Materialism Derives: An Analysis of Direct and Indirect Impact of Materialistic Attitude in the Development of Compulsive Buying Behavior

Saman Attiq, PhD
Assistant Professor, Leadership & Management Sciences
Faculty of Contemporary Studies
National Defence University, Islamabad Pakistan
Email: samanattiq@ndu.edu.pk

Rauf I. Azam, PhD
University Institute of Management Sciences
PMAS - Arid Agriculture University, Rawalpindi, Pakistan
Email: rauf@uaar.edu.pk

Abstract
The study aimed to examine the causal relationship between materialistic attitude, purchase-decision-involvement and compulsive buying behavior in the context of appearance-related products. Questionnaire adopted from literature was modified and administered to 1010 consumers from community, shopping-malls and institutes of four major cities of Pakistan. A structural equation model using AMOS 22 was analyzed using maximum likelihood method. Finding showed that materialistic attitude had a direct and indirect impact on consumer compulsive buying behavior through purchase-decision-involvement. Theoretical and practical implications are discussed along with future recommendations.

Keywords: Compulsive buying behavior, materialistic attitude, purchase-decision-involvement, mediation

I. Introduction
Consumers exhibit different buying behaviors due to their different sets of needs, wants and desires. Then buying patterns are formed due to combinations of their social/cultural, psychological and environmental factors etc. Whenever an individual goes to shopping, directly or indirectly she or he has to go through some decision processes in order to make a purchase and all key decisions are influenced by internal and external factors. The consumer’s internal factors are the most significant as they differentiate them from others in buying behavior.

In consumer behaviour literature, individuals are encouraged by many psychological desires, such as to have fun, to express an identity, to improve self-esteem, or to overcome some negative feelings etc. rather than only getting certain needed products. Basically, Humans frequently act on impulse (a sudden urge) which can cause abrupt changes in individuals buying behavior. Human primary urges refer to the essential physiological urges, whereas, the secondary urges refer those urges that are
shaped or developed by our social environment and social pressures, for instance, purchasing those items that are desirable or considered as social status in a society (Hausman, 2000). To large extent, social media play a significant role in shaping individual’s shopping motives and concept of materialism (Wang and Wallendorf, 2006).

Moreover, the consumer culture has evolved as the strongest force which affects people and society (Roberts and Sepulveda, 1999) and consumer culture as a way of life in which most of the consumers/people truly desire, expend and strive for more (Roberts and Jones, 2001). Such culture exhibits goods and services that are highly regarded for non-utilitarian reasons like status, increase of hatred and comfort seeking where money is considered as common language of their culture. It may be taken as emotionally worthwhile reality in present day as money is involved in individuals’ lives and impels comparative behavior between themselves and others by taking in view the social power, control, quality and freedom/independence/liberty (Medina, Saegert and Gresham, 1996).

Concurrently, consumers are surrounded by abundant and repetitive advertisement campaigns and messages due to the expanding mass media that encourages and strengthens the thought that shopping is a pleasure enhancing activity (Faber, 1992). Due to large number of marketplaces and shopping malls the consumers are continuously attracted to purchase more and more.

Several authors found that gender has significant influence on both the products purchased, and/or the causes of purchase (e.g. Coley and Burgess, 2003) etc. Conclusively, gender is a substantial predictor of compulsivity and female have more tendency to become compulsive as compared to male (e.g. Dittmar, 2005b).

II. Background

Literature review has revealed that consumer’s CBB has been explored and discussed actively and extensively during the past twenty seven years; resultantly the foci of CBB research has evolved from the interaction of numerous sociological, psychological, and biological factors (e.g. Faber, 1992; Hirschman, 1992; Black, 2007). Similarly some other researchers have found that psychographic, socio-environmental and demographic variables also have significant influences on compulsive buying (Roberts, 1998; 2000; Dittmar, 2005a).

Compulsive buying behaviour is usually defined either within the socio-environmental framework or viewed only in psychological framework. Most of the studies conducted on CBB with reference to internal factors using both qualitative and quantitative methods also investigated the impact of either a single factor or a randomly selected multitude to examine their impact on CBB, for example low self-esteem (e.g. Mendelson and Mello, 1986), compulsivity (e.g. Faber and O’Guinn, 1992), arousal seeking (e.g. Edwards, 1994a), fantasizing (e.g. Jacobs, 1986), impulsivity (e.g. Rook, 1987), depression (e.g. Schmitz, 2005) and materialism (e.g. Xu, 2008) etc. Dittmar et al. (1995) suggests that compulsive buyers are not qualitatively dissimilar from normal buyers.

Here we found that among few most influential cause which effect CBB is “materialism” and mostly, all studies founds its direct impact on CBB. Because of its too
much importance and repetition in many paper as a cause variable either young /old, and either male or female, it considered as a significant cause for CBB. The above discussion raises the need to understand the decision process of compulsive buying w.r.t. materialistic attitude and to analyze the joint impact of two internal influences on CBB” i.e. materialistic attitude and purchase decision involvement. The current research provides a framework to understand the way the materialistic attitude stimulate purchase involvement in formulation of consumer’s CBB.

III. Problem Statements

It is evident from the extensive review of literature that two associated issues (i.e. psychological influences and gender influences) still lack qualitative and quantitative explanations and require further comprehensive probing. It is worth realizing that the above mentioned influences need to be investigated together in order to examine their interplay and to analyze their contribution towards decision process of consumer’s CBB. Thus, the current study intends to fill these gaps and contributes to the existing literature on these issues besides improving the understanding of the academicians, policy makers, psychologists, behaviorists, marketers and retailers regarding these major issues working behind CBB.

Psychological Influence

Consumer’s psychological influence is the core concern with reference to its impact on CBB. There are many psychological constructs that influence the CBB but we consider two of these constructs to be of prime importance i.e. materialistic attitude and purchase-decision-involvement as these are vital predictors of consumers spending attitude and buying behaviour. Materialism is defined as an orientation considering material goods and money extreme important for social progress and personal happiness (Ward and Wackman, 1971). The materialistic consumers have a tendency to engage in purchasing as a means to attain most important life tasks, for instance, happiness. Various studies on psychological perspective have investigated the role of materialism and have consistently identified it as the strongest and direct predictor of consumer’s CBB (e.g. Roberts, 2000; Dittmar, 2005a). Therefore the need emerges again to explore the influence of materialistic attitude on CBB as a part of the process.

➢ “To what degree consumer’s materialistic attitude encourages compulsive buying behaviour.

Purchase-decision-involvement (PDI) is the second factor of consumer’s psychology and it refers to the degree to which the buyer views an item purchased as an engaging and meaningful activity and decisions about purchase as a dominant part of their life. Mostly researchers have focused on product involvement rather than PDI (e.g. Wertenbroch and Dhar, 2000) and this thought is different from response or situational involvement. The purchase-decision-involvement conveys and revolves around a consumer’s mind-set about buying and the goals associated to it. Therefore PDI is an important construct to influence attitudes and behaviour related to object purchase.

Similarly, Yurchisin and Johnson (2004) also investigated relationship between product involvement and compulsive buying behaviour and found it positive. To the knowledge of the researcher, the relationship of PDI with CBB had never been studied before; therefore this gap needs to be investigated.
“To what extent consumer’s purchase-decision-involvement encourages compulsive buying behaviour”

IV. Research Objectives
The major objectives of this research study are:

- To examine the role of psychological influences associated with consumer’s compulsive buying behaviour
  
  - To investigate the direct impact of materialistic attitude on purchase-decision-involvement
  
  - To investigate the direct impact of purchase-decision-involvement on compulsive buying behaviour
  
  - To investigate the direct impact of materialistic attitude on compulsive buying behaviour

- To investigate the indirect impact of materialistic attitude on compulsive buying behavior (purchase-decision-involvement act as a mediator between materialistic attitude and compulsive buying behaviour)

Research Questions
To achieve the objectives for this research, the following main research questions will be addressed.

i. What is the role of psychological influences i.e. materialistic attitude and purchase-decision-involvement in the development of consumer’s compulsive buying behaviour?

ii. How do consumers’ materialistic attitude persuade them in the development of compulsive buying behaviour?

Significance of the Study
Dittmar (2005a) further supported the notion by concluding that compulsive buying is considered as dark side of normal consumer’s buying behaviour. For the same reason, McElroy, Keck, Pope, Smith and Strakowski (1994) showed concern by suggesting that compulsive buying behavior is detrimental practice for both the individual and society. Such compulsive buying behaviors generated by marketers and retailers might lead to higher profits for manufacturers and sellers but in the long run it will result in more unsatisfied, unhappy, lost and troubled consumers. Now, the question arises what are the triggering factors that lead to the psychological disorder whether cause or the consequences?

The expression of CBB in recent years by Pakistani consumers seems to have increased the pace of converting Pakistan into a mass consumption society. Extensive review of literature reveals that scanty studies exist about Pakistani consumers that focus on their CBB. Modern consumerism culture has substantial impact on the excessive buying behavior especially in case of a collectivist culture (Triandis, 1995) like Pakistan.

Theoretical Significance
The key contributions of this research study towards existing theories and literature are:

i. Authentication of significant relationship within two psychological influences (i.e. materialistic attitude, purchase-decision-involvement) and compulsive buying behaviour.
ii. Identification of the significance of relationship between purchase-decision-involvement and compulsive buying behaviour.

iii. Identification of purchase-decision-involvement as a mediator between materialistic attitude and compulsive buying behaviour.

Practical Significance

Consumer’s compulsive buying behaviour is a deviant social behavior which needs to be curtailed, and in order to do that investigative analysis needs to be conducted to understand the influencing components and their contribution to its process. Examination of psychological influences regarding compulsive buying behaviour is useful for public policy makers, psychiatry practitioners and institutions to educate and discourage this undesired social behaviour in individuals like excessive credit card usage and shopaholism. Consumer welfare groups or public policy officials may use these findings to develop guidelines for marketers and retailers in order to restrain them from indulging in practices that trigger abnormal buying behaviors. Furthermore, this research is useful for formulating appropriate social marketing interventions like guidance and counseling in order to curb the rising consumer debts arising out of CBB which ultimately result in financial and economic crisis.

V. Literature Review

Compulsive Buying Behavior

Faber and O’Guinn (1989; 1992) assessed compulsive buying as an addictive behavior and also defined as some chronic, irresistible repetitive purchasing behavior that developing from adverse feelings or happenings resulting into damaging consequences. On the other hand, Valence et al. (1988) defined compulsive buying as some uncontrolled urge to buy activated by a psychological strain caused by internal influences, and followed by relief, similar to the pattern of frustration generated from the provocation by an addiction.

Basically the factors that affect or trigger CBB can be divided in two broad categories: external and internal. External influences refer to those stimuli that are categorized as social, environmental and/or situational factors to lure consumers towards excessive buying. Whereas the internal influences refer to a consumer’s psychological factors e.g. attitudes, motives, personality traits, etc. Most of researches that studied CBB with reference to external factors identified either a single factor or selected them randomly to examine their impact on CBB consisting of consumer’s susceptibility to social influences/socialization (e.g. Faber and O’Guinn, 1988; D’Astous et al., 1990), irrational credit card usage or money attitude (e.g. Watson, 2009) and product specific context (e.g. Johnson and Attmann, 2009).

Materialistic attitude

According to Belk (1984) materialism can be called the concern of consumers towards materialistic belongings. On the whole materialism is a significance related to the ownership and procurement of material stuff when it becomes a way to obtain the ambition of life or the expected position. More materialistic people have a habit to consume on costly items more publicly as they think that more purchases of expensive goods may cause their success and honor in the society (Fournier and Richins, 1991).
High-materialism consumers are driven to acquire goods primarily to symbolize and communicate status and success messages to others. Similarly, Wang and Wallendorf, (2006) emphasized that materialistic consumers have enhanced/magnified their familiarity about available products in the market to exhibit their social status. Dittmar et al. (1996) referred that materialism represents those consumers who regularly purchase products obsessively as compulsive buyers; since their categorization is related to the current study on consumers’ compulsive buying behaviours. Consumers having compulsive buying behaviour lean to purchase material goods with high visibility and charisma (Schlosser et al.’s 1994) such as clothing, jewellery, and cosmetics. More recently, Roberts and Pirog (2004) have suggested that compulsive buying behaviour is related to consumer’s individual objectives other than a wish for decreasing a psychological stress and individuals with their objectives set upon extrinsic factors, are more likely to be compulsive buyers than to those with the objectives standardized based on internal. Compulsive buying unlike impulsive buying is the phenomena where compulsive buyer seeks enjoyment in the buying process rather opposed to seek satisfaction from the item purchased.

Consumers who are passionate about authority and status due to excessive wealth lead to quick/hasty consumption headed for a point where it might end up generating adverse effects like compulsive buying (e.g. Phau and Woo, 2008). Many researchers, such as Xu (2008) described compulsive buying has been significantly, strongly and directly affected by materialism. In most of the previous studies materialism is considered as an antecedent variable directly predicting CBB, while it uses as a part of process towards CBB. Thus, it is inferred that

- Materialistic attitude will have indirect and positive effect on compulsive buying behavior.
- Materialistic attitude will have positive effect on purchase decision involvement

**Purchase-Decision-Involvement**

Product involvement is defined as invisible state that emulates the degree of consumer’s emotional connection, excitement and concentration with an item whereas, consumer’s purchase-decision-involvement is referred as the degree of his/her concern and interest regarding buying decision task’ or indicate a task related to consumer’s purchase-decision (Mittal, 1995). The degree of consumers’ involvement defines why one is encouraged to gather information regarding a particular product or brand. According to specific product categories, product involvement of all consumers varies along the spectrum which differs with the product class. Even though, with any product category, each consumer may possess different degree of involvement (Bloch, 1986). Moreover, if buying appearance related items proves to offer certain extent of enjoyment, as it most likely emerges to be the fact since compulsive buyers have a tendency to make use of buying process as a way of dealing with one’s mood swings (Dittmar et al., 1996; Dittmar and Drury, 2000).

Consumers placing a high degree of preference to appearance related product categories and seems enthusiastic regarding such appearance related products are believed to possess a higher extent of apparel-product involvement (Lee et al., 2000).
Consumers possessing high materialism see belongings/goods the same as the most suitable insignia to utilize for the signifying self-realization phenomenon. High materialistic consumers always prefer the possessions with greater possible utilization of symbols than that of possessions having lower apparent utilization of symbols related to finding meaning in ones’ self (e.g. Goldsmith et al. 2012). Several studies concluded that consumers possessing materialistic attitude have tendency to be the compulsive buyers (e.g. Yurchisin and Johnson, 2004). PDI is significant construct which provides more comprehensive information other than product characteristics and based on previous research it is further inferred that

- Purchase decision involvement will have positive effect on compulsive buying behavior.

VI. Theoretical Framework

The current study is largely based on Social Learning Theory. The reason for focusing on this theory is that the only those learned behaviors are retained which are rewarded & endorsed by the society particularly in collectivist society like ours. According to these perspectives, social learning theory is provided as theoretical underpinning to explain the consumer’s compulsive buying behavior phenomena.

![Figure I: Theoretical Framework](image)

VII. Hypotheses Development

In order to study the effect of psychological influences i.e. materialistic attitude and purchase-decision-involvement on compulsive buying; three major hypotheses have been established. The proposed hypotheses are as under:

H1: Psychological influences has direct impact on consumer’s Compulsive Buying Behavior

H1a: Materialistic attitude has significant and direct impact on purchase-decision-involvement

H1b: Purchase-decision-involvement has significant and direct impact on compulsive buying behavior

H1c: Materialistic attitude has significant and direct impact on compulsive buying behavior
H2: Materialistic attitude has indirect impact on compulsive buying behavior (or Purchase-decision-involvement act as a mediator between materialistic attitude and compulsive buying behavior)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Structural Paths</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Materialistic Attitude has significant and positive impact on Purchase-Decision-Involvement</td>
</tr>
<tr>
<td>H1b</td>
<td>Purchase-Decision-Involvement has significant and positive impact on Compulsive Buying Behavior</td>
</tr>
<tr>
<td>H1c</td>
<td>Materialistic Attitude has significant and positive impact on Compulsive Buying Behavior</td>
</tr>
<tr>
<td>H2</td>
<td>Purchase-Decision-Involvement act as a mediator between Materialistic Attitude and Compulsive Buying Behavior</td>
</tr>
</tbody>
</table>

**Sampling and Data Collection**

The data for study was collected by floating questionnaire to 1200 consumers and the questionnaire was distributed to the consumers in community, shopping centers and institutes in different cities across Pakistan and for sample selection convenience sampling technique was used.

**Measures**

A preamble was given in the beginning of questionnaire explaining the research purpose. The questionnaire further consisted of 32-items. There were three major research variables dividing the questionnaire in four sections including Materialistic Attitude (Moschis and Churchill, 1978), Purchase-Decision-Involvement (Schneider and Rodgers, 1996) and Compulsive Buying Behavior (Edwards, 1992) and demographic information such as age, gender, occupation, number of visit to market per month and amount of time spent on shopping etc. The respondents were asked to record their response on 5-point Likert scale regarding each study variables ranging from 1 (strongly disagree) to 5 (strongly agree).

Table II: Summary of all measures
Descriptive statistics were calculated for the sample and variables description. Structural Equation Modeling (SEM) was employed for main data analysis i.e. measurement and structural models were applied through AMOS 22.

**Descriptive Statistics**

Responses from consumers were obtained by floating questionnaires through online as well as personal interaction mode. A total of 1120 forms were received out of which only 1010 were useful for analysis making it 84% of response out of 1200 floated. This sample of 1010 individuals comprised of 600 females and 410 males (41%, 59% respectively). However 1% of the consumers were below 20 years of age, 40% were between 21-25 years etc. (see table III).

Table III: No text of specified style in document. Samples description

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Variables</th>
<th>Codes</th>
<th>Instrument authors</th>
<th>No. of Items</th>
<th>Measurement Scale</th>
<th>Previous Reliability</th>
<th>Current Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Materialistic Attitude</td>
<td>MAT</td>
<td>Moschis &amp; Churchill (1978)</td>
<td>06</td>
<td>1 = SA, 5=SD</td>
<td>0.60-0.74</td>
<td>0.70</td>
</tr>
<tr>
<td>2</td>
<td>Purchase-Decision-</td>
<td>PDI</td>
<td>Mattila &amp; Wirtz (2008)</td>
<td>07</td>
<td>1 = SA, 5=SD</td>
<td>0.84-0.85</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Compulsive Buying</td>
<td>CBB</td>
<td>Edwards (1992)</td>
<td>13</td>
<td>1 = SA, 5=SD</td>
<td>0.76-0.91</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Demographics variables</td>
<td>Self-</td>
<td></td>
<td>06</td>
<td></td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Demographic variables</td>
<td>Frequency</td>
<td>% total sample</td>
<td>Mean</td>
<td>S.D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------</td>
<td>----------------</td>
<td>------</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>410</td>
<td>41%</td>
<td>0.60</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>600</td>
<td>59%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (in years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20</td>
<td>10</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>401</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>198</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-35</td>
<td>214</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-40</td>
<td>130</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 40</td>
<td>57</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 – 12</td>
<td>189</td>
<td>19%</td>
<td>2.57</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 – 14</td>
<td>282</td>
<td>28%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 – 16</td>
<td>362</td>
<td>36%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 – 18</td>
<td>120</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 18</td>
<td>57</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>107</td>
<td>10%</td>
<td>2.60</td>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>440</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee &amp; Student</td>
<td>150</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Businessman/Businesswomen</td>
<td>80</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>47</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. wife &amp; Emp/ B. women</td>
<td>156</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. wife &amp; Emp/ B. women &amp; Student</td>
<td>17</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>9</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>&lt;1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No of market visit (in a month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>642</td>
<td>63%</td>
<td>2.61</td>
<td>2.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td>201</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-7</td>
<td>87</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-9</td>
<td>43</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 9</td>
<td>37</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spend (in hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>262</td>
<td>26%</td>
<td>2.50</td>
<td>1.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-4</td>
<td>543</td>
<td>54%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>184</td>
<td>18%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 6</td>
<td>21</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VIII. Data analysis

Testing of Measurement Model

In order to confirm the measurement model, the confirmatory factor analysis (CFA) was done with three latent and twenty six observed variables i.e. MAT, PDI and CBB and all are treated as first-order-degree variables. The rigorous measurement model testing and a series of CFA with maximum likelihood were conducted on the chosen indicators of the three latent variables (Kline, 2005).

![Diagram of Initial Measurement Model Specification]

Figure II: Initial Measurement Model Specification

Note:
Total Purchase Decision Involvement (TPDI); Total Materialistic Attitude (TMAT); Total Compulsive Buying Behavior (TCBB)
Analysis of Initial Measurement Model

The fit indices were found to be a little bit lower than the tolerance level upon the examination of the model fit i.e. the value of CMIN/DF is 6.63, GFI is 0.79, AGFI is 0.75, CFI is 0.73, whereas RMSEA is 0.09. Gefen et al. (2000) recommended a range of acceptance for CMIN to degree of freedom as 1-5 that is found to be higher than that by the current study and is an indication of poor fit. Similarly, Gefen et al. (2000) also suggested an acceptance level for GFI and CFI which should not be lesser than 0.90 and the initial measurement model results of this study are lesser than that. Similarly, on the other side, the RMSEA values was calculated and accepted due to falling in the average acceptance range of (0.80-1.00). Only two out of five required and decided fit statistics indices were found to be within the range of acceptance that further designates that the data does not fit well with the theorized model. The analysis of the fit-statistics indicated that the initial measurement model had poor fit which needed improvement. Due to the poor fit, the re-specification is always required.

Re-specification of the initial measurement model

The process for detection and correction of any type of errors generating from mis-specification is termed as specification search (Segars and Grover, 1993).

Analysis of Re-specified Measurement Model

In specification search seven observed variables that were source of misfit as they did not represent the domain of interest, were deleted due to having low factor loading(FL) or/and squared multiple correlation (SMC) etc. This elimination was recommended also by Nunnally and Bernstein (1994)and they suggested just to ensure the representativeness domain for the improvement of reliability and model fit.
The materialistic attitude is the first latent variable denoted as ‘TMAT’ was established from 6-items but three responses were eliminated due to their lowest SMC values and finally this variable was analyzed with only 3-items. Further examination of those included three items produced the values of FL and SMC that ranged between 0.62-.90 and 0.40-0.57 respectively. The results also show that the mean (M) and standard deviation (S.D) of individual’s MAT is 3.56 and 0.91 respectively. The alpha reliability of modified scale is found to be 0.80.

Consumer’s purchase-decision-involvement was second latent variable denoted as “TPDI” and its two responses out of 7-items were excluded. Further examination of those included five items produced the values of FL and SMC that ranged between 0.62-0.75 and 0.38-0.56 respectively, and the scores of M and S.D for the final dimension was found to be 3.50 and 0.70 respectively. The alpha reliability of modified scale is found to be 0.83.

Consumer’s compulsive buying behavior was the last/third latent variable, denoted as ‘TCBB’ and are composed of thirteen items. Further examination of those included nine items produced the values of FL and SMC that ranged between 0.63-0.79 and 0.40 - 0.62 respectively. The results also show that the M and S.D of this variable is 3.00 and 0.83 respectively. The alpha reliability of modified scale of CBB is found to be 0.90 which is quite high.

Hence, finally, the overall nine observed variables deleted from the initial measurement model comprised of two from PDI (i.e. inv3 & inv4), three observed variables from MAT (i.e. m1, m5 & m6) and four from CBB (i.e. cbf1, cbf2, cbgt1 & cbgt2). The re-specified model was re-examined with the three latent variables of seventeen indicators and fit statistics was analyzed. Then a final measurement model was estimated and the enhanced model showed reasonable fitness with following values of four out of five indices except CMIN/DF >5 (still poor fit); GFI = 0.90; AGFI = 0.90; CFI = 0.90; RMSEA = 0.08.

For assessing the fit of model, Thompson (2000) suggested two most useful fit indices namely the CFI and RMSEA as their results are thought to be the reasonably good fit. In the final measurement model the validity and reliability of the measures was also assessed. A satisfactory level of reliability was produced during the measurement model testing because as internal consistency predictor the Cronbach’s alpha coefficient ranged between 0.80-0.90 whereas composite reliability estimates ranged between 0.70-0.81 (Fornell and Larcker, 1981).

Table IV: Description of variables
For validity measures, the convergent validity and average variance extracted (AVE) estimates of all factors was assessed. Furthermore, the AVE estimates of all latent variables surpassed the acclaimed threshold of 0.50 (Fornell and Larcker, 1981).

### Table V: Comparisons between initial and Respecified measurement model

<table>
<thead>
<tr>
<th>Fit-statistics</th>
<th>Results of initial Measurement Model (i.e. Model 1)</th>
<th>Results of Respecified Measurement Model (i.e. Model 2)</th>
<th>Analysis of final Measurement Model (improvement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CMIN / DF</td>
<td>&gt; 5</td>
<td>&gt; 5</td>
<td>Poor fit</td>
</tr>
<tr>
<td>2 GFI</td>
<td>0.79</td>
<td>0.90</td>
<td>Average fit (improve)</td>
</tr>
<tr>
<td>3 AGFI</td>
<td>0.75</td>
<td>0.80</td>
<td>Good fit (improve)</td>
</tr>
<tr>
<td>4 CFI</td>
<td>0.73</td>
<td>0.90</td>
<td>Average fit (improve)</td>
</tr>
<tr>
<td>5 RMSEA</td>
<td>0.09</td>
<td>0.08</td>
<td>Good fit (improve)</td>
</tr>
</tbody>
</table>

**Testing of Structural Model**

**Specification of Structural Model**

The model specification is illustrated in Figure (IV). The model consisted of three latent variables with seventeen indicators. Based on the conceptual model, MAT was specified as exogenous latent variables (i.e., independent variables), and PDI and CBB serving as endogenous latent variables (i.e., dependent variables).

---

Note: [Standardized Factor Loading (St. FL); Squared Multiple Correlation (SMC); Internal Consistency (IC); Composite Reliability (CR); Average Variance-extracted Estimates (AVE)]
Hypotheses testing w.r.t. structural model

H1a: Consumer’s materialistic attitude has significant and direct impact on purchase-decision-involvement with the standardized regression Co-efficient value as 0.37, with p<0.05. The hypothesis for the relationship between materialistic attitude and purchase-decision-involvement is accepted.

H1b: It is also evident from the results that as the value of St. Regression Coefficient 0.34 with p<0.05, that is expressing the significant and direct relationship between purchase-decision-involvement and compulsive buying behavior. Finally this hypothesis is also sustained for this relation.

H1c: It is also evident from the results that as the value of St. Regression Coefficient 0.25 with p<0.05, that is expressing the significant and positive relationship between materialistic attitude and compulsive buying behavior. Finally this hypothesis is also sustained for this relation.

Analysis of Final Structural Model

Overall, the model fit was satisfactory and the structural model was estimated which showed reasonable fitness with following values of five indices: CMIN/DF >5; GFI = 0.90; AGFI = 0.86; CFI = 0.90; RMSEA = 0.08. In addition, results showed no critical problems of misfit and did not suggest any additions or eliminations of paths. Therefore, the fit of hypothesized model was found to be good. Figure (IV) illustrates the model and shows parameter estimates.
Figure V: 3-Variable Meditational Model

Hypotheses 2
Specification of Structural Model for mediation analysis
In structural model, 3-variable meditational model consisted of three latent variables i.e. based on the theoretical framework/model with one independent variable i.e. materialistic attitude was specified as exogenous latent variables, two dependent variables i.e. purchase-decision-involvement and compulsive buying behavior serving as endogenous latent variables (Figure V). These three variables i.e. materialistic attitude, purchase-decision-involvement and compulsive buying behavior are computed from their mean scores (three, five and nine items) and denoted as ZMAT, ZPDI and ZCBB respectively in structural model.

For analysis of mediation through AMOS, it must be done by bootstrapping methodology as recommended by Denis (2010), where AMOS produce 3000 bootstrap samples w.r.t. two-tailed significance(95% BC Percentile method). According to the current hypothesis, results showed the standardized-indirect-effect is equal to 0.09, standard-errors is equal to 0.01 and p-value for the indirect effect is equal to 0.00. Results indicating that it has sufficient evidence to accept the hypothesis of mediation. Hence, purchase-decision-involvement act as a mediator between materialistic attitude and compulsive buying behavior.

IX. Findings and Discussion
This part provides a brief description of the findings with reference to study objectives and acceptance / rejection of hypothesis as well. According to the analysis of first hypothesis, significant support was found regarding H1a, H1b and H1c. In simple words, that psychological influences i.e. materialistic attitude and purchase-decision-involvement have direct and positive impact on compulsive buying behavior.

According to consumers’ materialistic attitude, they believe that product possession is central for their happiness and life satisfaction. This relation leads them towards concept of involvement, which ultimately enhances their level of involvement regarding their purchase decisions. When individuals have greater tendency to materialistic attitude they get more involved in a purchase decision and exhibit less product involvement. The study also found a direct relationship between consumer’s purchase-decision-involvement and compulsive buying behavior. The findings of suggest that compulsive buyers are more prone to engage into act of purchase rather than product
involvement or actual possession of the product to discharge their psychological stresses. Based on the theoretical grounds discussed above, the current study concludes that consumer’s purchase-decision-involvement is a strong predictor of compulsive buying behavior. Previous research consistently affirms the relationship between materialism and compulsive buying behavior. The current study also analyses the direct relationship between materialistic attitude and compulsive buying behavior instead of materialism which is based upon the assumption that materialistic attitude can better predict the decision process of compulsive buying as compared to other factors.

Substantial support was also found for Hypothesis H2 for the fulfillment of study objective 2nd. It posits that consumer’s purchase-decision-involvement act as a mediator between materialistic attitude and compulsive buying behavior. The study conclude that individuals with materialistic attitude have greater tendency towards developing high purchased-decision-involvement and are more likely to engage in compulsive buying behavior. Overall, the results showed that materialistic attitude has direct and indirect influence on compulsive buying behavior. Finally, the overall causal model was supported.

X. Limitations
The scope of findings is narrowed by the cross sectional nature of the research, this may be considered as another limitation.

XI. Future recommendation
However the findings of this research can be replicated in more suitable settings for the generalizability of findings. Another gap needs to be addressed through longitudinal studies that can predict the ongoing consequences of compulsive purchase behavior and their influence on future behavior. This study did not include the moderating effects of other important variables such as gender, age, culture that can describe behaviors are important avenues to be explored.

References


