

DETERMINANTS OF COMPULSIVE BUYING BEHAVIOR: PSYCHOSOMATIC - SOCIAL ANALYSIS OF MALADAPTIVE SPENDING

MUHAMMAD IQBAL RANA

Institute of Business Administration, University of the Punjab, Lahore.
Correspondence Author E-mail: ysfhs2@gmail.com

Dr. SANIA ZAHRA MALIK

Professor, Institute of Business Administration, University of the Punjab, Lahore.

Abstract

Compulsive buying behavior must be considered in consumer research. Social science, psychology, and medicine have long discussed the negative effects of this behavior irrespective of its positive aspects. The current empirical investigation of the mediating role of compulsive buying behavior between a variety of psycho-somatic-social antecedents including depression, anxiety, stress, materialism, the need for uniqueness, the lack of self-control, and repurchase intentions among university students. In addition, the study explores the moderation effect of credit purchase facilities on compulsive buying. A questionnaire was used to collect data in survey research. The sampling unit and sample size were determined using multistage clusters sampling. A total of 900 questionnaires were distributed to university students. Using SPSS and Amos, 781 valid questionnaires were selected for analysis and testing the proposed model. Anxiety, depression, and stress are key triggers of compulsive buying behavior and repurchase intentions. Additionally, materialism, desire for uniqueness, and lack of self-control were positively correlated with compulsive buying behavior. Compulsive buying behavior mediated the relationship between CBB and CRI. Furthermore, credit card usage was found to have a significant negative impact on CBB and CRI. Based on the results, the results add to existing literature on compulsive buying, repurchase intentions, and credit card usage in developing countries. The current study on compulsive buying behavior may benefit society, academicians, marketers, and retail researchers. For future studies, consumption patterns and coping strategies that chronicle excessive consumption in developing countries can be useful.

Keywords: Determinants, Compulsive buying behavior, Repurchase intention, credit card usage, positive aspects

1. INTRODUCTION

A consumer's emotional response to a product and their enjoyment of it play a vital role in their decision-making process (Griffin et al., 2000). Globally, some researchers categorized unnecessary buying is a problem (Kukar-Kinney, Ridgway & Monroe, 2009). As a means of amusement, meeting daily needs, and expressing individuality, shopping has become a necessity for consumers. Shopping is a vital, convenient, and socially acceptable form of entertainment. People increasingly shop to gain immediate satisfaction and pleasure (Elliott, 1994).

Such shopping inclinations boost global market sales, and compulsive purchases are induced. Shopping compulsively is an excessive behavior of consumers. The topic has attracted scholars across the globe for more than three decades (Dittmar, 2005a; Manolis & Roberts, 2008). Negative events or feelings trigger recurrent and continuing shopping episodes. Shopping addiction results from an overwhelming desire to consume and shop.

Globalization, glocalization, technology, and social media-enabled world have led to compulsive buying (Raab, Elger, Neuner & Weber, 2011). Compulsive buying is associated with stress, depression and anxiety (Mueller & Szolnoki, 2010). Compulsive buyers accumulate things to compensate for unfortunate life events, to enhance self-esteem, and to enhance self-identity.

Fincher and Thornhill (2012) also encourage consumers to buy products to feel better about themselves by alleviating depression, anxiety, stress, and sadness of moods. According to O'Guinn and Faber (1989), compulsive buyers buy to alleviate negative psychological states. Young females are more likely to have it (Christenson et al., 1994). Furthermore, the behavior is associated with clothing, shoes, jewelry, and cosmetics (Christenson et al., 1994; McElroy, Keck, & Phillips, 1995; O'Guinn & Faber, 1989).

McElroy et al. (1994) described compulsive buying as an "uncontrollable urge to shop". "Urges to buy" can lead to temptations, meddling, senseless, or regular purchases of unnecessary or expensive products. According to Roberts and Manolis (2000), frequent buying has increased due to compulsive buying. It is a behavioral addiction from a scientific, histological, and pathological standpoint. Sometimes compulsive buying behavior may affect financial, social, and professional roles. There are some negative consequences associated with excessive buying.

In addition to the consumer, shopping addiction affects their friends and families, as uncontrollable impulses to buy can cause trouble for them as well. Whereas, Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) does not list compulsive buying as a behavioral addiction. Although compulsive buying is not a part of the disorder, most studies focus on its negative aspects and categorized it as a disorder. On the other side, according to some scholars, compulsive buying alleviates depression, anxiety, stress, and sadness.

This provides joy, self-satisfaction, self-identity, and social uniqueness while shopping (Black, 2007). Therefore, it has been found that compulsive buyers repeat their purchases again and again to get rid of negative emotions and to increase their self-identity, which has received little research. A negative approach to compulsive buying does not provide complete and concrete information.

To understand how compulsive buying affects society, we need to understand its positive aspects. Negative research is more prevalent than balanced consumption research. Business and psychological researchers ignore the positive aspects of such behavior (She, Rasiah, Waheed & Sharif, 2021; Rana & Malik, 2022).

The current study addressed the timely and relevant issue for business research that how determinants of compulsive buying behavior influences consumers' repurchase intentions. The research is important not only from theoretically but also marketing perspective.

This study examines how compulsive shopping behavior can mediate depression, anxiety, stress, materialism, uniqueness needs, and lack of self-control among university

students. The study also examines repurchase intentions among consumers. In this study, we assume that psychosomatic-social factors drive compulsive shopping behavior, which ultimately results in repurchase intentions. At the point of purchase, credit facilities further enhance this relationship. As a result, this study highlights the positive role compulsive buying plays in consumer behavior.

2. LITERATURE REVIEW

2.1 Compulsive buying behavior

Over the past three decades, little has been done to determine consumers' repurchase intentions. In previous studies, consumers' negative behavior was described only by indicators of compulsive behavior. Compulsive buyers have significantly higher rates of sadness, depression, stress, and self-restraint disorders than the general population. Compulsive buying behavior increased to 95% among female consumers in 2001 (Black, 2007). Koran et al. (2006) find that 5.8% of Americans display compulsive behavior. A 6.9% rate of compulsive behavior was reported by Muller et al. (2011).

Repetitive or poorly controlled preoccupations, urges, or shopping behaviors are key to compulsive buying. Eventually, these intrusive and irresistible thoughts lead to repeat buying episodes with adverse financial, personal, and social consequences (Kyrios et al., 2018). As Christenson et al. (1994) argue, negative emotions often lead to compulsive buying. Sometimes, compulsive buyers may feel guilt or remorse after doing too much shopping.

According to Mueller et al. (2011), excessive internet use, materialism, and depression are related and found prevalence of 17% compulsive behavior among participants. Sharif and Khanekharab (2017) found that 8.7% of mall visitors are obsessive shoppers. Using the Edwards Compulsive Buying Scale, Weinstein et al. (2016) found an association between anxiety and compulsive buying.

Müller, Mitchell, and de Zwaan (2011) analyzed literature from 1994 to 2013 and found positive relation among negative emotions and compulsive buying behavior. The study by Quoquab (2015) elaborated compulsive consumption. They dig out that low self-esteem triggers compulsive buying behavior. A low self-esteem affects compulsive buying indirectly; materialism directly. Lee and Workman (2015) found that women are more likely to engage in such behaviors.

According to available studies, compulsive shopping is not contemporary. Furthermore, consumers purchase to enhance their individuality and self-completeness (Schlosser, Black & Repertinger, 1994; Mitchell et al., 2006). The argument is also supported by social and psychological theories. Previously, repurchase intentions of consumers have been studied in a scattered pattern (Hellier, Geursen, Carr, & Rickard, 2003). The current study examined repurchase intentions in relation to compulsive behavior determinants, its mediating role and moderated role of credit card usage as well.

2.2 Materialism and Compulsive Buying Behavior

Sidanius and Pratto (2003) defined social dominance as group-based support for categories. Social dominance tends to maintain status stability and maintain inequalities between groups. Also, people who have a high level of social dominance prefer material goods and use their position to their advantage (Unnever, Cullen, & Barnes, 2017). The relationship between consumerism and compulsive buying has been extensively researched. In essence, materialistic values believe that acquiring material goods is the key to happiness and success (Richins, 2004).

A materialistic consumer perceives the upper class as possessing status-conscious and prestigious possessions (Richins & Fournier, 1991). Materialistic consumers may buy products that enhance their quality of life in accordance with their values (Wang & Wallendorf, 2006). According to Rindfleisch, Burrouhs, and Denton (1997), family structure, materialism, and compulsive buying correlate positively. Some recent studies have linked materialistic values to compulsive behavior. A study by Dittmer (2014) found that material values predict compulsive behavior.

As Rose (2007) argues, materialism and narcissism contributes to compulsive buying. Therefore, it can be concluded that compulsion buying mediated between materialism and consumers' repurchase intention, which reinforces the notion that materialism is a crucial antecedent.

H1: Consumer's materialism is positively associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

2.3 Need for Uniqueness and Compulsive Buying Behavior

According to Stryker and Burke (2000), self-identity influences compulsive behavior. Individuals' self-identity describes their social role and contribution to society (Stets & Burke, 2003). People's self-identity is determined by their place in society, which determines their performance. In addition, Stets and Biga (2003) examined self-identity. Buying and consumption behaviors are predicted by consumer self-identity, according to Arnocky, Stroink, and DeCicco (2007).

In order to distinguish themselves from others, consumers need uniqueness (Asshidin, Abidina, & Borhanb, 2016). Perner & Roessler (2010) suggest individuals may wish to distinguish themselves. People engage in self-distinguishing behaviors to differentiate themselves from others.

Buying products that are unique facilitates consumers' self-expression and distinguishing behavior (Maraz, Griffiths, & Demetrovics, 2016). The need for uniqueness makes symbolic self-completion consumers compulsive (Gollwitzer, 1986; Wicklund & Gollwitzer, 1981; Gollwitzer, Wicklund & Hilton, 1982). As a result, people express themselves in order to be differentiated (Gollwitzer, Wicklund & Hilton, 1982). To establish their self-identity, people purchase, wear, and represent products (Yurchisin & Johnson, 2004). Dittmar and Drury (2000) argue consumers hide self-discrepancies by engaging in consumption. Purchasing these products boosts their self-image and social standing.

Compulsive buying is also explained by Self-Completion theory (Wicklund & Gollwitzer, 1981) and Social Identity theory (Tajfel & Turner, 1978). The study examined consumers' addictive behavior using these theories. Van der Werff, Steg, & Keizer (2013) found that self-identity triggers consumer repurchase intention through compulsive buying. In this way, according to Arnocky, Stroink, & DeCicco (2007), consumer' need for uniqueness influences compulsive buying which further influence consumer repurchase intention.

H2: Consumers' need for uniqueness is positively associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

2.4 Stress, Anxiety, Depression, and Compulsive Buying Behavior

Psychosomatic and social distress are compulsive buying symptoms (McElroy et al., 1994). Compulsive shopping is defined as buying based on mood or obsession. Consumer-compulsive behavior is heavily influenced by stress, anxiety and depression. Williams (2012) argues that compulsive buying behavior results due to tension, depression, and low self-esteem. Some researchers briefed that compulsive buying behavior is associated with anxiety (Billieux, Rochat, Rebetz, & Van der Linden, 2008; Davenport, Houston & Griffiths, 2012). Moreover, Christenson, Faber, and Mitchell (1994) discovered anxiety is associated with compulsive buying. Lejoyeux and Weinstein, (2010) elaborated that anxiety and depression are strongly linked to compulsive behavior.

People who suffer from depression or anxiety behave compulsively. Depression, anxiety, and sadness cause compulsive buying (Frost, Tolin, Steketee, Fitch, & Selbo-Bruns, 2009; Mueller et al., 2011). According to McElroy et al. (1994), depression increases the likelihood of compulsive buying. Shopping fantasy relieves anxiety, depression, and sadness (Lejoyeux et al., 1997). Stress act as stimuli and consumers go for shopping to decrease the level of negative emotions which explain why people shop. Thus, stress, anxiety and depression influences a person's behavior to go for shopping. Consumers enjoy please and fun to get rid of these negative emotions. Studies show that compulsive buying behavior is motivated by depression, anxiety, and stress (Scherhorn, Reisch, & Raab, 1990).

H3: Depression is positively associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

H4: Anxiety is positively associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

H5: Stress is Positively Associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

2.5 Self-Control and Compulsive Buying Behavior

Compulsive buyers are surrounded by urges and emotions of stress, anxiety, and depression. Compulsive behavior is influenced by psychological, socio-demographic, and biological factors. According to Baumeister and Newman (1994), low self-control causes social and personal problems, Self-control helps individuals to break bad habits, resist temptations, and maintain discipline. Hofmann, Friese and Strack (2009) found that self-

control is directly related to positive outcomes, goal achievement, and emotional regulation. Several studies have found that self-control lowers the tendency to buy compulsively. In order to relieve anxiety, stress, and uneasiness, consumers engage in compulsive buying behavior (Claes et al., 2011).

In previous research, it has been found that as the degree of self-control increased, compulsive behavior decreased. The compulsive buyer displays increased impulsivity and self-control deficits. Many scholars found that self-esteem decreased, depression and anxiety increased, and materialistic orientation increased (Dittmar, 2005; Faber & Vohs, 2004; Mueller et al., 2011; Rose, 2007).

As a result, Black (2007) defines compulsive buying as an excessive or poorly controlled urge, preoccupation, or behavior. Excessive shopping is resulted due to experience of lack of self-control worldwide indicating uncontrolled buying (American Psychiatric Association, 1994). A lack of self-control leads to compulsive buying through which people go for shopping to release preoccupied emotions and shopping urges. Numerous studies link compulsive buying behavior to lack of self-control and preoccupied thoughts (Lejoyeux, Tassain, Solomon & Ades, 1997; Ahtziger et al., 2015).

H6: Consumer Lack of Self-Control is positively associated with Consumer's Repurchase Intention through Compulsive Buying Behavior.

2.6 Credit Facility and Compulsive Buying Behavior

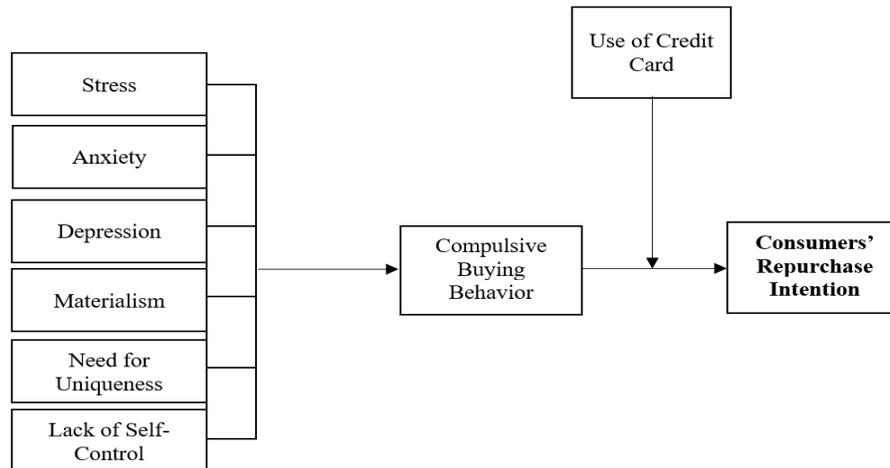
Consumers who are compulsive, typically spend a large portion of their income on products that enhance their self-identity and status. Despite financial crises and accumulated debts, compulsive buyers continue to purchase to amuse themselves. Some use credit cards to satisfy their playfulness (Koran et al., 2006; Bernthal, Crockett & Rose, 2005). Meier and Sprenger (2010) found a link between excessive buying behavior and credit card use. The use of credit cards has also been linked to reduced self-control and increased compulsive spending (Neuner, Raab & Reisch, 2005).

According to several studies, credit cards increase the tendency for buyers to buy excessively (Scherhorn et al., 1990). Nga, Yong, & Sellappan (2011) analyzed that credit card usage is associated with compulsive buying. Consequently, credit availability affects psychological determinants of compulsive buying behavior and contributes to excessive consumption.

H7: The Use of Credit Card Moderates the relationship of Compulsive Buying Behavior and Consumer's Repurchase Intention.

3. THEORETICAL FRAMEWORK

Research Model (Psychosomatic-Social Model)



The research model of the study is given in Figure 1.1. The path model shows that determinants of compulsive buying behavior (Anxiety, Depression, Stress, Materialism, Consumers' Need for Uniqueness, and Lack of Self-Control) are positively associated with compulsive buying behavior and consumers' repurchase intention. Further, the model measures the mediating relationship between compulsive buying behavior and the determinants of CBB and consumers' repurchase intention. The model also indicates the moderating role of credit card usage in the relationship between compulsive buying behavior and consumers' repurchase intentions.

4. METHODOLOGY

Various methods were used to measure the relationships of theoretically model. The current study was conducted to investigate factors influencing compulsive buying behavior and repurchase intentions in the pakistani apparel market. A survey was used to collect data. In order to ensure generalizability, a sample of students from Pakistani universities. Sample of survey was concluded using probability sampling technique. At first stage, Pakistan was divided into four clusters i.e. Punjab, Kpk, Baluchistan, and Sindh. A ballot method was used to determine one province i.e. Punjab. At second stage, the province is divided into nine clusters on the basis of division. To get the homogeneous sample, one university from each cluster was selected using simple random sampling. In addition, departments were selected based on their consistency across participating universities. A census was conducted to determine the departments. The sample size is determined by the item response theory i.e. calculate sample size as (10:1), i.e., ten respondents per item (Van der linden & Hambleton, 1997). According to the 10:1 rule, 75 questions would require 750 responses. Therefore, 900 questionnaires were distributed to nine universities across Punjab. Furthermore, two departments were selected based on similarities and differences. Finally, fifty (50) questionnaires were

distributed in each department through a self-administrative survey. After discarding 19 incomplete cases, 781 questionnaires were selected for data analysis. Data management included post-data collection screening, cleaning, normalizing, and ensuring reliability and validity. Further data is examined to check model fitness using correlation analysis, CFA, and SEM. data was analyzed using SPSS 25 and AMOS 23.

5. RESULTS

5.1 Respondents' Demographic Profile

Table 5.1

Demographic Profile of the Respondents		Frequency	Percent
Gender	Male	326	41.70
	Female	455	58.30
Age	18-35	716	91.7
	36-50	65	8.3
Qualification	Under graduate	339	43.4
	Graduation	286	36.6
	Post-Graduation	104	13.3
	Doctorate	52	6.7
Occupation	Student	781	100.0
Institution Name	University of Punjab	90	11.5
	Comsats University Sahiwal	96	12.3
	Government College University of Faisalabad	92	11.8
	Islamia University of Bahawalpur	84	10.8
	University of Central Punjab	97	12.4
	Agriculture University Rawalpindi	78	10.0
	Bahauddin Zakryia University Multan	82	10.5
	Ghazi University DG Khan	80	10.2
	University of Sargodha	82	10.5
Name of Department	Business Administration	405	51.9
	Engineering and Science	376	48.1
Income	10,000-50,000	174	22.3
	51,000-100,000	350	44.8
	101,000-200,000	206	26.4
	201,000 and above	51	6.5
Marital Status	Married	164	21.0
	Un Married	617	79.0

5.2 Reliability Analyses:

In order to ensure the reliability of the adapted scales, a reliability test was conducted. The Cronbach Alpha test was used to determine the scale's reliability. In order to be considered reliable, Cronbach Alpha should exceed 0.7.

Table 5.2: Reliability Analyses

Variable	Items	α
Compulsive buying behavior	24	.97
Materialism	6	.88
Depression	7	.96
Stress	6	.97
Anxiety	4	.96
Need for uniqueness	9	.96
Loss of self-control	10	.93
Credit Card use	6	.93
Repurchase intention	3	.89

5.3 Correlation Analysis

Study variables are correlated using correlation analysis. Correlation analysis describes the strength and direction of associations among variables (Ostrom, 1990; Zou, Tuncali & Silverman, 2003). Values with positive and negative signs indicate the direction of the relationship. The correlation coefficient, denoted by "r," is the absolute value of power, and the acceptable range is 0 to 1. The signs "-" and "+" indicate negative or positive associations between variables. There are several ways to measure the correlation between variables in statistics, but Spearman and Pearson correlation coefficients are more reliable. For calculating the linear correlation between dependent and independent variables, the Pearson correlation coefficient is more appropriate. In general, Spearman correlation coefficients are most suitable for ordinal scale variables (Zou, Tuncali & Silverman, 2003). A Pearson correlation coefficient was used to measure the association between variables in the current study. Correlation analysis results are presented in Table 5.22.

Table 5.3: Pearson Correlation between Study Variables

	CBB	Depression	Stress	Anxiety	NFU	LSC	CC	RPI	Materialism
CBB	--								
Depression	.923**	--							
Stress	.903**	.949**	--						
Anxiety	.918**	.948**	.941**	--					
NFU	.930**	.881**	.860**	.879**	--				
LSC	.945**	.896**	.877**	.887**	.911**	--			
CC	.911**	.879**	.862**	.869**	.894**	.902**	--		
RPI	.868**	.809**	.821**	.824**	.842**	.855**	.832**	--	
Materialism	.877**	.827**	.805**	.821**	.891**	.858**	.835**	.808**	--

Note. (CBB=Compulsive buying behavior, Depression= Depression, Stress= Stress, Anxiety= Anxiety, NFU=Need for uniqueness, LSC=Loss of self-control, CCU=Credit Card Use, RPI=Repurchase intention, and Materialism= Materialism), ** $p < .001$ (2-tailed).

Table 5.3 presents the correlation values. Purchasing behavior, depression ($r = .92$, $p .001$), stress ($r = .90$, $p .001$), anxiety ($r = .91$, $p .001$), NFU ($r = .93$, $p .001$), LSC ($r = .94$, $p .001$), CCU ($r = .91$, $p .001$), RPI ($r = .86$, $p .001$), and materialism ($r = .87$, $p < .001$). Furthermore, it indicates a significant correlation between depression, stress, anxiety ($r = .94$, $p < .001$), NFU ($r = .88$, $p < .001$), LSC ($r = .89$, $p < .001$), CCU ($r = .87$, $p < .001$),

RPI ($r = .80, p < .001$), and materialism ($r = .82, p < .001$). Anxiety ($r = .94, p .001$), NFU ($r = .86, p .001$), LSC ($r = .87, p .001$), CCU ($r = .86, p .001$), RPI ($r = .82, p .001$), and materialism ($r = .80, p .001$). In addition to anxiety ($r = .87, p < .001$), LSC ($r = .88, p < .001$), CCU ($r = .86, p < .001$), RPI ($r = .82, p < .001$), and materialism ($r = .82, p < .001$). NFU positively correlated with LSC ($r = .91, p .001$), CCU ($r = .89, p .001$), RPI ($r = .84, p .001$), and materialism ($r = .89, p .001$). LSC and CCU are positively correlated ($r = .90, p .001$), as are RPI and materialism ($r = .85, p .001$). The CCU positively correlates with RPI ($r = .83, p .001$), as well as materialism ($r = .83, p .001$). Materialism and RPI have a positive and significant correlation ($r = .80, p .001$).

5.4 Structural Equation Modeling (SEM):

According to Testa (2001), structural equation modeling uses multiple indicators to test theoretical models. It is only used for testing theories, not developing them (Anderson & Gerbing, 1988). An indicator's validity is determined and a structural model is developed in structural equation modeling (SEM). An application of structural equation modeling is the assessment and estimation of causal links through statistical analysis (Byrne, 2001). SEM also checks linear regressions, but using multiple models at once. SEM was used in the present study to analyze quantitative data since multiple regression equations can be run simultaneously. Validating measurement and structural models is a crucial component of SEM analysis. In order to separate good from poor models, there is no single fit index or "magic" value. Model fitness cannot be determined by a single cut-off value for all sizes and structures in measurement and SEM models. Fit indices depend heavily on a model's characteristics, sample size, and complexity, according to Hair et al. (2014).

To evaluate the model's fitness, previous literature recommended strict and lenient indices. A model with CMIN/DF equal to or less than 3.00 is considered fit, but it cannot be applied to large or complex models due to its sensitivity. Scholars have also suggested that #5 may also be acceptable in some cases (Kline, 2005; Hair et al., 2014). Further, Goodness of Fit (GFI) is calculated if the RMSEA value is less than or equal to 0.158, while Comparative Fit Index (CFI) is calculated if the RMSEA value is greater than 0.90 (Kukar-Kinney et al., 2009). The comparative fit index (CFI) is considered excellent with a value greater than 0.95, good with a value less than 0.95 but more significant than 0.90, and acceptable with a value less than 0.90 but more significant than 0.80.

Table 5.4: CFA Model fit

Model	CMIN/DF	CFI	AGFI	PNFI	RFI	P-Close	RMSEA
Observed Value	2.86	0.95	0.80	0.856	0.919	0.894	0.049

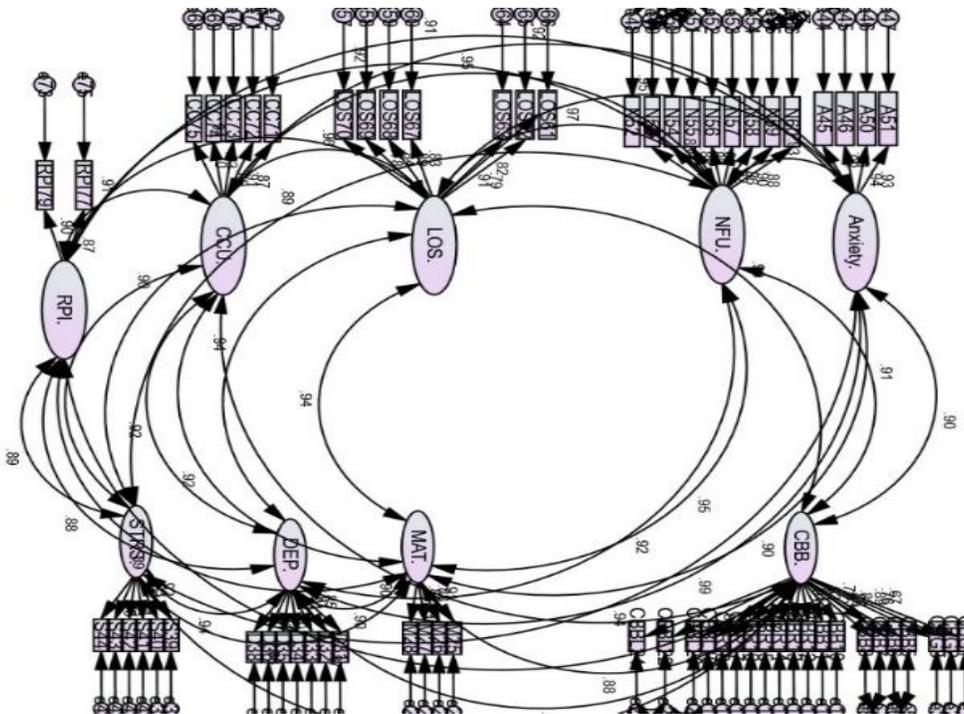
Table 5.5: SEM Model fit

Model	GFI	CFI	AGFI	RFI	TLI	RMR
Observed Value	0.967	0.99	0.804	0.919	0.954	0.017

5.5 Confirmatory Factor Analysis:

A confirmatory factor analysis was used to verify the fit of the proposed model (Kline & Tamer, 2016). Based on previously validated measures, we assessed the reliability of data collected through a questionnaire. CFA was demonstrated and a measurement model was justified. Loading values and model fit criteria are described below.

Figure 5.1: CFA Model



5.6 Structural Equational Modeling and Hypotheses Testing:

After the measurement model testing through Confirmatory factor analysis (CFA), the second step was to test the structural model. As discussed in the previous chapter of the theoretical framework and literature review section, the hypotheses of the current study were developed based on the previous literature and theories. The below Table 5.6 shows the path coefficient values of direct relationships of independent and dependent variables.

Table 5.6: Direct paths without Mediation

Variables	Relationships	β	SE	CR	p	Result
CBB	<--- Depression	.11	.02	3.54	.000	Significant
CBB	<--- Stress	.09	.02	3.88	.000	Significant
CBB	<--- NFU	.21	.02	8.14	.000	Significant
CBB	<--- LSC	.38	.03	15.23	.000	Significant
CBB	<--- Anxiety	.14	.02	4.63	.000	Significant
CBB	<--- MASIC	.08	.02	4.18	.000	Significant
RPI	<--- CBB	.87	.02	48.08	.000	Significant

Table 5.6 shows the direct path coefficients computed by AMOS 23. It has been found that depression positive and significantly predicts the CBB ($B = .11, p = .000$), stress positive and significantly predicts CBB ($B = .09, p = .000$), NFU positive and significantly predicts CBB ($B = .21, p = .000$), LSC positive and significantly predicts CBB ($B = .38, p = .000$), anxiety positive and significantly predicts CBB ($B = .14, p = .000$), MASIC positive and significantly predicts CBB ($B = .08, p = .000$), and Compulsive buying behavior positive and significantly predicts RIP ($B = .87, p = .000$).

Table 5.7: Direct Impact without Mediator

	Variable Relationship		β	SE	CR	p
RPI	<---	Anxiety	.19	.04	3.28	.00
RPI	<---	Depression	-.26	.05	-4.14	.000
RPI	<---	Stress	.30	.04	6.65	.000
RPI	<---	NFU	.16	.05	3.18	.00
RPI	<---	LSC	.38	.06	8.06	.000
RPI	<---	MASIC	.16	.05	4.14	.00

In Table 5.7, direct effects have been computed with the help of AMOS 23. Findings of the study suggests that anxiety positive and significantly predicts repurchase intention (RPI) ($B = .19, p = .00$), depression negative and significantly predicts RPI ($B = -.26, p = .000$), stress positive and significantly predicts RPI ($B = .30, p = .000$), NFU positive and significantly predicts RPI ($B = .16, p = .000$), LSC positive and significantly predicts RPI ($B = .38, p = .000$), and materialism ($B = .16, p = .00$).

Table 5.8: Direct Path Analysis with Mediator

Direct Paths			β	SE	CR	p
CBB	<---	NFU	.21	.02	8.14	.000
CBB	<---	LSC	.38	.03	15.23	.000
CBB	<---	MASIC	.08	.02	4.18	.000
CBB	<---	Anxiety	.14	.02	4.63	.000
CBB	<---	Depression	.11	.02	3.54	.000
CBB	<---	Stress	.09	.02	3.88	.000
RPI	<---	CBB	.31	.08	4.52	.000
RPI	<---	Anxiety	.14	.04	2.54	.01
RPI	<---	Depression	-.29	.05	-4.73	.000
RPI	<---	Stress	.27	.04	6.05	.000
RPI	<---	NFU	.09	.05	1.82	.07
RPI	<---	LSC	.27	.06	5.00	.000
RPI	<---	MASIC	.13	.05	3.48	.000

In Table 5.8, mediation analysis has been computed with the help of AMOS 23. Results indicate significant direct effect of depression ($B = -.29, p = .000$), stress ($B = .27, p = .000$), anxiety ($B = .14, p = .01$), NFU ($B = .09, p = .000$), LSC ($B = .27, p = .000$), and MASIC ($B = .13, p = .011$) on RPI. In addition, significant path coefficients were found on

NFU (B = .21, p = .000), LSC (B = .38, p = .000), MAISC (B = .08, p = .000), anxiety (B = .14, p = .000), depression (B = .11, p = .000), stress (B = .09, p = .000).

Figure 5.2 Direct path for IV and DV

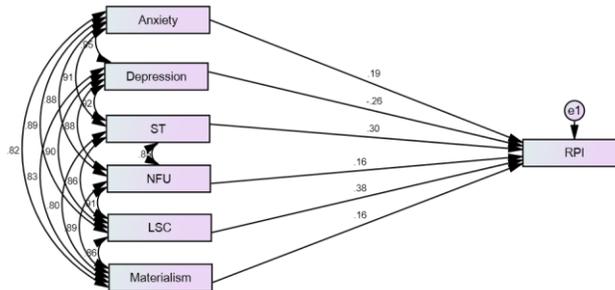
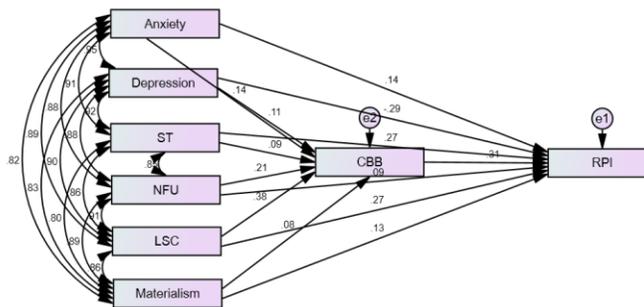


Figure 5.3 Full Mediation model



Note. Figure 5.2 shows direct impact of IVs on DV with Mediator, in this model standardized values are shown.

Table 5.9: CBB as Mediator between DAS, NFU, LSC, MAS and RPI

Variables	Indirect	Direct W/o Mediator	Direct with mediator	Result
DEP-CBB-RPI	.82***	-.26**	-.29**	Supported
MAS-CBB-RPI	.69***	.16**	.13***	Supported
STR-CBB-RPI	.66***	.30***	.27***	Supported
ANX-CBB-RPI	.71***	.19**	.14**	Supported
LSC-CBB-RPI	.56***	.38***	.27***	Supported
NFU-CBB-RPI	.63***	.16**	.09 ^{ns}	Supported

Note. ***p < .001, **p < .01, ns = non-significant

In Table 5.9, results show significant indirect effect of depression (B = .82, p = .000), materialism (B = .69, p = .000), stress (B = .66, p = .000) anxiety (B = .71, p = .000), LSC (B = .56, p = .000), and NFU (B = .63, p = .000). In conclusion, depression, materialism, stress, anxiety, LSC and NFU shows significant mediational effect on RPI.

5.6 Moderation Analysis

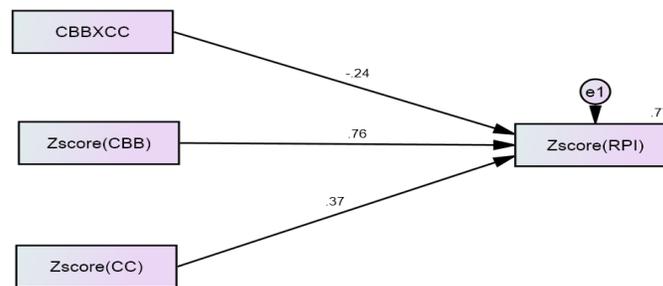
Table 5.10: Moderation Effect of Use of Credit Card on Repurchase Intention

Variables	Repurchase Intention				Result
	β	SE	CR	p	
UCC x CBB	-.24	.00	-13.39	.000	Significant
UCC	.37	.02	21.61	.000	Significant
CBB	.76	.02	43.74	.000	Significant

Note. $N = 781$, SE = standard error, CR = critical region, β = coefficient of regression (standardized)

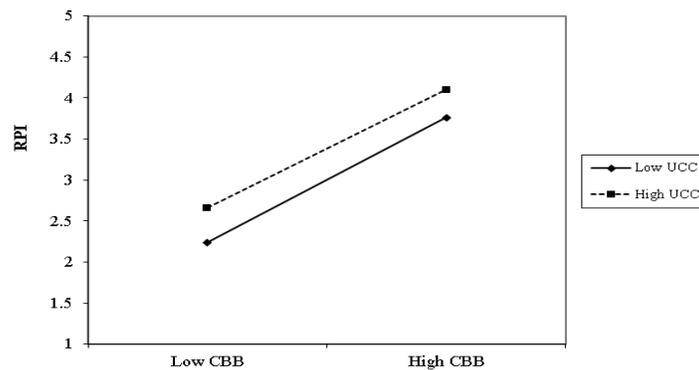
In Table 5.10 moderation analysis was computed with the help of AMOS 23. It has been hypothesized that use of credit card (UCC) moderates the relationship between compulsive buying behaviors (CBB) and repurchase intention (RPI). The interaction term (use of credit card x compulsive buying behavior) has been calculated for AMOS before running the analysis. The stated hypothesis was supported by the present research, and results indicate significant moderation effect of UCC x CBB on repurchase intention ($\beta = -.24$, $p = .000$). In addition, it has been found that the main effects: use of credit card ($\beta = .37$, $p = .000$) and compulsive buying behavior ($\beta = .76$, $p = .000$) are also significant.

Figure 5.4: Moderation Effect of Use of Credit Card on Repurchase Intention



Note. Figure 5.4 shows the effect of interaction term UCC x CBB on repurchase intention. The R^2 for the model was .77. The model indicates standardized values.

Figure 5.5: Interaction Graph of UCC and CBB on RPI



Note. Figure 5.4 shows the effect of interaction term UCC x CBB on repurchase intention. It indicates that use of credit card decreases the positive relationship between compulsive buying behaviors and repurchase intention.

Table 5.11: Hypotheses Testing and Results

Hypothesis Statements	Results
H1: Consumer's Materialism is positively associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior.	Supported
H2: Consumers' need for uniqueness is positively associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior.	Supported
H3: Stress is Positively Associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior	Supported
H4: Depression is positively associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior.	Supported
H5: Anxiety is positively associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior.	Supported
H6: Consumer Lack of Self-Control is positively associated with Consumer's Repurchase Intention Through Compulsive Buying Behavior.	Supported
H7: The Use of Credit Card Moderates the Compulsive Buying Behavior and Consumer's Repurchase Intention.	Supported

6. DISCUSSION

The current study aimed to recognize consumers' primary progress puzzle of compulsive buying behavior by empirically investigating the psychosomatic-social analysis of maladaptive spending among university students and teachers. The determinants of compulsive buying behavior explained significant variance (model $r^2 = 0.93$). They described that these determinants of psychosomatic-social analysis of maladaptive spending are powerful triggers of compulsive behavior among young consumers. The study's findings verify the previous results of different scholars (kukar-kinney et al., 2009; billieux et al., 2008). Similarly, compulsive buyers experience positive emotions after buying clothing-related products at a shopping mall (Weinstein et al., 2016). The excitement lasts for a short period, but they get immediate relief from negative emotions (ridgway et al., 2008). According to some scholars, those compulsive buyers tend to hide their purchases to avoid criticism over their shopping trips and excessive and needless shopping (Lejoyeux, 2010). Garðarsdóttir and Dittmar (2012) briefed that three essential elements trigger consumers to buy continuously:

- 1) Consumers experience an uncontrollable desire to buy, which acts as a stimulus.
- 2) Consumers' failure to control themselves to buy is the compulsion that acts as an organism of the SOR Model.
- 3) The response to compulsion created through stimuli is consumers' continuous buying without considering the financial, professional, and social consequences.

A compulsive shopper is addicted to shopping, just like a drug addict. They display dependent or addicted behavior. To eliminate obsessive thoughts, they engage in the

behavior they rely on. According to Lejoyeux et al. (1997), compulsive buyers experience repetitive urges to buy unnecessary or excessive items. They typically purchase famous brand clothes and expensive, unique products to establish their identity. Online shopping has changed the retail environment in Pakistan, allowing compulsive buyers to satisfy their addictions without being judged. In both physical and virtual stores, purchasing relieves negative thoughts. They usually feel ashamed of their excessive buying habits. Some compulsive buyers avoid interruptions or criticism by shopping alone. Compulsive buyers love physical purchase and feel valuable and decisive during purchase decisions. Online shopping lacks the feelings associated with such interaction. Consumers can enjoy shopping without embarrassment and guilt, which some compulsive buyers experience in real life due to a high degree of uniqueness and materialistic values. They experience sybaritic motives, resulting in positive feelings such as playfulness, pleasure, excitement, and thrill during shopping.

6.1 Stress and Compulsive Buying Behavior

Compulsion to buy is predicted by perceived stress. Based on Lee and Workman (2015), the results are consistent with previous empirical studies. The current study found that stress impacts compulsive buying behavior by 6% and repurchase intentions by 30%. Stress also affects repurchase intentions by 27% through compulsive buying behavior. The hypothesis was accepted and the theory was supported. People engage in compulsive buying behavior to relieve psychological stress. Perceived stress triggers compulsive buying behaviors, initiates repurchase cycles, and leads to maladaptive outcomes (Dean & Range, 1996). This study's results are in line with previous ones, according to Otero-Lopez and Villardefrancos (2014). Stress plays an important role in compulsive buying behaviors, according to this study. According to Lee and Workman (2015), compulsive buying is a coping mechanism. Despite previous findings regarding compulsive buying behavior, consumers' repurchase episodes did not differ. Stress is positively correlated with compulsive buying behavior among university students, according to the study.

6.2 Depression and Compulsive Buying Behavior

Compulsive buying behavior has been linked to distress and depression (Atalay & Meloy, 2011). In this study, "retail therapy" was tested for its effectiveness in reducing depression. This study examined whether retail shopping could reduce sadness. Depression and compulsive buying behavior have positive Pearson's correlation coefficients. Higher depression levels were associated with higher compulsive buying behavior, suggesting depression is directly related to compulsive buying. People who are depressed and unable to handle things often buy more to relieve their symptoms. According to Iqbal and Aslam (2016), anxiety and depression contribute significantly to compulsive buying. Based on regression weights, depression explain significant variation in compulsive buying behavior as mediators and consumers' repurchase intentions as dependent variables. A response to psychological depression and sadness, compulsive buying is triggered by anxiety and depression (Arafat et al., 2020). According to the study, anxiety and depression are predictors of compulsive buying. Depression causes mental

distortions, low energy levels, sickness, and difficulty performing routine tasks. Compulsive buying can be used as a coping strategy to reduce distress and regulate negative emotions (Arafat et al., 2020).

6.3 Anxiety and Compulsive Buying Behavior

Anxiety causes compulsive buying among university students in Pakistan. (Alavi, 2010; Rana & Malik, 2022). Both constructs produce similar results. The study found that anxiety contributes to compulsive buying, which motivates individuals to go shopping to relieve their mental stress and sadness. The treatment of anxiety through drugs or psychological sessions is similar to the treatment of anxiety through shopping activity. Compulsive buying is positively associated with anxiety. This study supports existing theories. Furthermore, it establishes a psychosocial link between maladaptive spending and mental health. As a means of escaping anxiety, consumers engage in compulsive buying behavior and repeat purchases. The present study confirmed our hypothesis that anxiety is positively associated with compulsive buying.

6.4 Consumers' need for uniqueness and Compulsive Buying Behavior

The current study indicates a correlation was explored between an individual's need for uniqueness and compulsive buying behavior. The results are in line with those of many previous studies. The literature indicates that consumers' need for uniqueness enhances individual self-esteem (Snyder & Fromkin, 1977). Hence, an individual's quest for individuality appears to be an essential construct that influences a wide range of consumer behaviors. Consumers' desire to feel unique compels them to acquire unique and sophisticated clothing brands, contributing to significant variances in compulsive buying. High levels of distinctiveness are sought by individuals with extensive product knowledge and ambition. In order to express their social status, they purchase quality products (Ruvio et al., 2008). Buying decisions and preferences may be influenced by individuals' need for uniqueness. A 21% variation in compulsive buying behavior and a 16% variation in repurchase intention can be attributed to individuals' need for uniqueness. As a determinant of compulsive buying behaviors, compulsive buyers repeat purchasing episodes continuously. Essentially, individuals with a greater need for uniqueness visit shopping malls more than those with a lower need. In addition, individuals with a need for uniqueness are more likely to engage with brands that are unfamiliar to them.

6.5 Materialism and Compulsive Buying Behavior

In the current study, the results reveal that consumers' social comparisons, self-identity, and social identity motivate them to research the latest fashion and boost their materialistic approach interest. The materialism of consumers influences their compulsive shopping behavior for apparel among university students in Pakistan. According to the results, materialism is positively associated with compulsive buying behavior (Srikant, 2013; Mueller et al., 2011). Compulsive buying behavior is significantly correlated with materialism. They tend to overspend on apparel brands because they are more conscious of their looks and appearance in society. According to the current study, materialism is

associated with compulsive buying behavior and repurchase intention. Based on the results of the current study, materialism is responsible for an 8% change in compulsive buying behavior and a 16% change in repurchase intentions. A large sample of university students participated in this study. The study estimates that materialism strongly influences compulsive buying behavior as a determinant of compulsive buying behavior. Otero-López and Villardefrancos (2014) also reported similar results. According to the results, psychological distress and personality traits such as materialistic values may increase the propensity for compulsive buying behavior. University students exhibit compulsive buying behavior due to significantly higher scores in anxiety, depression, stress, and materialistic values. As Burroughs and Rindfleisch (2002) pointed out, there is solid empirical evidence supporting the relationship between materialism and compulsive buying behavior. According to the present study, materialism correlates positively with compulsive buying, leading to repurchase intentions. As a result, the current study's findings validated the hypotheses by showing that materialism, compulsive buying, and consumer repurchase intentions are positively associated.

6.6 Lack of Self-Control and Compulsive Buying Behavior

Compulsion to buy is associated with anxiety, depression, and stress (Mueller et al., 2011). Self-control is a tool for controlling negative emotions. Individuals lacking self-control are compelled to indulge in excessive buying behaviors due to repetitive urges and negative emotions. Retail therapy temporarily relieves unpleasant recurring feelings caused by a lack of self-control. Compulsive buyers are motivated by repetitive thoughts rather than negative consequences. Compulsive buying has been studied from the perspective of clinical samples of bipolar disorder (Kesebir et al., 2012) without considering consumer behavior. Instead of categorizing it according to the DSM-V, this study examined the relationship between compulsive buying behaviors, lack of self-control, and repurchase intentions. An analysis of consumers' repurchase intentions was conducted based on their compulsive buying behavior. The young generation is more prone to compulsive behavior.

For the first time, this study examines the relationship between self-control, compulsive buying, and repurchase intentions. Lack of self-control is the most significant determinant of compulsive buying behavior and consumers' intention to repurchase. A high level of self-control was associated with a low level of compulsive buying. Compulsive behavior is common in people lacking self-control. Studying the medical consequences of self-control provided a new foundation for future researchers. 38% of consumers intend to repurchase, suggesting that lack of self-control drives compulsive buying. Similar to Rose (2007), the findings confirm the existing theory. People who cannot resist the temptation to buy become addicted because of a lack of self-control. Among university students, lack of self-control is positively correlated with compulsive purchasing behavior.

6.7 Compulsive Buying Behavior and Consumer Repurchase Intention

Study examines determinants of compulsive buying behavior (i.e., anxiety, stress, depression, materialism, the need for uniqueness, and lack of self-control) among

university students in Pakistan. The determinants of compulsive buying behavior were positively correlated. These results may provide a useful framework for mastering compulsive buying behavior. The results of this study are similar to those of previous studies (Chan et al., 2012). Pakistani youth have a stronger desire to acquire material goods and a more unusual compulsive buying behavior.

The variables from the current study were examined to determine their relationship with the results. Results show that determinants of compulsive buying behavior are positively associated with it. Stress contributes to 9%, anxiety contributes to 14%, depression contributes to 11%, consumers' need for uniqueness contributes to 21%, lack of self-control contributes to 38%, and materialism contributes to 8%. All independent variables are significantly associated with compulsive buying behavior. The need for uniqueness and lack of self-control determine compulsive buying. Compulsive buying is also less influenced by materialism. According to Donnelly et al. (2016), Sharif & Khanekharab (2017), and Dittmar (2005), the results support previous theories.

Consumers can buy products both physically and online nowadays. Shopping addiction is the same, whether physical or non-physical. According to Muller et al. (2013), depression, anxiety, stress, and negative feelings are positively correlated. This study clarifies the role of compulsive buying behavior determinants and their contribution to repurchase intentions. The top portion of the model was explained by compulsive buying behavior. 94% of the variation in compulsive buying behavior can be explained by independent variables, showing that the variables are reasonable. R² and adjusted R² are the same, so the sample represents the population exactly.

The determinants of compulsive buying behavior directly influence consumer repurchase intentions. Therefore, the present study validated theoretical evidence and previous empirical findings. All goodness of fit factors are adequate in the confirmatory factor analysis. As shown in the table of coefficients, anxiety directly influences 19% of consumers' repurchase intentions. Despite this, depression negatively impacts consumers' repurchase intentions by 26%. Stress 30%, uniqueness 16%, lack of self-control 38%, and materialism 16% influence consumers' repurchase intentions. Consumers' repurchase intentions were directly influenced by determinants of compulsive buying. Compulsive buying can also improve socioeconomic status, psychological calmness, and professional efficiency. Those with high determinants of compulsive buying behavior are more likely to repurchase.

6.8 Moderating Role of the Use of Credit Card, Compulsive Buying Behavior, and Consumers' Repurchase intention

According to Duh and Thorsten (2019), credit cards allow consumers to make unreasonably large purchases. Therefore, this study investigated the moderating effect of credit card use on repurchase intentions. Self-regulation theory suggests that people who lack self-control engage in compulsive behaviors. The likelihood of excessive credit card usage increases with poor self-control. Similar to previous research, Phau and Woo (2008) found that credit card use moderated compulsive buying. Table No. 5.10 presents

this information. The repurchase intention of consumers was positively correlated with their compulsive buying. Based on results and scores, credit card use moderates repurchase intentions. Credit cards trigger consumers' repurchase intention and boost the variation from 31% to 55% in consumers' repurchase intention, confirming previous research. The literature presented suggests that credit card usage moderates and enhances compulsive buying. Several studies have suggested that credit cards moderate buying behavior and increase compulsive shopping. Roberts and Jones (2001) demonstrated that authentication moderated the role of credit card usage and enhanced compulsive shopping. Numerous scholars argue that compulsive buying tendencies are caused by credit card debt (Palan, Morrow, Trapp & Blackburn, 2011). In Figure 4, credit card usage modifies compulsive buying behavior and repurchase intentions. Credit cards moderate the relationship between compulsive buying behaviors and repurchase intentions among university students, according to the current study.

6.9 Mediation Role of Compulsive Buying Behavior

Extant literature and theories about compulsive buying behavior, consumers' repurchase intention, and underlying mediation mechanisms are supported by the current study. Based on the current study's theoretical model, compulsive buying behavior was a crucial predictor of consumers' repurchase intentions. By revealing the mediated relationship between compulsive buying behavior and consumers' repurchase intentions, the present study strengthens the previous literature. Sharif & Khanekharab (2017) found that materialism increased the tendency for compulsive consumption among women. Studies have shown that upward social comparison triggers compulsive buying behavior and repeat purchases. Liu et al. (2019) reported that social comparison increases individual social identity and maladaptive buying behavior. According to Brand et al. (2019), anxiety, stress, and depression are critical triggers for online compulsive buying and addictive behaviors.

Consumers' need for uniqueness, materialism, and lack of self-control contribute to compulsive behaviors such as anxiety, stress, and depression. According to the current study's findings, determinants of compulsive buying behavior influenced consumers' repurchase intentions as well as compulsive buying behavior. Compulsive buying behavior is 94% determined by the determinants of compulsive buying behavior, according to the results. Compulsive buying is also responsible for 78% of the variation in consumers' repurchase intentions. Taking compulsive buying behavior as a mediator, the results showed a complete mediation between determinants of compulsive buying behavior and consumers' repurchase intentions. When compulsive buying behavior was taken into account as a mediator, all independent variables decreased consistently with a significant relationship. Compulsive buying behavior acts as a mediator between independent and dependent variables.

The inclusion of compulsive buying behaviors weakened the relationship between independent variables (e.g., anxiety, stress, and depression, consumers' need for uniqueness, materialism, and lack of self-control) and repurchase intention. A significant reduction in variables' values was observed after compulsive buying behavior was

included as a mediator. As per figure No., anxiety scores reduced from 19% to 14%, stress scores decreased from 30% to 27%, depression scores decreased from -26% to -29%, and consumers' need for uniqueness scores fell from 16% to 9%, materialism scores dropped from 16% to 13%, and lack of self-control scores dropped from 38% to 27%. Based on these results, compulsive buying behavior and consumers' repurchase intention are found to be mediators of the effect.

6.10 Theoretical contribution

In the present study, the key objective was to investigate the relationship between determinants of compulsive buying behavior and consumers' repurchase intention. Furthermore, the present study developed a model that examines the influence of personality traits on consumers' repurchase intentions based on different theories of consumer behavior, psychology, and sociology. Only a few previous studies have examined the proposed variables model in the context of compulsive buying.

1. Adding to the existing research body is the purpose of the current study. By investigating and validating the predictors responsible for compulsive buying behavior and repurchase intention among young university students and teachers, this study strengthens a theoretical model.
2. Secondly, the present study strengthens the body of literature and theories by examining the mediating role of compulsive buying. In order to accomplish this, etiological factors and critical determinants of consumers' repurchase intentions are considered.
3. The current study examined the role of credit card usage in moderating compulsive buying behavior and consumers' repurchase intentions. Compulsion buying behavior and consumers' repurchase intentions were significantly buffered by credit card usage in developing countries like Pakistan. According to Khandelwal et al. (2021), this is contrary to previous findings. Incorporating previous literature, the findings shed light on this issue and are expected to inspire further research.
4. Psychosomatic social analysis of maladaptive shopping behavior is demonstrated in the current study positively, and compulsive buying behavior is not categorized as a mental disorder by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013).
5. Additionally, this study supports the previous findings of previous studies by showing young students in developing countries are involved in addictive behavior as a means of alleviating negative emotions and affording expensive brands, as Cservenka and Brumback (2017) found in European countries.
6. The present study confirms Shenhav et al. (2017) findings that compulsive behavior is primarily driven by a lack of self-control. As well as the existing literature on lack of self-control. Researchers will be able to verify the same results in different contexts and research settings with these findings.

7. In the current study, compulsive buying behavior was demonstrated to be a mediator. Among the factors responsible for consumers' repurchase intentions are stress, anxiety, depression, the desire for uniqueness, materialism, and the lack of self-control. Compulsive buying behavior also served as complete mediation in the model, enlightening the literature on compulsive buying.

6.11 Managerial Contribution

1. The current study can be helpful to clinicians, public policymakers, marketers, and consumers. Studies in biology, psychology, sociology, and consumer behavior show that personality traits and environmental factors produce negative emotions, feelings, urges, and repetitive thoughts. People indulge in compulsive shopping to escape unpleasant feelings in socially acceptable situations. Using this approach is preferable to taking drugs for depression, anxiety, and distress.
2. Marketers and companies should be aware of consumers' compulsive buying behavior when creating sales, placing products in stores, or developing promotional strategies. Promoting and selling tactics can help firms increase sales volume strategically by persuading potential customers.
3. Compulsive buying behavior and repurchase intentions are negatively affected by credit card use. Researchers, marketers, and brand managers can find out why so many factors contradict one another in the literature by analyzing the results. Bankers and brand managers may form joint ventures to improve marketing strategies. Financial institutions and firms can earn profits in developing countries like Pakistan by offering payment packages.
4. In addition, managers can understand that people with a high level of self-control are less likely to engage in compulsive or repetitive buying. Businesses and marketers aim to sell products and earn profits. Lack of self-control is a critical factor determining repetitive and compulsive purchases. Through promotional strategies, a brand manager may decrease consumer self-control in a physical store or online store.
5. The results of this study's detailed literature analysis indicate that consumers with materialistic natures and a need for uniqueness are more likely to engage in compulsive buying. Marketers and consumer advocates can target these consumers with fast fashion campaigns.

6.12 Limitations and Recommendations for future research

The issue of compulsion-buying is intriguing and critical. While the study provides valuable insights into compulsive buying behavior and consumer repurchase intentions, it does have some limitations. This study uses appeal brands to examine determinants of compulsive buying behavior and repurchase intentions. A quantitative approach was used to examine and interpret the relationships between independent, dependent, mediating, and moderating variables. In the current study, a questionnaire was used to collect data, while future studies may use interviews, group discussions, and in-store observations. The current study did not examine the impact of other factors, such as income, education,

or social class, on compulsive buying. The present study was cross-sectional and correlational due to limited resources. Future researchers may be able to address these limitations to obtain more strategic and logical results.

6.13 Conclusion

A comprehensive study was conducted to examine the relationship between the research model and the research questions. Literature and theories in marketing psychology, sociology, biology, and consumer behavior. According to current research, some consumers spend beyond their means and needs. It's hard to overcome their inner motivations and urges to keep buying. Many studies have examined factors that determine compulsive buying behavior, and the literature on this concept is extensive. This study examined the impact of determinants such as anxiety, depression, stress, materialism, the need for uniqueness, and lack of self-control on consumer repurchase intentions by mediating compulsive buying behavior. To select the sample and population, previous studies were used. Among university students, compulsive buying behavior was measured. Probability sampling was used to select 900 respondents. To determine the prevalence of compulsive buying, nine university students were surveyed. For analysis, 781 valid questionnaires were selected. The study's hypothesis was tested using different analysis techniques in line with previous theories.

Compulsion to buy has been overemphasized by many scholars. Compulsive buying behavior is positively associated with materialism (Islam et al., 2018). In a developing country like Pakistan, materialism and compulsive buying behavior are examined. Previous studies have produced similar results based on the hypotheses, expectations, and theories proposed in this study. Materialism was found to be an essential predictor of compulsive buying. The H1 results has been accepted and it was also examined that how uniqueness influences compulsive buying. In order to maintain their social status and individuality, individuals with a higher level of uniqueness tend to buy more frequently (Wu et al., 2017). Existing theories were also verified by the study. Repurchase intention and compulsive buying behavior are positively correlated with consumers' need for uniqueness. As a result, we accepted H2. In this study, anxiety, depression, and stress were examined based on escape theory. A compulsive buying episode relieves anxiety, depression, and stress. Stress, anxiety, depression, and compulsive buying are positively related. Repurchase intention is negatively impacted by depression, leading to depression in those who cannot shop. The study supports the theory of SOR that depression induces negative thoughts that lead to compulsive behavior, yet individuals repurchase products. Statistical analysis supports H3, H4 & H5. Shenhav et al. (2017) suggest that consumers lacking self-control may be unable to control repetitive inner thoughts, urges, and environmental factors. Individuals who engage in addictive behaviors lack self-control, according to the literature. Consumers with compulsive buying habits and repeated purchases also lack self-control. **Thus, H6 is accepted.** Consumers who use credit cards tend to engage in compulsive buying behavior and repeat purchases (Khandelwal et al., 2021). Among consumers, this study examined the effect of credit cards on compulsive buying behavior. The use of credit cards significantly impacts

compulsive buying and repurchase intentions. In general, compulsive buying behavior and consumer repurchase intentions are moderately related. This study contradicts previous findings, so further research is needed. As a moderating and buffering factor, H7 is partially accepted.

References

- 1) Achtziger, A., Hubert, M., Kenning, P., Raab, G., & Reisch, L. (2015). Debt out of control: The links between self-control, compulsive buying, and real debts. *Journal of Economic Psychology, 49*, 141-149.
- 2) Alavi, S. S. (2010). Psychometric properties of Young internet addiction test. *International Journal of Behavioral Sciences, 4*(3), 183-189.
- 3) Alavi, S. S. (2010). Psychometric properties of Young internet addiction test. *International Journal of Behavioral Sciences, 4*(3), 183-189.
- 4) Anderson, J. C., & Gerbing, D.W. (1988). Structural equation modeling in practice, a
- 5) Arafat, S. Y., Hussain, F., Kar, S. K., Menon, V., & Yuen, K. F. (2020). How far has panic buying been studied?. *World Journal of Meta-Analysis, 8*(6), 447-461.
- 6) Arnocky, S., Stroink, M., & DeCicco, T. (2007). Self-construal predicts environmental concern, cooperation, and conservation. *Journal of Environmental Psychology, 27*(4), 255-264.
- 7) Asshidin, N. H. N., Abidina, N., & Borhanb, H. B. (2016). Perceived quality and emotional value that influence consumer's purchase intention towards American and local products.© 2016 Published by Elsevier BV This is an open access article under the CC BY-NC-ND license. *Peer-reviewed under responsibility of Universiti Tenaga Nasional. Doi, 10, S2212-5671.*
- 8) Atalay, A. S., & Meloy, M. G. (2011). Retail therapy: A strategic effort to improve mood. *Psychology & Marketing, 28*(6), 638-659.
- 9) Baumeister, R. F., & Newman, L. S. (1994). Self-regulation of cognitive inference and decision processes. *Personality and Social Psychology Bulletin, 20*(1), 3-19.
- 10) Bernthal, M. J., Crockett, D., & Rose, R. L. (2005). Credit cards as lifestyle facilitators. *Journal of consumer research, 32*(1), 130-145.
- 11) Billieux, J., Rochat, L., Rebetz, M. M. L., & Van der Linden, M. (2008). Are all facets of impulsivity related to self-reported compulsive buying behavior?. *Personality and Individual Differences, 44*(6), 1432-1442.
- 12) Black, D. W. (2007). A review of compulsive buying disorder. *World Psychiatry, 6*(1), 14.
- 13) Brand, M., Wegmann, E., Stark, R., Müller, A., Wölfling, K., Robbins, T. W., & Potenza, M. N. (2019). The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors: Update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neuroscience & Biobehavioral Reviews, 104*, 1-10.
- 14) Burroughs, J. E., & Rindfleisch, A. (2002). Materialism and well-being: A conflicting values perspective. *Journal of Consumer research, 29*(3), 348-370.
- 15) Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL:
- 16) Casey, J., Yue, X., Nguyen, T. D., Acun, A., Zellmer, V. R., Zhang, S., & Zorlutuna, P. (2017). 3D hydrogel-based microwell arrays as a tumor microenvironment model to study breast cancer growth. *Biomedical Materials, 12*(2), 025009.

- 17) Chan, C., Berger, J., & Van Boven, L. (2012). Identifiable but not identical: Combining social identity and uniqueness motives in choice. *Journal of Consumer research*, 39(3), 561-573.
- 18) Christenson, G. A., Faber, R. J., De Zwaan, M., Raymond, N. C., Specker, S. M., Ekern, M. D., ... & Eckert, E. D. (1994). Compulsive buying: descriptive characteristics and psychiatric comorbidity. *The Journal of clinical psychiatry*.
- 19) Claes, L., Bijttebier, P., Mitchell, J. E., de Zwaan, M., & Mueller, A. (2011). The relationship between compulsive buying, eating disorder symptoms, and temperament in a sample of female students. *Comprehensive Psychiatry*, 52(1), 50-55.
- 20) Cservenka, A., & Brumback, T. (2017). The burden of binge and heavy drinking on the brain: effects on adolescent and young adult neural structure and function. *Frontiers in psychology*, 8, 1111.
- 21) Dean, P. J., & Range, L. M. (1996). The escape theory of suicide and perfectionism in college students. *Death studies*, 20(4), 415-424.
- 22) Dittmar, H. (2005). Compulsive buying—a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. *British journal of psychology*, 96(4), 467-491.
- 23) Dittmar, H., & Drury, J. (2000). Self-image—is it in the bag? A qualitative comparison between “ordinary” and “excessive” consumers. *Journal of economic psychology*, 21(2), 109-142.
- 24) Dittmer, J. (2014). Geopolitical assemblages and complexity. *Progress in Human Geography*, 38(3), 385-401.
- 25) Donnelly, G. E., Ksendzova, M., Howell, R. T., Vohs, K. D., & Baumeister, R. F. (2016). Buying to blunt negative feelings: Materialistic escape from the self. *Review of General Psychology*, 20(3), 272-316.
- 26) Duh, H., & Thorsten, T. (2019). Preventing compulsive shopping among young South-Africans and Germans. *Young Consumers*.
- 27) Elliott, D. S. (1994). Serious violent offenders: Onset, developmental course, and termination—The American Society of Criminology 1993 presidential address. *Criminology*, 32(1), 1-21.
- 28) Faber, R. J., & Vohs, K. D. (2004). To buy or not to buy. *Handbook of self-regulation*, 509-524.
- 29) Frost, R. O., Tolin, D. F., Steketee, G., Fitch, K. E., & Selbo-Bruns, A. (2009). Excessive acquisition in hoarding. *Journal of anxiety disorders*, 23(5), 632-639.
- 30) Garðarsdóttir, R. B., & Dittmar, H. (2012). The relationship of materialism to debt and financial well-being: The case of Iceland’s perceived prosperity. *Journal of Economic Psychology*, 33(3), 471-481.
- 31) Gollwitzer, P. M. (1986). Striving for specific identities: The social reality of self-symbolizing. In *Public self and private self* (pp. 143-159). Springer, New York, NY.
- 32) Gollwitzer, P. M., Wicklund, R. A., & Hilton, J. L. (1982). Admission of failure and symbolic self-completion: Extending Lewinian theory. *Journal of personality and social psychology*, 43(2), 358.
- 33) Griffin, W. L., Pearson, N. J., Belousova, E., Jackson, S. V., Van Acherbergh, E., O’Reilly, S. Y., & Shee, S. R. (2000). The Hf isotope composition of cratonic mantle: LAM-MC-ICPMS analysis of zircon megacrysts in kimberlites. *Geochimica et cosmochimica acta*, 64(1), 133-147.
- 34) Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*.
- 35) Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer repurchase intention: A general structural equation model. *European journal of marketing*.

- 36) Hofmann, W., Friese, M., & Strack, F. (2009). Impulse and self-control from a dual- systems perspective. *Perspectives on psychological science*, 4(2), 162-176.
- 37) Iqbal, N., & Aslam, N. (2016). Materialism, depression, and compulsive buying among university students. *International Journal of Indian Psychology*, 3(2), 91-102.
- 38) 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*.
- 39) Kesebir, S., İşıtmez, S., & Gündoğar, D. (2012). Compulsive buying in bipolar disorder: Is it a comorbidity or a complication?. *Journal of affective disorders*, 136(3), 797-802.
- 40) Khandelwal, G., Maria Joseph Raj, N. P., & Kim, S. J. (2021). Materials beyond conventional triboelectric series for fabrication and applications of triboelectric nanogenerators. *Advanced Energy Materials*, 11(33), 2101170.
- 41) Kline, B., & Tamer, E. (2016). Bayesian inference in a class of partially identified models. *Quantitative Economics*, 7(2), 329-366.
- 42) Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*. Sage.
- 43) Koran, L. M., Faber, R. J., Aboujaoude, E., Large, M. D., & Serpe, R. T. (2006). Estimated prevalence of compulsive buying behavior in the United States. *American Journal of Psychiatry*, 163(10), 1806-1812.
- 44) Kukar-Kinney, M., Ridgway, N. M., & Monroe, K. B. (2009). The relationship between consumers' tendencies to buy compulsively and their motivations to shop and buy on the Internet. *Journal of Retailing*, 85(3), 298-307.
- 45) Kyrios, M., Mogan, C., Moulding, R., Frost, R. O., Yap, K., & Fassnacht, D. B. (2018). The cognitive-behavioural model of hoarding disorder: Evidence from clinical and non-clinical cohorts. *Clinical psychology & psychotherapy*, 25(2), 311-321.
- 46) Lee, S. H., & Workman, J. E. (2015). Compulsive buying and branding phenomena. *Journal of Open Innovation: Technology, Market, and Complexity*, 1(1), 3.
- 47) Lejoyeux, M., & Weinstein, A. (2010). Compulsive buying. *The American Journal of Drug and Alcohol Abuse*, 36(5), 248-253.
- 48) Lejoyeux, M., Tassain, V., Solomon, J., & Ades, J. (1997). Study of compulsive buying in depressed patients. *Journal of Clinical Psychiatry*, 58(4), 169-173.
- 49) Liu, X., He, P., Chen, W., & Gao, J. (2019). Improving multi-task deep neural networks via knowledge distillation for natural language understanding. *arXiv preprint arXiv:1904.09482*.
- 50) Manolis, C., & Roberts, J. A. (2008). Compulsive buying: Does it matter how it's measured? *Journal of Economic Psychology*, 29(4), 555-576.
- 51) Maraz, A., Griffiths, M. D., & Demetrovics, Z. (2016). The prevalence of compulsive buying: A meta-analysis. *Addiction*, 111(3), 408-419.
- 52) McElroy, S. L., Keck, P. E., & Phillips, K. A. (1995). Kleptomania, compulsive buying, and binge-eating disorder. *The Journal of clinical psychiatry*.
- 53) McElroy, S. L., Keck, P. E., Pope, H. G., Smith, J. M., & Strakowski, S. M. (1994). Compulsive buying: a report of 20 cases. *The Journal of clinical psychiatry*.
- 54) Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. *American Economic Journal: Applied Economics*, 2(1), 193-210.

- 55) Mitchell, J. E., Burgard, M., Faber, R., Crosby, R. D., & de Zwaan, M. (2006). Cognitive behavioral therapy for compulsive buying disorder. *Behaviour research and therapy*, 44(12), 1859-1865.
- 56) Mueller, A., Claes, L., Mitchell, J. E., Faber, R. J., Fischer, J., & de Zwaan, M. (2011). Does compulsive buying differ between male and female students?. *Personality and Individual Differences*, 50(8), 1309-1312.
- 57) Mueller, S., & Szolnoki, G. (2010). The relative influence of packaging, labelling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness. *Food quality and preference*, 21(7), 774-783.
- 58) Müller A, Arikian A, Zwaan M, and Mitchell JE: Cognitive – behavioural group therapy versus guided self-help for compulsive buying disorder: a preliminary study. *Clin Psychol Psychother* 2013, 20:28–35.
- 59) Neuner, M., Raab, G., & Reisch, L. A. (2005). Compulsive buying in maturing consumer societies: An empirical re-inquiry. *Journal of economic psychology*, 26(4), 509-522.
- 60) Nga, J. K., Yong, L. H., & Sellappan, R. (2011). The influence of image consciousness, materialism and compulsive spending on credit card usage intentions among youth. *Young Consumers*.
- 61) O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of consumer research*, 16(2), 147-157.
- 62) Ostrom, C. W. (1990). *Time series analysis: Regression techniques* (No. 9). Sage.
- 63) Otero -López, J. M., & Villardefrancos, E. (2014). Prevalence, sociodemographic factors, psychological distress, and coping strategies related to compulsive buying: a cross sectional study in Galicia, Spain. *BMC psychiatry*, 14(1), 1-12.
- 64) Palan, K. M., Morrow, P. C., Trapp, A., & Blackburn, V. (2011). Compulsive buying behavior in college students: the mediating role of credit card misuse. *Journal of Marketing Theory and Practice*, 19(1), 81-96.
- 65) Perner, J., & Roessler, J. (2010). Teleology and causal understanding in childrens' theory of mind. *Causing human action: New perspectives on the causal theory of action*, 199-228. Persons with compulsive buying: Preliminary findings. *American Journal of Psychiatry*, 155, 960–963.
- 66) Phau, I., & Woo, C. (2008). Understanding compulsive buying tendencies among young Australians: The roles of money attitude and credit card usage. *Marketing Intelligence & Planning*.
- 67) Quoquab, F. (2015). Compulsive buying: What is behind the curtain?. *International Journal of Innovation and Business (IJIBS)*, 3(1).
- 68) Raab, G., Elger, C. E., Neuner, M., & Weber, B. (2011). A neurological study of compulsive buying behaviour. *Journal of Consumer Policy*, 34(4), 401-413.
- 69) Rana, I.M. & Malik, S.Z. (2023). Compulsion or Excitement: Unveiling the Mystery of Compulsive Buying Behavior. *Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition)* 42(1) 469-490.
- 70) Richins, M. (2004). Special session summary the positive and negative consequences of materialism: what are they and when do they occur?. *ACR North American Advances*.
- 71) Richins, M. L. (1994). Special possessions and the expression of material values. *Journal of consumer research*, 21(3), 522-533.
- 72) Richins, M., & Fournier, S. (1991). Some theoretical and popular notions concerning materialism. *Journal of Social Behavior and Personality*, 6(6), 403-414.

- 73) Ridgway, N. M., Kukar-Kinney, M., Monroe, K. B., & Chamberlin, E. (2008). Does excessive buying for self-relate to spending on pets?. *Journal of Business Research*, 61(5), 392-396.
- 74) Rindfleisch, A., Burroughs, J. E., & Denton, F. (1997). Family structure, materialism, and compulsive consumption. *Journal of consumer research*, 23(4), 312-325.
- 75) Roberts, J. A., & Jones, E. (2001). Money attitudes, credit card use, and compulsive buying among American college students. *Journal of consumer affairs*, 35(2), 213-240.
- 76) Roberts, J. A., & Manolis, C. (2000). Baby boomers and busters: an exploratory investigation of attitudes toward marketing, advertising and consumerism. *Journal of Consumer Marketing*.
- 77) Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate governance: An international review*, 15(2), 404-413.
- 78) Ruvio, A., Shoham, A., & Brenčič, M. M. (2008). Consumers' need for uniqueness: short-form scale development and cross-cultural validation. *International Marketing Review*.
- 79) Scherhorn, G., Reisch, L. A., & Raab, G. (1990). Addictive buying in West Germany: An empirical study. *Journal of consumer policy*, 13(4), 355-387.
- 80) Schlosser, S., Black, D. W., Repertinger, S., & Freet, D. (1994). Compulsive buying: Demography, phenomenology, and comorbidity in 46 subjects. *General hospital psychiatry*, 16(3), 205-212.
- 81) Sharif, S. P., & Khanekharab, J. (2017). Identity confusion and materialism mediate the relationship between excessive social network site usage and online compulsive buying. *Cyberpsychology, Behavior, and Social Networking*, 20(8), 494-500.
- 82) She, L., Rasiah, R., Waheed, H., & Sharif, S. P. (2021). Excessive use of social networking sites and financial well-being among young adults: the mediating role of online compulsive buying. *Young Consumers*, 22(2), 272-289.
- 83) Shenhav, A., Musslick, S., Lieder, F., Kool, W., Griffiths, T. L., Cohen, J. D., & Botvinick, M. M. (2017). Toward a rational and mechanistic account of mental effort. *Annual review of neuroscience*, 40(1), 99-124.
- 84) Sidanius, J., & Pratto, F. (2003). Social dominance theory and the dynamics of inequality: A reply to Schmitt, Branscombe, & Kappen and Wilson & Liu. *The British journal of social psychology*, 42, 207.
- 85) Snyder, C. R., & Fromkin, H. L. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology*, 86(5), 518.
- 86) Srikant, M. (2013). Materialism in consumer behavior and marketing: a review. *Management & Marketing*, 8(2), 329.
- 87) Stets, J. E., & Biga, C. F. (2003). Bringing identity theory into environmental sociology. *Sociological theory*, 21(4), 398-423.
- 88) Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social psychology quarterly*, 224-237.
- 89) Stets, J. E., & Burke, P. J. (2003). A sociological approach to self and identity. *Handbook of self and identity*, 128152, 23-50.
- 90) Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social psychology quarterly*, 284-297.
- 91) Tajfel, H., & Turner, J. C. (1978). Intergroup behavior. *Introducing social psychology*, 401-466.

- 92) Testa, M. R. (2001). Organizational commitment, job satisfaction, and effort in the service environment. *The Journal of Psychology*, 135(2), 226-236.
- 93) Unger, L. S., & Kernan, J. B. (1983). On the meaning of leisure: An investigation of some determinants of the subjective experience. *Journal of Consumer research*, 9(4), 381-392.
- 94) Unnever, J. D., Cullen, F. T., & Barnes, J. C. (2017). Racial discrimination and pathways to delinquency: Testing a theory of African American offending. *Race and justice*, 7(4), 350-373.
- 95) Van der Linden, W. J., & Hambleton, R. K. (1997). Handbook of item response theory. *Taylor & Francis Group. Citado na pág.*, 1(7), 8.
- 96) Van der Werff, E., Steg, L., & Keizer, K. (2013). It is a moral issue: The relationship between environmental self-identity, obligation-based intrinsic motivation and pro-environmental behaviour. *Global environmental change*, 23(5), 1258-1265.
- 97) Wang, J., & Wallendorf, M. (2006). Materialism, status signaling, and product satisfaction. *Journal of the Academy of Marketing Science*, 34(4), 494-505.
- 98) Weinstein, J. S., Herman, E. I., Lainez, B., Licona-Limón, P., Esplugues, E., Flavell, R., & Craft, J. (2016). TFH cells progressively differentiate to regulate the germinal center response. *Nature immunology*, 17(10), 1197-1205.
- 99) Wicklund, R. A., & Gollwitzer, P. M. (1981). Symbolic self-completion, attempted influence, and self-deprecation. *Basic and applied social psychology*, 2(2), 89-114.
- 100) Williams, R. (2012). Using the margins command to estimate and interpret adjusted predictions and marginal effects. *The Stata Journal*, 12(2), 308-331.
- 101) Wu, J., Zhao, Y., Qi, H., Zhao, X., Yang, T., Du, Y., ... & Wei, Z. (2017). Identifying the key factors that affect the formation of humic substance during different materials composting. *Bioresource technology*, 244, 1193-1196.
- 102) Yurchisin, J., & Johnson, K. K. (2004). Compulsive buying behavior and its relationship to perceived social status associated with buying, materialism, self-esteem, and apparel-product involvement. *Family and Consumer Sciences Research Journal*, 32(3), 291-314.
- 103) Zou, K. H., Tuncali, K., & Silverman, S. G. (2003). Correlation and simple linear regression. *Radiology*, 227(3), 617-628.