

Personality Dimensions and Compulsive Buying Behavior among Female Students: A Predictive Analysis

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DOI: <https://doi.org/10.70670/sra.v4i1.1680>

Abstract

Background: Compulsive Buying Disorder (CBD), also known as oniomania, is now becoming an increasing psychological issue for many students entering college. This condition affects more females attending college due to their unique pressures financially and socially during their transition into being independent.

Purpose: The intent of this study was to investigate if personality traits measured through the Big Five Personality Factors (Extraversions, Agreeableness, Conscientiousness, Neuroticism, and Openness to New Experience) determined how compulsively a female student at Gujrat would engage in CBB.

Methods: A cross-sectional survey design was used to collect data from 500 female undergraduate and graduate degree students. Convenient sampling technique was used to select the sample size. The Richmond Compulsive Buying Scale (RCBS) and the Big Five Inventory-2 Short version (BFI-2XS) was used to measure. The study used Pearson product-moment correlation and a multiple linear regression analysis (MLR) using SPSS 26.

Results: The multiple regression analysis results indicated that only 3.6% of the variance in CBD could be explained by the Big Five Personality Factors; therefore this result marginal does not support to reject the null ($p = .052$). Alternatively, the analysis by each individual participant revealed that the two personality traits found to positively predict compulsive shopping were Extraversion (with a beta coefficient of .15 and a p -value of .011) and Neuroticism (with a beta coefficient of .16 and a p -value of .009). All three additional personality traits, i.e., Conscientiousness, Agreeableness, and Openness to Experience, were not found to predict compulsive shopping in the current sample. Therefore, it can be concluded from these findings that emotional instability and sociability are correlated with the likelihood to exhibit compulsive consumption among female college students. Even though only a small amount of variation in the compulsive consumption behavior was explained by the personality traits, the results suggest there is a need for developing targeted programs to foster the emotional regulation and social-capital-seeking behaviors of those exhibiting compulsive consumption behaviors through psychological treatment and financial literacy programs.

Keywords: Compulsive Buying Behavior, Personality Traits, Big Five Model, Female University Students, Neuroticism, Extraversion.

Introduction

Transitioning to university life is a significant developmental milestone that is typically associated with higher levels of independence as well as one's first experience managing finances independently (Borjas et al., 2020). Women are prone to additional social pressures that stem from being marketed products, which can often exacerbate the potential for using maladaptive consumption behaviours (Baniashraf et al., 2025). CBB (Compulsive Buying Behaviour), also referred to as oniomania, has become a major mental health issue (Granero et al., 2016). Knowing how to use fixed personality dimensions to predict these behaviours will help identify those who are at risk and develop effective psychological treatment options for use in the future.

Personality Dimensions

Personality dimensions refer the more or less permanent ways in which individuals think, act, and feel, thereby setting them apart from other people (Allport 1961). Under this larger construct of personality are personality traits; these traits are the stable characteristics that demonstrate how individuals have the same general tendency and do the same types of things (Haehner et al., 2023). The Big Five Model (Widiger & Crego, 2019) has proven to be the best scientific tool to use as a framework through which to quiz about someone's personality dimensions.

- 1. Neuroticism:** the degree of experiencing negative feelings such as anxiety or depression.
- 2. Extraversion:** the amount of outgoing or sociable energy produced.
- 3. Openness to experience:** the degree to which individuals are willing to entertain new ideas and do not conform to conventional standards.
- 4. Agreeableness:** how willing or cooperative is one toward other individuals in terms of kindness or being empathetic.
- 5. Conscientiousness:** how organised, persistent and motivated to reach a goal are individuals.

Personality Dimensions in Female Students

The research shows that there are differences in how personality traits are expressed based on gender, likely as a result of some biological reasons, as well as the gender role society has implemented. Female college students have been found to score higher than male college students in terms of both their levels of Neuroticism and Agreeableness (Weisberg et al., 2011). As a result, these females are using the traits of Neuroticism to cope with stress, and those with Neuroticism have been shown to utilize external stimuli such as shopping for emotional regulation (Xie et al., 2025).

Compulsive Buying Behaviour (CBB)

CBB is defined as an obsession with shopping/buying that includes repeated preoccupation with purchasing and the presence of intrusive (urgent) buying impulses which the individual perceives as out of their control or completely nonsensical. (Müller et al., 2015).

CBB and University Students

CBB is becoming increasingly common among students due in part to the ability to use credit cards and due to the presence of a culture promoting "retail therapy" seen throughout social media. Students often use shopping to cope with the stress of their studies and meet their desire to belong socially (Andreassen, 2015). Studies have indicated that university aged females are at a much greater risk of developing CBB due to the cultural influences such as the importance of their appearance and how that is linked to their identity (Black, 2007).

Factors Affecting Compulsive Buying Behavior (CBB)

Personality Traits (The Five-Factor Model)

The blueprint for consumer choice is made up of the internal characteristics of people known collectively as personality (Li & Yu, 2022). Women's purchasing choices are consistent with separate, personality characteristic traits that indicate a tendency for excessive purchasing, as in the following examples:

Neuroticism: Emotional Instability and an extreme level of emotional instability leads to some students using shopping as a means to cop and relieve themselves of anxiety or excessive nervousness (Li et al., 2022; Erzincanlı et al., 2024).

Low Conscientiousness: An inability to exercise self-control results in some students' immediate gratification behaviors, resulting in impulsive, financial behavior (Bai, 2023).

Extraversion: High levels of extraversion are related to a specific purchasing characteristic pertaining to a student's desire or "need" for social belonging and validation within their social peer group through purchasing (Pagani et al., 2013).

Psychological & Emotional drivers of consumer purchasing often accompany the emotional state of individuals when making a purchase (Rodrigues et al., 2021). Examples include the following characteristics:

Mood Regulation: As a means of providing themselves with a "dopamine rush," shopping is often utilized as a coping strategy by students experiencing extreme levels of academic pressure while desiring to escape from their negative feelings (Müller et al., 2019)

Environmental and Sociocultural Factors

Women have been shown to be influenced more heavily by social media related marketing than men (e.g., Instagram) this includes how women perceive themselves and how they see what other women are doing and whether or not they should be doing the same thing (Dai et al., 2025).

Materialism: The idea that one can find happiness through having things is one of the main ways that personality and buying behaviour interact (Xie et al., 2022).

Social Media (including Instagram's FOMO): the costs associated with curated lifestyles, leading many women to buy things so they can be seen as 'relevant' to society (Bartosiak et al., 2025).

Table-1: Summary of Predictive Variables

Factor Category	Specific Variable	Direction of Effect
Personality	Neuroticism	Positive (+)
Personality	Conscientiousness	Negative (-)
Sociocultural	Materialism	Positive (+)

The Relationship between Variables

There is a strong indication that one's personality can be used to predict CBB. The first indicator of this is Neuroticism and CBB, which is the most reliable predictor. High neuroticism students tend to shop to reduce negative feelings or compensate for emptiness (Cleveland Clinic, 2024). The next indicator is conscientiousness and CBB, which is negatively correlated. Those with low conscientiousness typically do not have sufficient self-control and future-oriented thinking, both of which are necessary to prevent impulsive shopping (Wang et al., 2022).

Significance of the Study

The importance of this research is that it supports university counselor's ability to identify students who are at risk of becoming addicted before they incur significant debts. This research is particularly valuable because it quantifies some differences in CBB's personality characteristics among females, thus allowing gender-specific mental health assistance to address important issues such as social

anxiety and self-esteem. Also, findings from this research will assist in designing financial literacy programs that promote an understanding of CBB and how it relates to both the "math" of spending and the "psychology" of spending.

Objective of the Study

- ◆ To determine the predictive role of Personality Dimensions (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience) on the compulsive buying behavior among female students.

Methodology

Setting of the Study

The study was conducted in the universities (private and government) located in Gujrat.

Study Design

A cross-sectional survey research design was used. This design was good for measuring the relationship between personality traits and compulsive buying at one time.

Target Population

The target population consisted of female university students aged 18 years and above, studying in different departments of public and private universities.

Sample Size

The sample size (N) for the study was 500 university female students.

Sampling Technique

A convenience sampling technique was used. Female students were contacted in educational settings, public spaces within the university, and digital communication platforms utilized by them. This approach was preferred due to practicality, ease of access, and time conservation.

Inclusion Criteria

Female students enrolled in a university program, whom aged was 18 years and above. They were willing to voluntarily participate were included in study.

Exclusion Criteria

Participants who reported severe psychological disorders. Incomplete or invalid questionnaires were excluded from the study.

Measurement Tools

Demographic variables

The participant's age, educational level, financial status and social media usage duration were included on demographic sheet.

Richmond Compulsive Buying Scale (RCBS)

The RCBS is a brief, 6-item self-report instrument developed by Ridgway et al. (2008). It utilizes two distinct response formats to capture the complexity of the behavior: Impulsivity Dimension: Items measure the lack of control over the "urge" to buy. Obsessive-Compulsive Dimension: Items measure the preoccupation and intrusive thoughts regarding shopping. Participants rate the items on a 7-point Likert scale (ranging from 1 = strongly disagree to 7 = strongly agree). Higher total scores indicate a stronger predisposition toward compulsive buying behavior. A total score of 25 or higher is typically used as the clinical cutoff to identify "compulsive buyers." In the original validation study, the scale demonstrated high internal consistency with a Cronbach's alpha of .89. For the current study, the scale yielded a reliability coefficient of .87, confirming its suitability for this population of female university students.

Big Five Inventory–2 XS (BFI-2-XS)

The Big Five Inventory - 2 Extra-Short Form (BFI-2-XS) was utilized to evaluate the personality dimensions of the participants in this study. The BFI-2-XS is a short version of the full BFI-2 that was specifically developed for use in research contexts where efficiency is highly desired, without compromising the psychometric properties (Soto & John, 2017). The BFI-2-XS was composed of

(15) sixteen items used to measure each of the five only domains of personality (i.e. Extraversion, Agreeableness, Conscientiousness, Negative Emotionality [Neuroticism] and Open-Mindedness). Each domain was measured with three items. Each of these statements (e.g., "is systematic, likes to keep things in order") was rated on a 5-point Likert type scale (1 = strongly disagree, 5 = strongly agree). The BFI-2-XS was chosen for this study because it provided the ability to decrease participant fatigue while maintaining a high level of correlational and predictive validity when compared to the original 60-item BFI-2. The BFI-2-XS scales showed strong reliability coefficients (Cronbach's alpha) that ranged from .65 to .85, which aligns with results shown in the original validation study conducted by Soto and John (2017).

Procedure

After taking permission from scale author, the research procedure started. Data were collected through a self-administered online questionnaire distributed via university email groups, learning management systems, and social platforms commonly used by students. Prior to taking the questionnaire, individuals were presented with an informed consent document outlining the study's purpose, privacy information, and the ability to withdraw at any point. Completing the survey took about 10 to 15 minutes per individual. Every answer was written down without names to make people feel free to be honest and not care if it was right or wrong.

Statistical Analysis

Data were analyzed using SPSS version 26. Descriptive statistics (mean, standard deviation, frequencies) were used to summarize demographic variables and scale scores. Reliability was checked for the scales, Cronbach's alpha was used. The relationship between personality types and compulsive shopping was tested with Pearson correlation. Multiple regression analysis was applied to identify personality predictors of compulsive buying. A significance level of $p < .05$ was considered for all analysis.

Ethical consideration

Participation was voluntary, and participants could withdraw at any time without penalty. No identifying information was collected, and all data were stored securely and used only for academic research purposes.

Results

Table-1: Multiple Regression Analysis Predicting Compulsive Buying from Personality Traits among Female Students (N = 500)

Predictor	B	SE B	β	t	P
Constant	12.24	3.76	-	3.26	.001
Extraversion	0.49	0.19	.15	2.55	.011*
Agreeableness	-0.05	0.20	-.01	-0.24	.813
Conscientiousness	0.10	0.21	.03	0.48	.632
Neuroticism	0.40	0.15	.16	2.61	.009*
Openness	-0.11	0.20	-.03	-0.52	.601

Note. $R = .19$, $R^2 = .036$, Adjusted $R^2 = .020$. $F(5, 294) = 2.23$, $p = .052$.

Dependent variable = Compulsive Buying (CB). * = $p < .05$.

A multiple linear regression analysis was conducted to examine whether Big Five personality traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness) predict Compulsive Buying (CB). The overall regression model explained 3.6% of the variance in compulsive buying behavior, $R^2 = .036$, Adjusted $R^2 = .020$. This indicates a small effect size, suggesting that personality traits account for a limited proportion of variability in compulsive buying. The model approached but did not reach conventional statistical significance, $F(5, 294) = 2.23$, $p = .052$. Thus, the overall predictive model is marginally non-significant. Despite the overall model being marginal, two personality traits emerged as significant predictors of compulsive buying. Extraversion significantly

positively predicted compulsive buying ($\beta = .15, t = 2.55, p = .011$). This suggests that individuals higher in extraversion are more likely to engage in compulsive buying behaviors. Neuroticism also significantly positively predicted compulsive buying ($\beta = .16, t = 2.61, p = .009$). This indicates that individuals with higher emotional instability and negative affectivity tend to show greater compulsive buying tendencies. All the other following variables were non-significant predictors of compulsive buying.

Discussion

Neuroticism's association with compulsive buying (positive relationship: $\beta = .16, p = .009$), therefore, can imply that many university students shop as a way of coping. Those who are higher in neuroticism tend to experience chronic negative affect (e.g., anxiety, self-doubt), which has led to the idea of compulsive buying as a compensatory consumption for people who are trying to remedy their negative affective state or improve their self-concept (Aquino & Lins, 2023). The company of students who are extraverted demonstrated a positive association with compulsive buying (positive relationship: $\beta = .15, p = .011$) (Shehzadi et al., 2016). The association does demonstrate that while individuals with neuroticism are motivated by their negative affect, those individuals with extraversion are typically motivated by the rewards they receive for their acknowledgment from the people around them as well as having a desire to achieve a certain amount of social status. Extraverted students are more involved in social activities/engaging in visible accumulations (conspicuous consumption) (Speed et al., 2018). Compulsive buying may be one way for extraverted individuals to create/maintain their desired image in society and create a sense of social belonging (Yurchisin & Johnson, 2004). The lack of significance in the dimensions of Conscientiousness, Agreeableness, and Openness is also an important observation. Multiple studies indicate that individuals with low Conscientiousness are likely to exhibit compulsive buying, as they demonstrate a higher propensity for poorly controlling their impulses (Qureshi et al., 2025). This may simply not apply to university entrants due to the newness of their environment and social pressures (as defined by Extraversion and Neuroticism) being larger contributing factors than individuals' general levels of self-discipline (Yu et al., 2024). The 3.6% of variance in compulsive buying behavior that can be attributed to personality, compulsive buying is not only influenced by personality but also by the availability of student credit (i.e., newly established credit accounts), aggressive targeted advertising via social media, and the upheaval associated with entering university (Otero-López, 2022).

Conclusion

The findings suggest that extraversion and neuroticism play a meaningful role in predicting compulsive buying behavior, whereas agreeableness, conscientiousness, and openness do not contribute significantly. Although the overall model explains a relatively small amount of variance, the results highlight the importance of emotional instability and sociability-related traits in understanding compulsive buying.

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