior of an individual by providing them pleasure and joy, praise and attention (Park & Chun, 2023), and individuals purchase apparel products to seek enjoyment (Khelladi et al., 2024).

We may say that one of the primary motives of addictive buyers to purchase apparel products is to seek immediate gratification, excitement, and fun, and to alleviate negative feelings.

- H3: Addictive buying behavior has a positive impact on hedonic motivations.

3.3 Addictive Buying Behavior and Social Comparison

The most commonly identified personality characteristic of an addicted shopper is low self-esteem (Alic & Kadrić, 2024). Addictive buyers often attempt to restore self-confidence and enhance self-image through apparel shopping, with the belief that purchasing certain products can elevate social status and personal worth (McQueen et al., 2014). Prior research also indicates that the shopping habits of people with lower self-esteem turn into addiction when they purchase for the motive to enhance their self-image and bolster their self-esteem (Harnish and Bridges, 2015; Akin, 2025).

In addition to self-esteem repair, addictive buyers frequently engage in social comparison. They look to peers and reference groups for consumption cues and often shop to alleviate the insecurity that arises from comparing themselves unfavorably with others (Gao, Shen,

Lu, Xu, & Wu, 2024). This process is amplified in contexts where social approval and group belonging are tied to visible consumption.

The addictive buyers seek self-confidence and try to enhance their self-esteem via the purchasing activity and shopping for apparel products. Researchers suggest that irrational beliefs, such as purchasing a specific brand or item, will increase the self-image and social status of the individual, triggering the shopping behavior of individuals with low self-esteem (Liang, Li, Song, & Wang, 2024). Other scholars have also provided similar results that the shopping habits of people with lower self-esteem turn into addiction when they purchase for the motive to enhance their self-image and bolster their self-esteem (Harnish and Bridges, 2015). Many studies reveal that addictive shoppers often seek others' approval to compensate for low self-esteem. The individuals shop addictively as a coping mechanism to alleviate the unpleasant feelings and emotions that arise from comparing one's own self with others and feeling insecure about oneself. Many addicted buyers have a primary motive to please others through their shopping for apparel products. These individuals look to others for cues while shopping. Impressing and pleasing others is a way to gain social approval and, therefore, to belong to a certain social class (Wang, Yuan, Liu, & Luo, 2022).

- H4: Addictive buying behavior has a positive impact on social comparison.

3.4 Hedonic Motivation and Counterfeiting

The counterfeited products look exactly like the original branded products. This similar appearance gives emotional value to the purchaser, thus forming favorable emotions toward the counterfeited products (Moon et al., 2018). Consumers purchase counterfeits because they obtain similar products, with similar names, colors, design, under the same logos and trademarks, without having to pay for the original brand. The counterfeits are available in more variants than the original brand, which gives pleasure and excitement to the purchasers of counterfeits (Khan, Fazili, & Bashir, 2021). The purchasers of counterfeits seek newness and variety to experience and satisfy their curiosity (Nagar & Singh, 2019). Since the counterfeits are available at lower prices as compared to the original branded products, therefore, consumers purchase low-priced counterfeited goods to fulfill their need for variety-seeking, excitement, and joy (Farooq & Moon, 2025).

- H5: Hedonic motivations lead consumers to purchase counterfeited apparel products.

3.5 Social Comparison and Counterfeit Consumption Behavior

People purchase fashion-related products in response to confirm social expectations, as well as to express their true self-identity. Consumers give importance to branded apparel products and relate their prestige with different brands; moreover, the possession of brands helps them to signal class, hence to gain social approval. Many individuals are more inclined towards the symbolic value that is associated with the brands, rather than the

functional value. The brand carries certain symbolic meanings. Researchers suggest that brands today have become crucial as they signal the identities and lifestyles that are distinctive (Raimondo, Cardamone, Miceli, & Bagozzi, 2022). Literature suggests that many 'fashion-savvy' consumers prefer purchasing the imitated products of the legitimate brands because these consumers cannot justify the high prices of the seasonal clothing items. Moreover, the counterfeits provide the consumers with the same benefits of displaying class and gaining social approval without being heavy on their pockets.

- H6: Social Comparison motivations lead consumers to purchase counterfeit apparel products.

3.6 Mediation of Hedonic Motivation and Social Comparison

Previous literature indicates that counterfeits of apparel products provide excitement and a feeling of joy to the compulsive buyers, which, in turn, arouse positive feelings (Wang, et al., 2022). Compulsive buyers purchase more and more products to alleviate their negative feelings. Since the counterfeits are available at low prices as compared to the original brands, therefore, it gives an excuse to the compulsive buyers to shop excessively (Nagar, & Singh, 2019). The low price of the counterfeits also alleviates the feeling of guilt associated with excessive shopping (Faber & O'Guinn, 1992; Khan, Fazili, & Bashir, 2021).

- H7: Compulsive buyers purchase counterfeits to fulfill their needs for hedonic motivation.

Extant literature suggests that compulsive buyers purchase counterfeit apparel products or beauty management products when they have a desire to belong to a certain status or social class (Gao et al., 2022). Compulsive buyers have low self-esteem and to bolster their self-image and self-esteem, compulsive buyers purchase counterfeit apparel products. Literature suggests that one of the key motives behind counterfeit consumption is to signal social status and wealth to others. Compulsive buyers signal their social status by using brands (Moon, Faheem, & Farooq, 2022; Husain, Ahmad, & Khan, 2022). Therefore, the counterfeits of legitimate brands are an inexpensive way to send positive social signals to others.

- H8: Compulsive buyers purchase counterfeits to fulfill their needs for social comparison.

Previous research indicates that hedonic motives influence the addictive buyers to shop (Heredero & Rodríguez-Escudero, 2025; Ali, Li, Hussain, & Bakhtawar, 2024). Hedonic motivations are related to the positive feelings of excitement and pleasure that the shopping addict experiences whilst shopping. Various studies posit that addictive buyers experience a lift in their moods while shopping for counterfeit apparel products (Rose & Dhandayudham, 2014). Addictive buyers who experience an uncontrollable urge to buy purchase counterfeit apparel products to enhance their moods and to alleviate negative feelings. Although the addicted buyers worry about their spending habits, the low-priced

counterfeit apparel products of the authentic brand make them excited, and they revert to shop excessively.

- H9: Addictive buyers purchase counterfeits to fulfill their needs for hedonic motivations.

Previous studies indicate that one of the primary motives of addictive buyers to shop excessively is to socially compare themselves with others (Gao, Shen, Lu, Xu, & Wu, 2024). When the peers, friends, and family purchase counterfeit apparel products, the addictive shoppers also indulge in the activity of buying illicit brands. The addictive buyers take cues from what others wear and shape their manners in accordance with them so that they may fit into a certain class (Wilcox et al., 2009). Extant literature reveals that addictive buyers socially compare themselves with friends and family in their excessive buying patterns despite the negative consequences of extreme shopping (Mundel, Wan, & Yang, 2024). Branded products also cater to the interpersonal goals of an individual, such as demonstrating social status and social acceptance within certain social groups (Kim, Kikumori, Kim, & Kim, 2024). However, there are risks related to the purchase of original branded apparel products; therefore, the addictive buyers purchase the counterfeited apparel products to gain similar advantages as the original brand with lower risks (financial, change in trends and fashion). Therefore, we posit that:

- H10: Addictive buyers purchase counterfeits to fulfill their needs for social comparison.

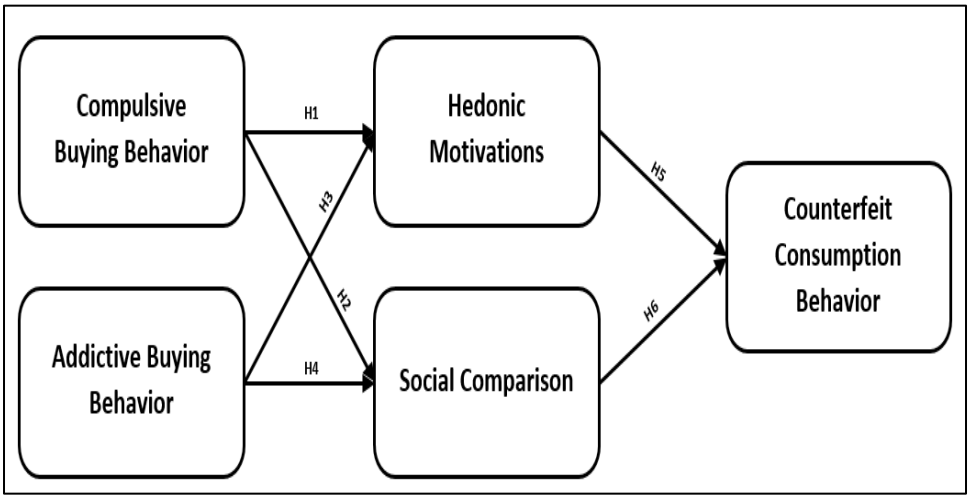

Figure 1: Theoretical Framework

4. Research Methodology

4.1 Sample

The target population of this study comprised young adults in Pakistan who purchase apparel products. According to the Pakistan Bureau of Statistics (2018), approximately 63% of the country's urban population falls within the 18-33-year age group. We selected this population because young adults are more prone to fashion-related products (Moon, Farooq, & Abbasi, 2018). Moreover, various studies have found that young adults have lower levels of psychological well-being, which may lead to a higher tendency to develop behavioral addictions (Moon, Rasool, & Attiq, 2015). The sample of this study consisted of a total of 944 systematically intercepted (every third) consumers of apparel products from shopping malls, between the ages of 18 and 33 years. Most incidences of excessive buying behaviors occur in the shopping mall settings because the consumers are motivated by many contextual factors (Horváth & Adıgüzel, 2017; Moon & Attiq, 2018). Therefore, we considered shopping mall consumers as the most appropriate respondents for our study.

The sample size for this study was determined based on established guidelines. According to Hair, Black, Babin, and Anderson (2019), an appropriate sample size should include approximately 5 to 10 observations for each estimated parameter, ensuring sufficient statistical power and model stability. Based on this guideline, we require a sample size of at least 175 respondents (5 x 35 items = 175). Second, according to the widely accepted rule of thumb, Kline (2015) suggested that for conducting structural equation modelling (SEM), the data required should not be lower than 200. Third, researchers in the fields of compulsive buying, addictive buying, and counterfeit consumption behavior conducted their studies with sample sizes around 331 respondents and considered it sufficient (Kukar-Kinney, Scheinbaum, & Schaefers, 2016; Moon et al., 2018; Tang & Koh, 2017). Therefore, a sample size of 944 respondents were considered appropriate for the purpose of this study.

4.2 Measures

To measure the study's constructs, we adopted all the instruments from previous literature. We adopted four items of compulsive buying behavior from Moon and Attiq (2019). Four items of addictive buying behavior were adopted from Moon and Attiq (2018). Five items of hedonic motivations were adopted from Voss et al. (2003). Four items of social comparison and counterfeit consumption were adopted from Lennox and Wolfe (1984) and Augusto de Matos et al. (2007), respectively. Furthermore, the questionnaire also included demographic variables, such as income, age, gender, and frequency of buying.

4.3 Data Collection Method

We collected the data via self-administered questionnaires from the systematically intercepted shopping mall consumers from five big cities of Pakistan, namely Lahore, Islamabad, Multan, Faisalabad, and Karachi. Data were collected exclusively from shopping malls that met two criteria: (1) the availability of clothing-related retail outlets

and (2) a consistently high footfall. In each city, a team of four trained researchers, two males and two females, personally administered the survey at these selected malls. These researchers were provided with the necessary training for data collection. The research team approached shoppers located near clothing retail areas within the selected malls. Every third individual encountered was invited to participate in the survey. The researchers briefly described the purpose of the study to potential respondents and requested their voluntary participation. Those who agreed were informed about the academic nature of the research and assured that their responses would remain confidential and be used solely for scholarly analysis. We initially approached 3531, systematically intercepted consumers in the shopping malls, and only 1522 gave consent to participate in the survey. Out of the 1522 respondents, we excluded 149 respondents because they did not meet the inclusion criteria of the study. The inclusion criteria required that participants be (1) at least 18 years of age and (2) have purchased a clothing-related item during their current shopping trip. Based on these criteria, 1373 individuals qualified to take part in the study and were provided with the questionnaires. Of these, 230 either did not return the survey or discontinued midway. After excluding incomplete responses and those missing demographic details, a total of 944 valid questionnaires were retained for final analysis.

4.4 Data Analysis Procedures

The dataset was first screened and coded using SPSS 23. Structural equation modeling (Sem) was then employed via AMOS 23 to test both the measurement and structural models. We opted for the covariance-based SEM instead of PLS because of the theoretical and methodological objectives of the study.

First, the objective of the current study is to test and confirm existing theories, rather than to make predictions. CB-SEM is widely recommended when the purpose of the study is to test and validate an existing theoretical model (Hair, Black, Babin, & Anderson, 2019). Furthermore, the nature of our constructs is reflective rather than formative. CB-SEM is better suited for reflective measurement models where the latent variable explains the variance of its indicators (Sarstedt, Ringle, & Hair, 2020). PLS-SEM is considered more appropriate for formative constructs, exploratory models, or prediction-based studies.

Although demographic variables (such as age, gender, and income) were collected in the self-administered questionnaires, no control variables were included in the structural model, because the current study aims to confirm the theoretical relationships. Since our focus is on validating the theory-driven links, we did not include demographic controls in the structural model. Adding control variables could dilute the effects of interest. This approach is consistent with prior studies in compulsive buying and counterfeit consumption literature, which have typically examined these relationships directly without demographic adjustments (Kukar-Kinney, Scheinbaum, & Schaefers, 2016; Moon & Attiq, 2018).

5. Data Analysis, Results and Discussion

Before moving to the data analysis, we screened the data to identify and remove all possible errors from the data set, which would otherwise hamper the results. We first identified and treated the missing values with the help of the mean of the corresponding variable (Gallagher, Lopez, & Pressman, 2017). There were no cases of aberrant values in the data set. A few outliers in the data set were treated with the mode of the corresponding variable. We also assessed the normality of the data with the help of skewness and kurtosis. The values of skewness and kurtosis were within the recommended threshold of ±1 and ±3, respectively, as suggested by Tabachnick and Fidell (2007). Additionally, the variance inflation factor (VIF) and tolerance values (VIF < 10; Tolerance> 0.10) indicated the absence of multicollinearity issues among the independent variables in the study. To address potential common method bias (CMB), both procedural and statistical remedies were applied, and the results confirmed that the dataset was free from significant CMB concerns (Podsakoff et al., 2012).

5.1 Sample Demographics

The final sample consisted of an equal proportion of male and female respondents, with females representing 50% of the total. A majority of participants (79%) were between 18 and 22 years of age, and most reported a monthly income ranging from PKR 1000 to 30,000.

5.2 Structural Equation Modeling

To conduct the structural equation modeling (SEM), we followed a two-step approach, suggested by Anderson and Gerbing (1988), where we first established the reliability and validity of the scales and then tested the structural model for the proposed hypothesis.

We performed the confirmatory factor analysis with five latent and 19 observed variables. In the initial run of the CFA, model fit indicated a poor fit. In the re-specification of CFA, we eliminated the items with low factor loadings (FL< 0.6). The items with low squared multiple correlations (SMC < 0.2) were also deleted (Kline, 2015). Furthermore, the items having standardized residual covariance greater than 2.58 were also eliminated (Byrne, 2001). After removing the problematic items, the model fit indices indicated a best fit with CMIN/DF= 2.52, CFI=.973, GFI=.968, AGFI=.953, TLI=.964, NFI=.956, IFI=.973, RMSEA=.040, and PClose=.997. Furthermore, we also assessed the reliability, convergent, and discriminant validity to test the strength of the measures of the constructs. We measured the reliability with the values of Cronbach's alpha, composite reliability and average variance extracted. The values of Cronbach's alpha > 0.7 and CR>0.7 indicate the reliability of the constructs. Moreover, the values of AVE > 0.5 are also an indication that the constructs have achieved reliability. Table number 1 shows that all the constructs exceed the recommended threshold values of Cronbach's alpha, CR, and AVE, thus indicating the reliability of the constructs.

Table 1: Results of Confirmatory Factor Analysis

SN	Items	Factor Loadings	SMC	Mean	SD
Compulsive Buying Behavior					
CB1	My closet has unopened shopping bags in it.	.767	.588	4.49	1.511
CB2	Others might consider me a 'shopaholic'.	.701	.492	4.71	1.555
CB3	Much of my life centers around buying things.	.759	.577	4.69	1.562
Addictive Buying Behavior					
AB1	I feel "high" when I go on shopping/buying.	.726	.392	2.75	1.136
AB2	I worry about my spending habits but still go out and shop/buy things.	.798	.487	2.85	1.222
AB3	I try to cut down on shopping/buying without success.	.726	.367	2.77	1.192
Counterfeit Consumption Behavior					
CNT1	I would intend to buy Counterfeit Clothing & Accessories.	.759	.577	4.42	1.611
CNT2	My willingness to buy Counterfeit Clothing & Accessories is high.	.777	.604	4.27	1.621
CNT3	I am likely to purchase any Counterfeit Clothing & Accessories.	.726	.527	4.24	1.595
Hedonic Motivations					
HD1	Purchasing Fashion Clothing is fun.	.674	.454	3.85	1.73
HD2	Purchasing Fashion Clothing is exciting.	.628	.394	4.19	1.69
HD3	Purchasing Fashion Clothing is delightful.	.757	.572	4.23	1.72
HD4	Purchasing Fashion Clothing is thrilling.	.809	.654	4.27	1.73
HD5	Purchasing Fashion Clothing is enjoyable.	.778	.605	4.29	1.67
Social Comparison					
SC2	At parties I usually try to behave in a manner that makes me fit in.	.670	.448	4.31	1.62
SC3	I try to pay attention to the reactions of others to my behavior in order to avoid being out of place.	.779	.606	4.72	1.63
SC4	I tend to pay attention to what others are wearing.	.739	.546	4.51	1.62

We further assessed the convergent and discriminant validity of the measurement model using multiple established criteria. According to Fornell and Larcker (1981), an Average

Variance Extracted (AVE) value greater than 0.50 demonstrates convergent validity. Similarly, high and significant factor loadings, factor loadings greater than 0.60, confirm that the indicators reliably represent their respective constructs (Hair et al., 2019). In addition, Kline (2015) suggested that convergent validity is achieved when the Composite Reliability (CR) of each construct exceeds its corresponding AVE, the AVE value is above 0.50 (CR≥ AVE≥ 0.50). As shown in the table below, all constructs in this study meet these conditions, each exhibiting AVE values above 0.50 and factor loadings above 0.60, thereby confirming satisfactory convergent validity.

To establish discriminant validity, three criteria were applied. First, the square root of AVE for each construct should exceed the correlations between that construct and others (√AVE > r >) (Fornell & Larcker, 1981). Second, all items should exhibit strong and significant loadings on their respective constructs (FL > 0.60). Third, relatively low inter-construct correlations provide further evidence of discriminant validity (Hair, Black, Babin, & Anderson, 2019). In the below table, all constructs satisfied these criteria, thereby demonstrating discriminant validity.

Table 2: Results of Convergent and Discriminant Validity

	Variables	α	CR	AVE	SC	AB	CB	CNT	HD
1	**Social Comparison**	.739	0.774	0.534	**0.731**				
2	**Addictive Buying**	.720	0.788	0.554	0.259	**0.645**			
3	**Compulsive Buying**	.744	0.787	0.552	0.534	0.123	**0.743**		
4	**Counterfeit Consumption**	.800	0.798	0.569	0.513	0.239	0.576	**0.754**	
5	**Hedonic Motivations**	.854	0.851	0.536	0.469	0.309	0.481	0.476	**0.732**

5.3 Structural Model and Hypotheses Testing

The full latent structural model was tested to examine the hypothesized relationships. Model fit indices indicated an acceptable model fit (CMIN/DF= 3.88, AGFI= 0.93, GFI= 0.95, CFI= 0.95, IFI= 0.95, NFI= 0.93, TLI= 0.93, RMSEA= 0.04, and PCLOSE= 0.06). the model explained 42% of the variance in counterfeit consumption (R2 =0.46, $p < 0.05$), 32% in hedonic motivations, and 36% in social comparison. These values indicate substantial explanatory power for consumer behavioral models in social psychology and marketing domains (Hair et al., 2019).

Compulsive buying behavior (H1: $\gamma = 0.50$, $p < 0.05$) and addictive buying behavior (H2: $\gamma = 0.26$, $p < 0.05$) positively influenced hedonic motivations. These results support previous studies that suggest that consumers pursue shopping primarily for pleasure, excitement, and mood enhancement (Ran & Wan, 2023). Furthermore, the extant literature also suggests that compulsive buying behavior and addictive buying behavior are more hedonic in nature (Tarka, Harnish, & Babaev, 2023).

The current study extends this by highlighting that young Pakistani mall consumers face strong triggers, such as promotional displays, peer visibility, and brand availability, which make it difficult for them to control impulses. This echoes Hu et al., (2023), who observed similar dynamics in Chinese online consumers, suggesting that hedonic motivations may act as a cross-cultural driver of compulsive buying behavior.

Further, the results suggest that compulsive buying behavior (H3: $\gamma = 0.56$, $p<0.05$) and addictive buying behavior (H4: $\gamma = 0.21$, $p <0.05$) positively impact social comparison. This finding aligns with social comparison theory (Festinger, 1954), which posits that individuals evaluate themselves by comparing themselves to others. Consistent with the literature (Mundel, Wan, & Yang, 2024; Liu et al., 2024), our results indicate that Pakistani consumers adopt comparison-based shopping motives to conform to social norms. In collectivist societies, consumers often rationalize counterfeit purchases as a means to maintain social harmony and avoid losing face (Kim, Kikumori, Kim, & Kim, 2024). Importantly, in collectivist cultures, such as Pakistan, the social comparison motive may be stronger than in individualist societies. While U.S. studies show compulsive buyers seeking individual identity validation, our findings suggest that Pakistani consumers are motivated to "fit in" with group standards. The results imply that shopping mall consumers who are preoccupied with shopping thoughts notice the reaction of others with regard to their behavior. These individuals repeatedly shop for counterfeit apparel products to comply with what others are wearing so that they do not stand out of place. At the shopping malls, social pressure exists because individuals see a lot of people purchasing apparel products. The compulsive buyers rely on the social comparison information and may achieve greater anticipation of the approval of others while purchasing at the shopping malls.

Hedonic motivations were also found to significantly predict counterfeit consumption behavior (H5: $\gamma =0.15$, $p < 0.05$). This indicates that consumers who derive pleasure and excitement from shopping are more inclined to purchase counterfeit apparel products, which offer novelty, variety, and aesthetic satisfaction at a lower cost. The findings align with prior studies that link counterfeit consumption with experiential and emotional gratification rather than functional utility (Sharma & Chen, 2017). More recent research supports this notion, showing that counterfeit buyers often rationalize their behavior by focusing on the hedonic and social value of the purchase while maintaining ethical and legal concerns (Kim et al., 2024). In Pakistan's price-sensitive and status-oriented market, counterfeit products serve as accessible alternatives that allow consumers to experience the symbolic and sensory rewards of branded goods without financial strain, echoing findings from other emerging Asian economies (Singh & Sahni, 2019).

Similarly, social comparison exerted a positive effect on counterfeit consumption behavior (H6: $\gamma =0.19$, $p <0.05$). This demonstrates that individuals who frequently compare themselves with others are more likely to purchase counterfeit apparel to project an image

of belonging or success. Consumers motivated by social approval and recognition rely on counterfeit goods as a cost-effective means of displaying desired social symbols (Wilcox, Kim, & Sen, 2009; Islam et al., 2025). Such patterns are consistent with the growing literature on identity signaling, which finds that both authentic and counterfeit brands fulfill interpersonal goals such as demonstrating social status and achieving acceptance within valued social groups (Petrescu et al., 2025).

Table 3: Result of Hypotheses

Paths			γ	p-values	Decision
CB	→	HD	0.50	0.001	Accepted
CB	→	SC	0.44	0.001	Accepted
AB	→	HD	0.26	0.001	Accepted
AB	→	SC	0.075	0.001	Accepted
HD	→	CNT	0.17	0.001	Accepted
SC	→	CNT	0.23	0.001	Accepted

Furthermore, the mediation analysis using the bootstrapping method with 5000 resamples (Hair, Black, Babin, & Anderson, 2019) confirmed the indirect effects of hedonic motivation and social comparison. Hedonic motivation partially mediated the relationships between compulsive buying (H7: $\gamma = 0.12$, $p = 0.01$) and addictive buying behavior (H8: $\gamma = 0.10$, $p = 0.01$) and counterfeit consumption behavior. This suggests that individuals experiencing stress or guilt from overspending often continue shopping to regain emotional balance. The availability of low-priced counterfeit apparel products reignites their excitement and serves as a justification for repeated indulgence, despite self-awareness of financial excess. These findings are consistent with the emotional-regulation perspective of shopping addiction (Heredero et al., 2025), emphasizing that hedonic pleasure acts as both a trigger and a temporary coping mechanism for addictive buyers.

Social comparison also mediated the relationship between compulsive buying (H9: $\gamma = 0.15$, $p = 0.001$), addictive buying (H10: $\gamma = 0.14$, $p = 0.001$), and counterfeit consumption behavior. This confirms that compulsive and addictive buyers rely on social cues to validate their self-worth, often mirroring the consumption habits of peers or admired figures to maintain social inclusion. The tendency to conform and display status through consumption has been noted in several cultural contexts (Kim et al., 2024). Within Pakistan, where social identity and appearance play critical roles in collective self-evaluation, counterfeit luxury brands provide an accessible medium for such conformity.

Overall, these findings reinforce the premise of Coaction Theory, suggesting that behavioral addictions such as compulsive and addictive buying operate synergistically with emotional (hedonic) and social (comparison) mechanisms to shape consumers' choices. The study extends the literature by situating these mechanisms within a collectivist and price-sensitive market, offering evidence that both hedonic gratification and social belonging jointly sustain counterfeit consumption.

Table 4: Results of Mediation

	Paths					Direct Effect		Indirect Effect		R2	Mediation
						Γ	p-value	γ	p-value		
WOM	CB	→	CNT			0.577	0.001	-	-	0.33	Mediation
WM	CB	→	SC	→	CNT	0.427	0.001	0.152	0.001	0.39	Mediation
WM	CB	→	HD	→	CNT	0.458	0.001	0.122	0.001	0.38	Mediation
WOM	AB	→	CNT			0.247	0.001	-	-	0.06	Mediation
WM	AB	→	SC	→	CNT	0.122	0.013	0.143	0.001	0.28	Mediation
WM	AB	→	HD	→	CNT	0.101	0.033	0.102	0.001	0.24	Mediation

6. Study Implications, Limitations, and Future Research

6.1. Theoretical Implications

This study extends the application of Coaction Theory (Prochaska, 2008; Johnson et al., 2014) to consumer behavior by illustrating how one maladaptive consumption behavior can facilitate another in the pursuit of psychological fulfillment. Coaction theory posits that engaging in one maladaptive or abnormal behavior increases the likelihood of performing another because both serve parallel emotional and motivational needs. Consistent with this theoretical premise, our findings reveal that compulsive and addictive buying behaviors act as antecedents to counterfeit consumption, mediated by hedonic and social comparison motivations. This demonstrates that excessive buying not only satisfies emotional arousal and pleasure but also extends to counterfeit purchasing as an accessible means of sustaining gratification and reinforcing identity.

By situating counterfeit consumption within a framework of behavioral coaction, this study contributes to a more integrated understanding of maladaptive consumer psychology. Prior studies have typically examined compulsive and addictive buying and counterfeit consumption in isolation; our results show that these are not distinct pathologies but interdependent manifestations of a shared maladaptive system. The study thus advances coaction theory by confirming that consumer addictions do not operate independently but reinforce one another.

Furthermore, our findings extend coaction theory by introducing a socio-cultural layer of coaction. While traditional applications of the theory emphasize individual-level self-regulation, our results reveal that collectivist cultural factors, such as face-saving, peer conformity, and social identity, amplify the relationship among maladaptive behaviors. In Pakistan's collectivist context, individuals pursue counterfeit goods not merely for personal pleasure but to maintain social belonging and status parity.

6.2. Practical Implications

From a managerial perspective, the findings hold important implications for brand strategists, policymakers, and behavioral intervention designers. Although excessive shopping behaviors temporarily boost sales, they contribute to unstable demand cycles and high product returns, ultimately damaging long-term brand equity. Marketers must, therefore, design campaigns that balance commercial incentives with consumer well-being. Specifically, advertising strategies should incorporate responsible messaging, warning consumers about the emotional and financial consequences of compulsive buying while highlighting the authenticity, durability, and ethical superiority of genuine products.

For legitimate brand marketers, differentiating authentic products from counterfeits requires more than visual distinction; it demands an emotional and moral repositioning. Campaigns should emphasize the integrity, reliability, and emotional satisfaction associated with genuine ownership while subtly framing counterfeit consumption as socially and morally discreditable. Messaging that appeals to self-respect, pride, and authenticity may counter the peer-driven appeal to counterfeits.

Policy implications emerge at a broader institutional level. Regulators and enforcement agencies should collaborate to reduce counterfeit markets through consumer education programs, targeting the psychological motives behind counterfeit purchases, and behavioral interventions that reshape social norms around counterfeit acceptance. Stronger penalties, digital anti-counterfeiting technologies, and reward-based public reporting systems could further disincentivize participation in counterfeit markets.

6.3. Limitations and Future Research

While this study makes valuable theoretical and practical contributions, several limitations offer avenues for future research.

Firstly, the study utilized a cross-sectional research design, which limits the ability to establish causal relationships among behavioral addictions and counterfeit consumption. Future studies could adopt longitudinal or experimental designs to examine how one abnormal or maladaptive behavior evolves into another over time, providing temporal validation of coaction theory in consumer contexts.

Secondly, the research relied on self-reported measures, which may be prone to social desirability bias, particularly given the sensitive nature of counterfeit consumption. Subsequent studies should consider behavioral observation or purchase tracking to capture more objective behavioral data.

Third, while this study confirmed the emotional and social pathways of coaction, other psychological mechanisms, such as self-control, guilt proneness, moral disengagement, and materialism, remain unexplored. Integrating these constructs would strengthen the explanatory scope of coaction theory and identify additional mediators of maladaptive consumption.

Lastly, the current literature focused primarily on apparel-related counterfeit consumption. Future research could expand into digital and experiential domains, such as NFTs, streaming piracy, or virtual goods, to examine whether digital consumption replicates the same coaction mechanisms observed in tangible goods markets.

Research Funding

The authors received no research grant or support for this research study.

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