

## **The Relationship of Compulsive Buying with Consumer Culture and Post-Purchase Regret**

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### **Abstract**

The aim of the current study was to determine whether Post-Purchase Regret is caused among consumers due to internal feelings, which in our case was Compulsive Buying as a result of the Materialistic and Status oriented values prevalent among the people, that affects Post-Purchase Regret which could also be caused by Unplanned Buying resulting from external factors like Sales Promotions and Bank-card Payments at the retail stores. A sample of 308 college students filled the questionnaires for this study. Confirmatory factor analysis (CFA) was done to check the reliability and validity of instrumentation used in this study. After conducting Structural Equation Modeling (SEM) we found a significant impact of materialism; passion defined success, acquisitions as the pursuit of happiness and acquisition centrality, on compulsive buying leading to a significant impact on Post-Purchase Regret. This indicates that the internal states of the consumers such as compulsiveness associated with Materialism and status consumption causes Post-Purchase Regret.

**Keywords:** post purchase regret, compulsive buying, materialism, structural equation modeling

### **1. Introduction**

In recent times, the emerging markets in the developing countries have witnessed a rapid change in the retail marketplace; there has been an increase in the number of shopping malls, increasing availability of global brands and more variety in retail shelves. Moreover, the purchasing power of consumers has also increased in these emerging markets. Such changes might lead the urban consumers of these emerging markets to increasingly indulge in shopping which is based on hedonistic values, which may cause an increase in the occurrence of compulsive buying behavior among the consumers in these countries (Horvath et al. 2013).

The concept in this study has been derived from different theories from different disciplines. Utility theory by economists, is, every consumer expects some kind of utility from goods or services. It is difficult to measure such utility so the consumer ranks the

alternatives according to his preferences. Since this choice is controlled by the price, materialism, any kind of promotions and most importantly the income of the consumer so their choices will vary.

Prospect theory has probably done more to bring psychology into the heart of economic analysis than any other approach. Expected utility theory focuses on how decisions under some uncertain situations should be made (a prescriptive approach), whereas prospect theory focuses on certainty of the situation and how decisions are actually made in such conditions (a descriptive approach). People underweight uncertain outcomes that are merely probable in comparison with outcomes that are obtained with certainty (Kahneman and Tversky, 1979)

In today's markets, the vast range of unconventional brands has, in a way, caused confusion for the consumers' decision making for purchasing items; consumers might be dubious about the extent to which their purchase decisions were right or not after compulsively purchasing a particular brand, they compare the brands bought with the other brands that they did not buy and this comparison might cause a state of sorrow known as post-purchase regret (Saleh, 2012). This post-purchase regret is mostly the result of compulsive or unplanned buying, a consumer might not had in mind to buy a certain product but occasionally because of product packaging, sales promotion or even just to make him/herself feel better, compulsively buys a product even though their finances are not capable enough to undergo such purchases (Saleh, 2012). Compulsive buying occurs without considering for consequences, compulsive behavior is normally regarded as having negative psychological consequences that cause internal conflicts, such as guilt and regret (Chatzidakis et al. 2009). One of the common elements in the definitions of compulsive buying is the occurrence of dissatisfaction and regret after the purchase (Wood, 1998).

Due to increased globalization, the trend of purchases by the consumers poses a picture which might state that the societies are increasingly moving towards a consumer culture; a culture in which most of the consumers eagerly desire, pursue, use and exhibit goods and services that are esteemed for non-utilitarian purposes such as provocation, status, pleasure seeking and envy. Such a culture will facilitate the spread of materialistic values in a society (Roberts 2000). For individuals with compulsive buying behaviors, the products associated with appearance seem to be of huge importance (Trautmann et al. 2009). Status consumption and Materialism are the two main essential components of the consumer culture (Roberts 2000). Consumer culture depicts the way of associating personal happiness with buying material possessions and consuming in excess of one's need, traditionally consumer culture and compulsive buying were related with capitalism and the west, but due to increased globalization and the widespread use of technology, compulsive buying has crossed the geographical limits, an example can be the occurrence of compulsive buying behaviors among the young population in Pakistan (Saleem and Salaria, 2010). The prevalence of compulsive buying is likely to increase in the coming decades in most of the developing countries (Horvath et al. 2013).

As societies evolve from lower to higher socio-economic levels, the symbolic attributes of a brand tend to gain more importance (Strizhakova et al. 2008). Consumers in developing countries have been known to choose a brand based upon the status- symbol that a brand conveys. Such concern with status display has been known to be of significant value in developing countries, where huge importance is placed upon

interpersonal relationships (Batra et al. 2000). Young Pakistani consumers have been known to perceive foreign brands to be of higher quality, foreign brands influence consumer motives through two techniques, first by offering quality products and the second concerns social status (Rafi et al. 2012).

There is evidence that consumer spending increases due to the use of bank cards. Those consumers who use credit cards regularly, has a tendency to spend more in comparison of those who do not use credit cards, a positive connection of unplanned buying with the usage of bank-cards has been found in many researches, the use of credit cards reduces the necessitate for money and increases the probability for unplanned buying, and this problem of unplanned buying has been known to have widely increased owing to the extensive growth in the marketing of credit cards (Saleh, 2012). The discounting model assumes that compulsive buyers discount the future at a very high rate, as a result, the current benefits of buying an object becomes more important than the future problem of paying bills, and at the time when the consumer has to pay the bills, these preferences change, as the consumer regrets the purchase made impulsively (Dittmar et al. 1995).

Different shopper groups agree that regret is more likely to occur after unplanned compulsive purchases, as compared to planned purchases which are better thought through (Dittmar and Drury, 2000). Purchasing goods in order to augment one's self-image is possibly an impulse that is a part of most buying behaviors, but it might be a particularly significant part of an unplanned spontaneous purchase, such compulsive purchases which are done without thoughtful consideration and planning might be regretted later on, and while many people undergo the occasional lapse of careful deliberation before purchasing, in a severe form this can be a cause of excessive buying behavior (Dittmar and Drury, 2000). The regret due to the realization that the items bought on sale were not in fact a bargain, might be regarded as one of the most common occurrence of irrational compulsive purchases; regret and dissatisfaction can be seen as emotional responses related to retrospective judgments about the purchase, when looked at an unplanned compulsive purchase in a retrospective manner, that purchase might seem wasteful or unnecessary (Wood, 1998).

As Asian developing countries strive for economic prosperity, their citizens are becoming more materialistic (Pornpitakpan and Han, 2013). Economists argue that increased importance is placed upon positional values in a society during periods of economic development; such values are oriented towards status display and conspicuous consumption (Batra et al. 2000). As noted by a Pakistani economist, that throughout its economic history Pakistan has been plagued by weaknesses such as the tendency of its people to live beyond the means, and rather than doing long-term investments, indulging in short-term consumption (Arby 2001). Compulsive buying is considered to be a significantly deteriorating problem which involves continuous desires to shop and uncontrolled money spending tendencies (Harvanko et al. 2013). When people spend excessively to maintain an image, they will face difficulties, financially as well as psychologically, when consumers get too much involved in spending and their lives revolve around it, they will suffer from an obsessive disorder generally known as compulsive buying (Bindah and Othman, 2012). Researching on compulsive buying is of immense importance as a lot of studies indicate that there is an increasing number of compulsive buyers in many countries, which appears to be a growing problem (Horvath et al. 2013).

*1.1. Research Rationale*

As noted above that due to globalization there has been an increase in the spread of consumer culture around the world and that it has significant potential negative aspects to it on a societal level in the form of materialism, status consumption and compulsive buying leading to affect the consumers in a negative way in the form of financial loss and regret. In the western world, this has already occurred and it has been known to spread around the globe in the developing countries as well. As noted earlier that consumers in the developing countries are increasingly becoming influenced by the consumer culture and that this consumer culture has been known to be strongly associated with compulsive buying and its significant negative consequences on the society, especially in the developing countries as the consumers over there are influenced by new kinds of products attractively displayed in new kinds of markets.

The current study aims to provide an insight into the factors related to compulsive buying in the Pakistani society, this aspect of the Pakistani society has not been extensively researched upon. The Pakistani society is increasingly becoming influenced by the factors associated with compulsive buying which might be detrimental for the society as a whole. Due to the potential negative consequences of compulsive buying with regards to the evidence available in the developing countries, it is imperative to research on compulsive buying within the Pakistani context to find out whether the instances of compulsive buying are currently present in Pakistan or not, and if so, whether it has spread on a large scale as to effect the lives of the consumers in a negative way as it did in the western world or not. The theoretical framework modeled for this research has not been used before in any other research within the Pakistani context, so it will provide a new and different view of the compulsive buying phenomenon and its consequences.

And the results of the current study will not only be relevant to the Pakistani society only, but will also be helpful in predicting whether compulsive buying as a result of the consumer culture is occurring in other developing countries or not, and if so, whether it is leading to negatively affect the consumers in the form of post-purchase regret or not. In this way, it will indicate whether the current societal trends are in consumer's benefit or not. So it will make a significant contribution to the existing literature, as it focuses on the prevalence of compulsive buying in one of the developing countries where it is a relatively new phenomenon.

Other than that, as the current study also takes into account the impact of sales promotion on unplanned buying, it will also be useful to marketers operating in Pakistan and in other developing countries with somewhat similar economic and societal conditions, with regards to marketing their products in such an environment. The consumer culture might have its negative consequences to the society in the form of compulsive buying but it benefits the retailers and businesses dealing with consumer items, and so, in a way, benefits the economy as well.

The main objectives of the study are to determine, the current trend of purchases by the Pakistani consumers with respect to Materialism, Status consumption, Sales promotion and Bank-card payment, the prevalence of Materialism and Status Consumption with regards to Compulsive Buying; whether these two variables cause Compulsive buying or not.

## 2. Literature Background

Bell (1982) investigated the probability that expected utility theory seems to fail in light of the fact that only 'money' as an outcome indicator is not adequate. According to this study, there is proof that consumers do not generally settle on choices relating to unsure monetary returns as if they were augmenting anticipated utility of final assets and that, circumstances exist in which more than mental shortcuts are included and these inconsistencies raise questions with regards to the comprehensiveness of expected utility theory as a guide to conduct of consumers. After making a choice under unsure circumstances and getting the significant results, a consumer may find out that an alternative choice might have been best. This realization may confer a feeling of misfortune, or regret. The person making the choice who is now ready to tradeoff monetary reward in-order to evade regret will show some of the behavioral inconsistencies of the theory. He found out that, by precisely including regret, expected utility theory improves not only as a better explanatory interpreter of stipulating consumers' actions, but also becomes a credible guide, as explicitly including the tradeoff between asset and regret may offer a better chance of reflecting, descriptively the consumer's overall evaluations of the choices present and will let the consumers' judgment to progress with the realization that evading regret is also a concern when making a choice between two or more alternatives.

Veludo et al. (2014) studied the relationship between money attitudes in terms of power-prestige, retention-time, distrust and anxiety) and compulsive buying behavior while using a credit. The results indicated that any misuse of credit cards significantly increased compulsive buying among individuals with high levels of anxiety.

Roberts (2000) discussed that the rise of an overall consumer culture has possibly extreme negative outcomes. According to him, Materialism and Status Consumption are the foundations of the consumer culture, whereas Compulsive Buying is a harmful consequence of the consumer culture. The outcome of his study uncovered increased levels of Compulsive Buying among college students. A positive association of Compulsive Buying with Status Consumption was found. Also, it was found that two of the three dimensions of Materialism; "Acquisition as the Pursuit of Happiness" and "Acquisition Centrality" were significant motivating variables behind Compulsive Buying. However, the third dimension of Materialism i.e. "Possession-defined Success" was found not to be significantly associated with Compulsive Buying.

Saleh (2012) found out that there is a positive relationship between Post-Purchase Regret and Unplanned Buying. A strong relationship was found between buying without planning and Post-Purchase Regret. It was found among individuals with less income and among the males as well in his study. Also, Bank-card payment but not any promotions on sales had a noteworthy positive association with unplanned buying behavior.

Harvanko et al. (2013) conducted a study which was focused on to understanding the prevalence and characteristics of college students meeting the criteria for Compulsive Buying. The results showed that 3.6% of college students surveyed fulfilled the criteria for Compulsive Buying. As compared to the students not meeting criteria for CB, those who met the criteria for Compulsive Buying showed considerably stronger exhibits of psychiatric co morbidity, poorer physical health, increased stress, and lower grade point averages.

Compulsive buyers normally do not go out with the particular objective of visiting a particular shop and buying a certain item; the tendency occurs after having a desire to purchase, and that is influenced by environmental and/or external factors as well as internal states (Kyrios et al. 2013). A positive association of retail displays with compulsive buying of certain products because of commercial offerings has been found (Wakefield et al. 2008). The point-of-sale exhibits increase consumers' unplanned buying extensively because of the fact that the point-of-sale exhibits work as advertising that allures consumers into buying products that they did not plan to purchase before any consumer enter the store (Carter et al. 2009). Employing the promotion strategy in sales, specifically the reward which is given instantly to the consumers, has a positive effect on unplanned buying and that price discounts and attractive packages also increase unplanned buying (Liao et al. 2009). On-sale displays have been found to be the most prominent factor on unplanned buying (Mihic and Kursan, 2010).

Donnelly et al. (2013) conducted a study to explain why materialism has a strong affect on compulsive buying. It was found that materialism had a positive relationship with compulsive buying and that a deficiency of money supervision mediates the course from materialism to compulsive buying, their results also showed that, it is particularly the poor credit management of materialist individuals that most strongly intercedes this relation. Furthermore, emotional purchasing intentions (i.e., shopping to improve one's mood) and transformation expectations also arbitrate the association between materialism and compulsive buying. Thus, the tendency of materialist individuals to not control their credit, believing that their purchases will change their lives, and making purchases for emotional reasons clearly explains the reasons for the large occurrences of compulsive buying behaviors among them.

Eren et al. (2012) identified compulsive buying behaviors as an outcome of materialistic and hedonistic values. Their study examined the compulsive buying behaviors through materialistic and hedonic values prevalent among college students in Turkey. Considerable direct effects of hedonism and materialism were found on compulsive buying.

A study by Reeves et al. (2012) examined the correlation between materialism, worship of celebrity, and compulsive buying, as well as boredom proneness, and numerous other measures of well-being, such as self-esteem and self-concept precision. It was found that, materialism and compulsive buying had a positive relationship with celebrity worship. Moreover, materialism and compulsive buying had a strong association with low level of self-concept clarity. These results indicated that those individuals who were high in materialism, celebrity worship, and compulsive buying were deficient in internal resources such as a clear sense of self and a positive self-regard. Such people seem to require external motivation, perhaps as an escape from negative consequences of introspection, and turn to external, yet useless, sources of satisfaction, such as celebrity worship and materialistic recreations, in an effort to cope with their deficiencies.

A study by Mueller et al. (2011) investigated the association between Compulsive Buying complaints and materialism by gender. The results showed that in both genders Compulsive Buying Scale scores were positively associated with materialism.

Pham et al. (2012) state in their study that even though there a strong relationship between materialism and compulsive buying, psychological theories also propose that

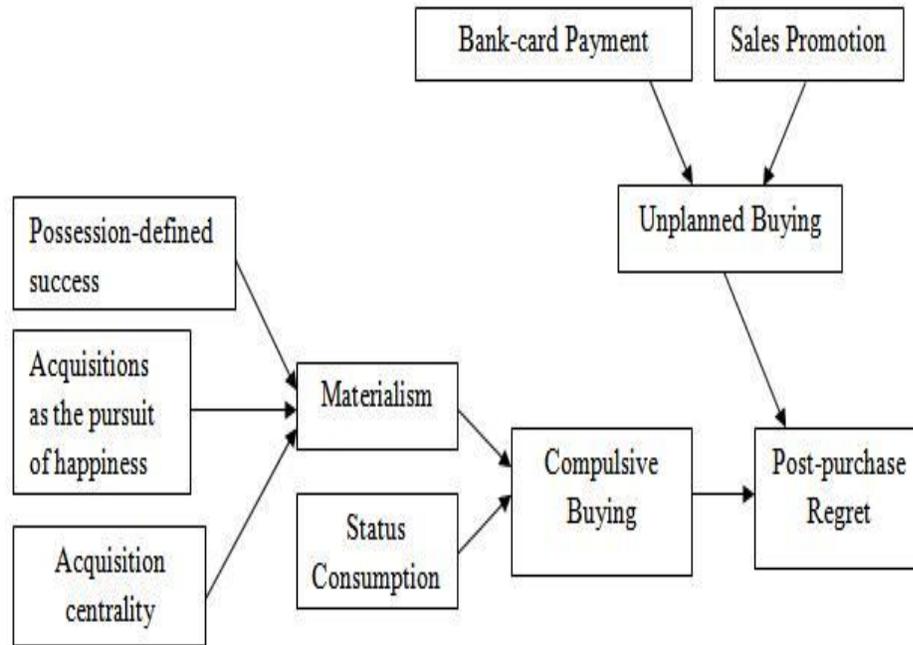
financial management practices and financial attitudes would considerably envisage compulsive buying tendencies even after controlling for materialism. The aim of their study was to examine the association between financial management practices, financial attitudes, and materialism, and their comparative effect on compulsive buying. The results showed that only financial management practices, notably predicted compulsive buying tendencies after controlling for materialism. Also, financial management practices considerably moderated the association between materialism and compulsive buying severity. The findings maintained that the addition of financial management components in the present psychosocial interventions should be considered and also showed that individuals placing high values to materialistic possessions who also were not good at managing their finances were particularly prone to the problems related to compulsive buying.

Due to changes in the marketing environment in the developing countries, there is a huge possibility for compulsive buying to occur, especially in the major urban cities of these developing countries (Mai et al. 2013). Furthermore, young consumers in most of the developing countries are more likely to buy new and fashionable products, adopt new lifestyles and have been known to enjoy shopping in newly developed shopping systems that could lead to compulsive buying, this is essentially the case of urban consumers' shopping in new kinds of markets, such as supermarkets, in which a wide range of products with attractive displays and a good shopping environment can be found (Mai et al. 2013). Changing social dynamics in developing countries might create negative circumstances for individuals, such circumstances might lead to compulsive buying being an escape solution for the individual, a condition similar to consumers in the western world (Horvath et al. 2013). Despite the cultural differences, consumers from developing countries share some common tendencies and behaviors with consumers in advanced economies with respect to compulsive buying (Mai et al. 2013). The increasing prevalence of compulsive buying in different cultures indicates that it is not solely a Western problem (Horvath et al. 2013).

### **3. Methodology**

The following theoretical framework has been inspired by the expected utility theory and prospect theory.

3.1. Theoretical Framework and Variables under consideration



3.2 Conceptual and Operational definition of Variables

3.2.1 Post-purchase Regret

It is a state of sorrow and grief that occurs when consumers perceive that they did not make the right purchasing decisions. It is defined as the feel of anxiety or sorrow after buying certain items and perceiving that they might have little benefit or no benefit at all.

3.2.2 Compulsive Buying

It is defined as a continuous tendency to repetitively undergo purchasing that comes as a reaction to certain events and negative feelings. For operational purposes it is defined as a sudden surge to undergo buying to make oneself feel better regardless of the consequences of that purchase.

3.2.3 Status Consumption

It is defined as a kind of power that comprises consideration, admiration and envy from others and symbolizes the goals of a society or a culture. Status consumption is regarded as a consumer value and the patterns of consumption will be the outcome of consumer values. It is the motivational process by which people attempt to improve their social status through the consumption of consumer products that convey status for the individual and the surroundings. It gives consumers a feel of being socially powerful, so it has a very strong potential to lead to compulsive buying.

3.2.4 Materialism

It is defined as the importance a consumer ascribes to worldly possessions. It has been regarded as a personality construct with three characteristics: envy, possessiveness, and

non-generosity. Materialists attempt to find pleasure and fulfillment through possessions and acquisitions. The operational definition of materialism is that it is a combination of one's principles in life pertaining to the priorities one places in to worldly belongings.

### 3.2.5 Unplanned Buying

It is defined as the concept and characteristics of the purchase which is not planned. Unplanned buying occurs when the consumers remember their need of something that is available in the store, or they are allured by attractive packaging or sales promotion.

### 3.2.6 Sales Promotion

It is defined as actions meant at alluring particular targeted market segments to purchase the products. Monetary and non-monetary activities aimed at increasing sales through coupons, discounts, free gifts and buy-one-get-one-free offers.

### 3.2.7 Bank-card Payment

Payments using credit and debit cards at shopping outlets; swiping the card for the transaction. This study has used the term 'bank cards' to cover both credit cards and ATM cards, as ATM machines are widely present and are a source of acquiring money through a very short process.

## 3.3. Hypothesis Development from Theory:

Expected utility theory, is a certainty effect, which contributes to risk aversion in consumer's choices of maximum utility. This can lead to contradictory preferences within the same choice if it is presented in different ways. Prospect Theory is concerned with the decision making of the consumer under some risk that can be viewed as a choice between different prospects.

Roberts (2000) found that compulsive buyers associate buying with social status a positive association of compulsive buying with status consumption was found. Eren et al. (2012) identified Compulsive buying behaviors as an outcome of materialistic values; Donnelly et al. (2013) also found that materialism has a positive relationship with compulsive buying.

Moreover, Verplanken and Herabadi (2001) focused on compulsive buying, with some cognitive aspects such as lack of planning and deliberation. There is some affective aspects as well, such as compulsion, less control, and probability of feeling regret. This provides support for H<sub>1</sub> and H<sub>2</sub> of the current research.

- **H<sub>1</sub>**: Materialism will have a significant positive impact on Compulsive Buying leading to positive significant affect on post purchase regret of consumer.
- **H<sub>1a</sub>**: The 'Possession defined Success' dimension of Materialism will have a positive significant impact on materialism, which have significance on compulsive buying leading to positive significant affect on post purchase regret.
- **H<sub>1b</sub>**: The 'Acquisition as the pursuit of Happiness' dimension of Materialism will have a significant positive impact on materialism which have significance on compulsive buying leading to positive significant effect on post purchase regret.

- **H<sub>1c</sub>**: The ‘Acquisition Centrality’ dimension of Materialism will have a significant positive impact on materialism which have significance on compulsive buying leading to positive significant effect on post purchase regret.
- **H<sub>2</sub>**: Status Consumption will have a significant positive impact on Compulsive Buying leading to positive significant impact on post purchase regret of consumer.

The results of the study by Saleh (2012) showed that there is a positive relationship between post-purchase regret and unplanned buying; Wood (1998) also concluded that most cases of unplanned buying led to regret. Some sales promotion strategies have a positive effect on unplanned buying and it is known to increase unplanned buying (Liao et al. 2009). Mihic and Kursan (2010) also found sales promotion to be the most influential factor on unplanned buying.

Whereas, Palan et al. (2011) showed that facilitating role of credit cards in making payments was directly related to unplanned buying which had a significant positive relationship between bank-card payment and unplanned buying (Saleh, 2012), providing support for H<sub>3</sub> of this study.

- **H<sub>3</sub>**: Unplanned Buying has a significant positive impact on Post-purchase Regret.
- **H<sub>3a</sub>**: Sales Promotion has a significant positive impact on unplanned buying leading to positive significant effect on post purchase regret.
- **H<sub>3b</sub>**: Bank-card payment has a positive impact on unplanned buying leading to positive significant effect on post purchase regret.

3.4. Reference List of Variables under consideration

Independent Variables	Expected sign (+/)	Theoretical Justification
Status Consumption	+	Roberts (2000)
Materialism	+	Donnelly et al. (2013) and Eren et al. (2012)
Unplanned Buying	+	Saleh (2012) and Wood (1998)
Compulsive Buying	+	Verplanken and Herabadi (2001)
Sales Promotion	+	Liao et al. (2009), Mihic and Kursan (2010)
Bank-card payment	+	Saleh (2012) and Palan et al. (2011)

3.5. Regression Model Equation:

$$PPR_t = \beta_0 + \beta_{1t}UB_t + \beta_{2t}CB_t + \beta_{3t}M_t + \beta_{4t}SC_t + \beta_{5t}SP_t + \beta_{6t}BCP_t + \beta_{7t}PDS_t + \beta_{8t}APH_t + \beta_{9t}AC_t + \varepsilon$$

*PPR<sub>t</sub>* is Post-purchase Regret at time *t*; *UB* is Unplanned Buying; *CB* is Compulsive Buying; *M* is Materialism; *SC* is Status Consumption; *SP* is Sales Promotion, *BCP* is Bank-card Payment, *PDS* is Possession-defined Success, *APH* is Acquisitions as the Pursuit of Happiness, *AC* is Acquisition Centrality,  $\beta_0$  is constant and  $\varepsilon$  signifies the error term.

### *3.6. Sample Criteria and Respondents Profile*

The planned sample was of 300- 350 college students. 338 questionnaires were distributed, the ones completed and selected for analysis were 308 which had no missing values, giving a response rate of 91.12% out of which 56.17% were females whereas 43.83% were males.

The participants for the distribution of the questionnaires for this research constituted both the genders, the sample selected mainly comprised college-aged students and data was collected from three universities in Lahore i.e. Lahore University of Management Sciences (LUMS), Lahore School of Economics (LSE) and Forman Christian (FC) College University, Lahore as it was easily accessible. Mostly university students between the ages of 20 to 25 possess a high probability of compulsive buying behavior. The cultural effect is more prominent in such consumers than others. Consumers of such age group and same social status show more inclination towards dissatisfaction/regret in their post purchase decisions. This is the basic purpose of selecting a university student as a sample for this study.

### *3.7. Instrumentation*

For this study, a structured questionnaire has been taken from two research papers i.e. Saleh (2012) and Roberts (2000) after formal permission. In the first section, the dependent variable i.e. Post-Purchase Regret has been tested by using the scale adopted by Saleh (2012). For our research, the questions have been further modified to suit our sampling criteria.

In the next sections the independent variables have been tested. The independent variables Compulsive Buying, Status Consumption and Materialism have been measured by using the scale adopted by Roberts (2000) for his research. The remaining independent variables Unplanned Buying, Sales Promotion and Bank-card payment have been measured by using the scale employed in his research by Saleh (2012). Again, all the questions have been further modified to suit the sampling criteria.

The questions for all the variables have been measured by Likert-type scales, each item has been measured by a seven-point scale ranging from “1=strongly disagree” to “7=strongly agree”. The last section deals with demographics. The questionnaire is shown in Table 2 with its factor loadings simultaneously. The questionnaires distributed to the respondents did not list the names of the variables that were being measured. Each questionnaire comprised of 55 questions for the dependent and independent variables, whereas the last 4 questions were included to gather information about the demographics.

### *3.8 Data Analysis Tools and Techniques*

The tools used were SPSS software and AMOS graphics. The techniques used were CFA and Path Analysis i.e. SEM.

## **4. Results**

The data for the current study was collected from 308 respondents. Harman’s one factor test was conducted to check for common variance biasness in the data.

### *4.1. Harman’s One-Factor Test*

Harman’s one factor test was conducted in order to analyze the presence of common method variance biasness in the data. If a single factor reports most of the variance, then

common method variance bias exists (Podsakoff et al. 2003). In the current study such biasness was not present because of the fact that 13.7% of the variance is explained by the first component (See below in Table 1).

**Table 1: Common Method Variance**

Component	Total	% of Variance	Cumulative %
1	6.348	13.801	13.801
2	3.693	8.029	21.830
3	2.693	5.855	27.685
4	2.284	4.965	32.650
5	2.146	4.665	37.314
6	2.076	4.512	41.826
7	1.782	3.874	45.701
8	1.555	3.381	49.082
9	1.368	2.974	52.056
10	1.311	2.851	54.907
11	1.262	2.743	57.650
12	1.090	2.369	60.018
13	1.047	2.277	62.295

*4.2. Confirmatory Factor Analysis (CFA)*

After collection, the data is coded and analyzed for validity and reliability. Shah and Goldstein (2006) identified an approach of tests which are considered important i.e. to check for reliability and validity. For CFA items with loadings above than 0.5 were included for the analysis and the ones with a factor loading below 0.5 were excluded as suggested by Hair et al. (2006). Detailed factor loadings are given below in Table 2 for model. The analysis was conducted for Post-Purchase Regret, Compulsive Buying, Materialism and its three dimensions i.e. ‘Possession defined success’, ‘Acquisition as the Pursuit of Happiness’, and ‘Acquisition Centrality’, Unplanned Buying, Sales Promotion, and Bank-card Payment.

*4.2.1. Factor Loadings*

The factor loadings for every item of each construct is checked against the criteria to be 0.5 or higher, only the items that fulfilled this criterion were included in the final analysis, once the items with lower than 0.5 factor loading were excluded from the data, the estimates were computed again to check for the factor loadings for the remaining items.

Table 2 shows the final factor loadings of variables. For dependent variable Post-purchase regret (PPR), the items factor loadings were 0.66 and 0.74(PPR1 and PPR2) respectively. Bank-card payment (BCP), the factor loadings of BCP4, BCP5 and BCP6 items were kept for the final analysis as they had a value of 0.72, 0.76 and 0.77 respectively. Loadings for status Consumption (SC) were 0.81, 0.85, 0.80 and 0.53 (SC1, SC2, SC3 and SC4) respectively. Acquisition Centrality (AC) had a value of 0.61 and 0.86 (AC5 and AC6) respectively. Acquisitions as the pursuit of Happiness (APH), the factor loadings of APH2, APH4, and APH5 were kept for the final analysis as they had a value of 0.59, 0.77 and 0.70 respectively. For the variable Possession defined Success

(PDS), the factor loadings were 0.74, 0.73, 0.53 and 0.70 (PDS1, PDS2, PDS4 and PDS5) respectively. Compulsive Buying (CB) the factor loadings of CB1, CB2, CB3, CB4, and CB6 were kept for the final analysis as they had a value of 0.57, 0.69, 0.63, 61 and 0.52 respectively. Sales Promotion (SP) loadings were 0.56, 0.53, 0.64, 0.54 and 0.50 (SP2, SP3, SP4, SP5 and SP6) respectively.

**Table 2: Final Factor Loadings Included in Analysis**

	<b>Post-Purchase Regret</b>
I often feel anxiety after buying goods I had not planned to buy before entering the store.	0.66
I often feel that my unplanned purchases have little or no benefits	0.74
	<b>Bank-card Payment</b>
I become less interested in product price when using a bank card in purchasing process.	0.72
My banking cards encourage me to repeat my visits to stores for purchase.	0.76
My banking cards encourage me not to put limits on the value of my purchases from stores.	0.77
	<b>Status Consumption</b>
I am interested in new products which convey high social status.	0.81
I would buy a product just because it has status.	0.85
I would pay more for a product if it has status	0.80
The status of a product is irrelevant to me	-0.53
	<b>Acquisition Centrality</b>
Buying things gives me a lot of pleasure.	0.61
I like a lot of luxury in my life.	0.86
	<b>Acquisitions as the Pursuit of Happiness</b>
My life would be better if I owned certain things I don't have.	0.59
I'd be happier if I could afford to buy more things.	0.77
It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.	0.70
	<b>Possession-defined Success</b>
I admire people who own expensive homes, cars and clothes.	0.74
Some of the most important achievements in life include acquiring material possessions.	0.73
The things I own say a lot about how well I'm doing in life.	0.53

I like to own things that impress people.	0.7
	<b>Compulsive Buying</b>
If I have any money left at the end of a certain period, I just have to spend it.	0.57
I often feel that others would be horrified if they knew of my spending habits.	0.69
Oft times I bought things even though I couldn't afford them.	0.63
Oft times I wrote a check even when I knew I didn't have enough money in the bank to cover it.	0.61
I feel anxious or nervous on days I don't go shopping	0.52
	<b>Sales Promotion</b>
Stores I visit always give free samples of some goods.	0.56
When visiting stores, I always find contests for those who exceed a certain purchase value.	0.53
Stores always distribute prizes to those who exceed a certain limit of purchase value.	0.64
Stores always provide several types of goods in one package at reduced prices.	0.54
At purchasing, I visit stores I know they give price discounts on some products.	0.50

4.2.2 Testing for Construct Reliability, Convergent Validity and Discriminant Validity

Post-purchase Regret reliability was 0.658 as the value is closer to 0.7, we conclude that the construct reliability and also holds convergent validity as AVE value of 0.492 as it is near to 0.5; and as the AVE values were greater than the squared co-variances, we conclude that the discriminant validity also holds for this construct (See below in Table 3)

Bank-card payment is a reliable construct with 0.794 cronbach alpha, AVE of 0.563. This constructs holds convergent and discriminant validity. Whereas, Sales Promotion had AVE values which were greater than the squared co-variances in both the models, so we conclude that the discriminant validity holds for this construct and is reliable with the cronbach alpha of 0.690. Status Consumption was also reliable and valid for the study (cronbach 0.686, AVE 0.578 respectively). Possession defined Success had an AVE value of 0.463, as it is close to 0.5; we conclude that the convergent validity for this construct holds. And as the AVE value was greater than the squared co-variances, we conclude that the discriminant validity also holds for this construct. The value for the construct reliability was 0.772, as the value is above 0.7; we conclude that the construct reliability also holds for this construct (See Table 3).

Acquisition as the Pursuit of Happiness is a reliable construct (0.73) and both validities hold (AVE 0.477). Acquisition Centrality had an AVE value of 0.556, we conclude that the convergent and discriminant validity for this construct holds and was reliable with cronbach alpha of reliability of 0.709. Compulsive Buying had an AVE value which was greater than the squared co-variances, so it concludes that the discriminant validity holds

for this construct. The reliability for this construct was 0.743 so it concludes that construct is reliable (See below, Table 3).

**Table 3: Construct Reliability, Convergent Validity and Discriminant Validity**

Variables	Construct Reliability	Convergent Validity (AVE)	Discriminant Validity (squared covariance)
Post-Purchase Regret	0.658	0.492	0.0196,0.0625,0.0004,0.0484
Compulsive Buying	0.743	0.368	0.3025, 0.2116, 0.1156,0.0484
Status Consumption	0.686	0.578	0.4761, 0.0196, 0.0625,0.1156
Possession-defined Success	0.772	0.463	0.4624, 0.1024, 0.0004,0.3025
Acquisition as the Pursuit of Happiness	0.73	0.477	0.4624, 0.1024, 0.0004,0.3026
Acquisition Centrality	0.709	0.556	0.4624, 0.1024, 0.0004,0.3027
Sales Promotion	0.69	0.309	0.0625,0.0625,0.2116, 0.1024
Bank-card Payment	0.794	0.563	0.0625,0.0625,0.2116, 0.1025

4.2.3 CFA Model Fit

Once the factor loadings, validity and reliability for each construct has been checked for, the model fit of the variables was tested employing different SEM benchmarks (Kline, 2005; Hu and Bentler, 1999). The model fit results indicate a chi-square per degree of freedom value of 1.784 for model which indicates an excellent fit for the model as the values are between 1 and 3 (Segars and Grover, 1998; Carmines and McIver, 1981), the Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-lewis Coefficient (TLI) and Comparative Fit Index (CFI) were 0.795, 0.898, 0.873 and 0.895 respectively, which render the model fit because the values are above or close to 0.8 (Segars and Grover, 1998). The root mean square error of approximation (RMSEA) should be less than or equal to 0.05, and shows the average difference between observed and implied model covariance, in the current study, this value is 0.05. Lastly the values for HOELTER’s n must be above 200 to indicate a good fit; it measures the sample size that would be adequate for a good fit, for the current research the value was 205 which show that this model has a good fit. The Model Fit summary is shown below in Tables 4.

**Table 4: Model Fit Summary (CFA Model Fit)**

	CMIN /DF	NFI	RFI	IFI	TLI	CFI	RMSEA	HOELTER (0.01)
<b>Model</b>	1.784	0.795	0.752	0.898	0.873	0.895	0.051	205

4.3 Path Analysis (SEM) Hypothesis Testing

For Hypothesis testing, SEM was used. The path analysis for the model indicated that, Materialism has an extremely significant positive impact on Compulsive Buying with a p-value of 0.00, and has a highly positive significance impact on post purchase regret with p-value of 0.05 so H<sub>1</sub> is accepted. It can be clearly said that post purchase regret is affected by compulsive buying behavior which is directly affected by materialism (See below in figure 1)

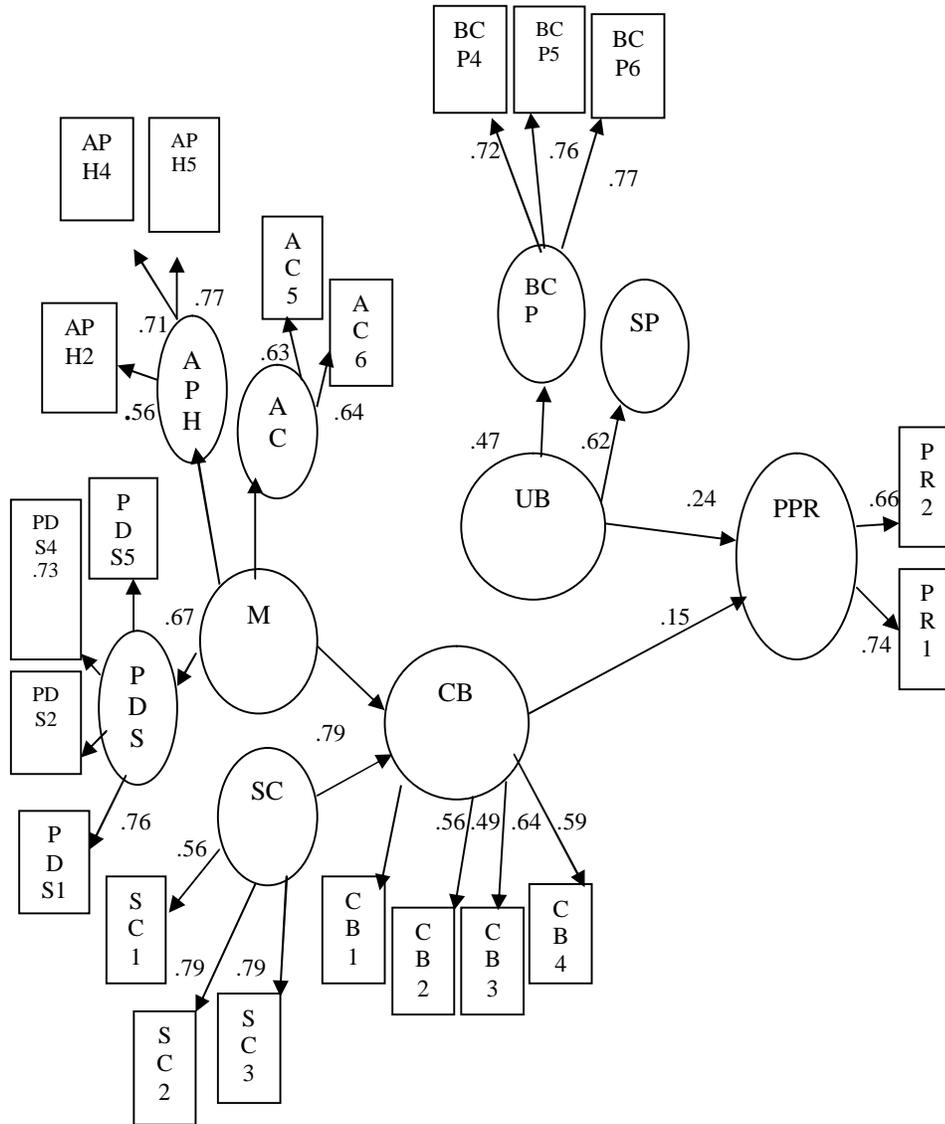


Figure 1: Amos Output of Path Analysis of the Model

Possession defined Success' dimension of Materialism had an extremely significant positive impact on Materialism, with a value p-value of 0.000, Materialism has an extremely significant positive impact on Compulsive Buying with a p-value of 0.00, and has a highly positive significance impact on post purchase regret with p-value of 0.05 so we accept the first generated path (H<sub>1a</sub> is accepted). The 'Acquisition Centrality' dimension of Materialism has an extremely significant positive impact on Materialism, with a value p-value of 0.000, Materialism has an extremely significant positive impact on Compulsive Buying with a p-value of 0.00, and has a highly positive significance impact on post purchase regret with p-value of 0.05 so we accept the second generated path, and H<sub>1b</sub> is accepted. The 'Acquisition as the pursuit of Happiness' dimension of Materialism has an extremely significant positive impact on Materialism, with a value p-value of 0.000, so H<sub>1c</sub> is also accepted.

Status Consumption had a p- value of 0.05, thus it also has a significant positive impact on Compulsive Buying leading a positive significant impact on post purchase regret of consumers so fourth path is also generated and we accept H<sub>2</sub>.

Unplanned Buying had a p- value of more than 0.05, thus it does not have a significant impact on Post-Purchase Regret so H<sub>3</sub> is not accepted. So is the case with sales promotion had a p- value of more than 0.05, thus it does not have a significant impact on Unplanned Buying, and so H<sub>3a</sub> is not accepted. Bank-card Payment had a p- value of more than 0.05, thus it does not have a significant impact on Unplanned Buying, and so H<sub>3b</sub> is not accepted (See below in table 5).

**Table 5: Results of Path Analysis Tables**

Path Analysis	Estimate	S.E.	C.R.	P-value
CB <--- M	0.521	0.108	4.809	***
CB <--- SC	0.106	0.055	1.93	0.05**
BCP <--- UB	1.198	0.95	1.261	0.20
SP <--- UB	0.835	0.662	1.261	0.20
PDS <--- M	1.665	0.301	5.524	***
APH <--- M	0.601	0.109	5.524	***
AC <--- M	1.003	0.157	6.391	***
PPR <--- CB	0.157	0.085	1.854	0.05**
PPR <--- UB	0.545	0.39	1.398	0.16
***Significant at 0.01				
**Significant at 0.05				

**5. Discussion**

The main objectives of the study is, to determine whether Materialism and Status Consumption exist in our society and cause Compulsive Buying or not, and whether Compulsive buying leads to Post-Purchase regret directly or indirectly because of Materialism and/or Status Consumption or not. Also to determine the role of Unplanned Buying in causing Post-Purchase Regret; whether there exists a significant relationship

between these two variables or not, and whether the role of gender plays some role in the relationship of these two variables or not, and to determine whether Sales Promotion and Bank-Card payment are the cause of Unplanned Buying.

The results show that there is a positive association between Materialism and Compulsive Buying ( $H_1$ ); previous researches also linked Materialism with Compulsive Buying (Donnelly et al., 2013; Eren et al., 2012; Reeves et al., 2012; Mueller et al., 2011; Pham et al., 2012; Brougham et al., 2011), which strongly supports the claim that Materialism leads to Compulsive Buying, this might be due to the fact that those individuals who were high in materialism and compulsive buying were deficient in internal resources such as a clear sense of self and a positive self-regard, such people seem to require external motivation, perhaps as an escape from negative consequences of introspection, and turn to external sources of satisfaction, such as materialistic recreations, in an effort to cope with their deficiencies (Reeves et al., 2012).

The three dimensions of Materialism i.e. 'Possession defined Success', 'Acquisitions as the Pursuit of Happiness' and 'Acquisition Centrality' had a positive impact on Materialism ( $H_{1a}$ ,  $H_{1b}$  and  $H_{1c}$ ), showing that these dimensions are true indicators of Materialism. The results indicated that Compulsive Buying is directly affecting Post-Purchase Regret of consumers. Materialism did have a strong association with Post-Purchase Regret supporting the claim that when consumers make compulsive purchases with regards to augmenting their social status, they do regret it afterwards (Dittmar and Drury, 2000).

The results shows that Status Consumption also had a strong relationship with Compulsive Buying with a strong impact on post regret behavior ( $H_2$ ) this might be due to the fact that while Status Consumption might be associated with Compulsive Buying, its essence is somewhat accounted for in the 'Acquisition centrality' dimension of Materialism, while status is an essential element of materialism, the two factors are related but not redundant (Roberts, 2000).

Sales Promotion did not have a strong direct relationship with Unplanned Buying nor did it have a significant association with Post-Purchase Regret ( $H_{3a}$ ). This result is consistent with what Saleh (2012) found out, indicating that the effect of Sales Promotion on Unplanned Buying was not significant this might be attributed to the fact that consumers are not that much influenced by external factors such as Sales Promotion as to indulge in Unplanned Buying and they might make decisions with regards to their purchases based on their own desires which are different from the promotional activities they see around them. Consumers might not be influenced by external factors indicating that it is not the marketers' promotional activities that cause Post-purchase regret but the internal states of the consumers such as compulsiveness associated with Materialism and Status Consumption that cause Post-Purchase Regret.

The findings also indicate that Bank-card Payment did not have a significant direct relationship with Unplanned Buying ( $H_{3b}$ ). Bank-card Payment's significant association with Unplanned Buying not further leading to Post-Purchase Regret might be attributed to the high income levels of the sample constituted, as the research was undertaken in a relatively wealthy part of the city where consumers are generally known to be financially well-off and as most of the respondents were females with high disposable incomes; able

to afford the products they desire for so they might be satisfied with their purchases whether planned or unplanned.

## **6. Conclusion**

The results of the current study have important implications for researchers and society in general. As discussed earlier, that due to globalization there has been an increase in the spread of consumer culture around the world, as consumers in the developing countries are increasingly becoming influenced by it and that it has significant potential negative aspects to it on a societal level in the form of materialism, status consumption and compulsive buying leading to affect the consumers in a negative way in the form of regret. It is suggested that Compulsive Buying does lead to Post-Purchase regret because of Status Consumption; the strong direct relationship of Compulsive Buying with Materialism also indicates that the materialistic values are present among the young consumers. This reinforces the fact that the cornerstones of consumer culture are present in our society and are causing Compulsive Buying to some extent, pointing out the negative aspects of the consumer cultures' prevalence in the Pakistani society.

With this sample consideration, which depicts one of the wealthiest, well-educated and well-off sector of the Pakistani society; generally can be said they are influenced by the western culture and values, leading to the occurrence of compulsive buying with regards to its negative consequences in the form of regret is likely to spread in the future in the country. In this case the spread of materialistic and status oriented values might spread leading to the same consequences as faced by the elites. The same might be said for other developing countries, particularly in the South Asian region as the countries here are somewhat similar in terms of the socio-cultural aspects. This is an alarming situation and calls for the consumer protection groups/organizations to make the public aware of the negative consequences of the materialistic and status oriented values in the society and guide them through public service messages or advertising campaigns to make rational decision-making with regards to their purchases.

## **7. Future Research**

Since extensive research has not been done on Materialism, Status consumption, Compulsive Buying, Post-Purchase regret, Sales promotion with regards to Unplanned Buying, Bank-card Payment with regards to Unplanned buying in Pakistan, it is recommended that different dimensions of variables should be included in future research.

For Post-purchase regret, it is recommended that in future, different dimensions of it be measured such as outcome regret and process regret i.e. regret due to disappointment in the product purchased and regret due to process of the purchase, these dimensions can help find out exactly which aspects of the purchase do the consumers regret and why.

As the current study only takes into account materialism and status consumption as associated with Compulsive buying, future research in Pakistan should take into account factors like the role of mood in compulsive buying, celebrity worship and/or financial management practices of consumers with regards to compulsive buying, extensive research has not been done with regards to the relation of mood and the role of attitude towards money in compulsive buying in Pakistan or the developing countries, similarly the role of celebrity worship with regards to compulsive buying and materialism might also be an interesting factor to research upon as celebrity following in Pakistan is wide

spread and the relation of it with compulsive buying and materialism might show some interesting results.

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