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The effect of personality on impulsive and compulsive buying behaviors

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This study investigates the impact and effect of personality (Big Five Personality Traits) on buying behavior (impulsive and compulsive buying). The participants (N=640) are students from a public sector university. Moreover, the influence of individual personality traits, that is, extraversion, agreeableness, conscientiousness, openness and neuroticism on impulsive and compulsive buying has been analyzed. Moreover, the effect of age and educational level has also been analyzed. The analysis presents interesting insight on the aforementioned relationship.

Key words: Big Five Personality Traits, Impulsive Buying, Compulsive Buying, Consumer Buying.

INTRODUCTION

Impulsive and compulsive buying are considered some of the most persistent and idiosyncratic phenomenon in consumer lifestyle. This distinctive nature of impulsive and compulsive buying has increased the attention from consumer researcher and theorists in these phenomenon (Rook, 1987; Rook and Fisher, 1995). Historically, research on impulsive and compulsive buying behaviors have been focused on; its definitional elements distinguishing and differentiating them from other form of buying behaviors (Cobb and Hoyer, 1986; Piron, 1991; Rook, 1987). Moreover, theorists have traditionally focused on providing theoretical frameworks for examining impulsive and compulsive buying (Rook and Fisher, 1995; Weun et al., 1997). Lately, many studies have been conducted to develop and validate scales to measure the tendency of consumers to display impulsive and compulsive buying behaviors. However, the interest of theorist and scientists is on an increase; in the constructs of impulsive and compulsive buying there is still a lot of work that needs to be done to identify and examine the factors that affect impulsive and compulsive buying.

Researches identify three main things that can affect

impulsive and compulsive buying behaviors; the internal states and mood of the consumers, the personality traits of the consumers and the environmental factors. This study seeks to examine if people who frequently engage in impulsive and compulsive buying behaviors have some common personality traits. This study is not to find diagnosable compulsive and impulsive consumers among a sample of subjects. Instead, it aims at examining the relationships among Big Five personality traits, impulsive and compulsive buying tendencies that exist in the same sample of subjects.

Compulsive buying

Research on the phenomenon of compulsive buying was presented into the consumer behavior literature by Faber et al. (1987) and other works have extended those first findings (Faber and O'Guinn, 1988; O'Guinn and Faber, 1988; Valence et al., 1988; d'Astous and Tremblay, 1989). This abnormal form of consumer behavior is characterized by chronic buying episodes of a somewhat stereotyped fashion in which the consumer feels unable to stop or significantly moderate the behavior. Although compulsive buying may produce some short-term positive feelings for the individual, it ultimately is disruptive to normal life functioning and produces significant negative consequences (O'Guinn and Faber, 1988).

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Compulsive behavior is defined as "repetitive and seemingly purposeful" acts that are "performed according to certain rules or in a stereotyped fashion" (American Psychiatric Association, 1985: 234). In marketing, manifestations of compulsive behavior include purchasing behaviors that cannot be controlled, are excessive, time consuming, and/or patterned in nature. Although compulsive buying can be associated with emotional attachment to objects, it is more likely that the pleasure derived from the act of buying is the primary motivation (O'Guinn and Faber, 1989). It is distinct from impulsive behaviors because compulsive buying involves an "inability to control the urge" (Faber et al., 1995: 297) and "leads to extreme negative circumstances" (Ridgway et al., 2006: 131).

While efforts have been made to document and understand the problem of compulsive buying, none of these previous works have been able to provide an estimate of the incidence of compulsive buying. One reason for this is that much of this work has relied on self-identified subjects. While self-identified compulsive buyers can provide a rich and valuable source of information about this problem, there are some potential limitations and concerns in relying solely on self-identified respondents.

A major problem with only examining compulsive buyers is that they are likely to be at a later stage in the development of this problem behavior. Research with other forms of addictive and compulsive behaviors indicate that people generally go through denial stages and feelings that they are somehow immune from negative effects before admitting that they truly have a problem (Marlatt et al., 1988; Prochaska and DiClemente, 1986; Salzman, 1981). People in these earlier phases may differ from those who are able to admit they have a problem. Feelings and behaviors during these earlier periods can be examined by having people try to retrospectively report them, but such efforts are subject to errors in recall and changes in perspective that are likely to come with time and experience. A related problem is that people who seek help may be different from those who do not (Schacter, 1982). By relying solely on self-identified respondents, we are unable to examine these possible differences.

Although d'Astous and Tremblay (1989: 2) refer to this behavior as an "extreme case of a generalized urge to buy", they offer no definitional threshold for where this extremity would begin and in their analysis treat it as if it were simply a linear difference in the population.

O'Guinn and Faber (1988), on the other hand, hold that the constellation of attitudes, value orientations and economic behaviors that comprise compulsive buying represent a phenomenon that is fundamentally different from even high levels of the normal buying urge. Instead, they have shown that compulsive buying shares many similarities with other types of compulsive and addictive behaviors (Faber and O'Guinn, 1988; O'Guinn and Faber,

1988). The debate between a qualitative versus a quantitative difference is admittedly a difficult point to resolve here just as it has been in other areas of clinical and developmental psychology (Reese and Overton, 1970).

Impulsive buying

Impulsivity is a personality trait defined as a tendency towards acting without forethought, making quick cognitive decisions, and failing to appreciate the circumstances beyond the here and now (Barratt, 1993). It is one of those dimensions of individual differences that are frequently associated with the biological bases of personality; a state involving non-specific physiological activation and the non-directional component of alertness (Anderson and Revelle, 1994).

For over fifty years, consumer researchers have strived to form a better definition of impulse buying. Early studies on impulse buying stemmed from managerial and retailer interests. Research in this vein placed its emphasis on the taxonomic approach to classifying products into impulse and non-impulse items in order to facilitate marketing strategies such as point-of-purchase advertising, merchandising, or in-store promotions. This approach is limited by a definitional myopia, which simply equates impulse buying to unplanned purchasing (Bellenger et al., 1978; Kollat and Willet, 1967; Stern, 1962).

Impulsive buying has been defined as the spontaneous or sudden desire to buy something, and when compared to more contemplative approaches to decision-making, is considered emotional, reactive, and "prone to occur with diminished regard" for the consequences (Rook, 1987: 191). While impulsive buying is often emotion-related (Eysenck et al., 1985), there is evidence of a cognitive component in impulsive behavior (Hoch and Loewenstein, 1991; Rook and Fisher, 1995); individuals are shown to consider an impulsive act a priori then engage in the behavior because it is believed to be appropriate. In this case, short-term benefits may be chosen despite their potential for "serious long-term consequences," depending on the situation or a person's "chronic values" (Puri, 1996: 88). Although some individuals are more likely than others to satisfy hedonic goals by acting on impulse, "not all reward seekers are impulsive" (Ramanathan and Menon, 2006: 640). Impulsive buying has been described as making unplanned and sudden purchases, which are initiated on the spot, and are accompanied by a powerful urge and feelings of pleasure and excitement (Rook, 1987).

In response to this definitional problem, researchers began to focus on identifying the internal psychological states underlying consumers' impulse buying episodes (Rook, 1987; Rook and Gardner, 1993; Rook and Hoch, 1985). Impulse buying was redefined as occurring "when

a consumer experiences a sudden, often powerful and persistent urge to buying something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict; also, impulse buying is prone to occur with diminished regard for its consequences" (Rook, 1987: 191). In the same vein, Hoch and Loewenstein (1991) explained impulse buying as a struggle between the psychological forces of desires and willpower.

The shift in defining impulse buying has drawn particular attention to systematically investigating factors that may underlie or cause impulse buying. This work includes examinations of the mood-impulse buying relationship (Gardner and Rook, 1988; Rook and Gardner, 1993); the relationship between affective states, in-store browsing, and impulse buying (Jeon, 1990); the holistic processing and self-object meaning-matching in impulsive buying (Burroughs, 1996); and the normative influences on impulse buying (Rook and Fisher, 1995).

There are several complementary models of purchase behaviors employed in consumer research, such as utility-maximization, decision-making, behavioral influence, hedonic, and meaning-transfer perspectives, and often purchase behavior is best explained by a combination of perspectives (Arnould et al., 2004). However, impulse buying do not conform to any of the so-called rational, economic, or decision-making perspectives and instead seem to be associated with complex hedonic psychosocial motivations and low-effort, feeling-based decision-making (Holbrook and Hirschman, 1982; Hoyer and Macinnis, 2001). Prior research has described risk taking in product choices, innovativeness in the adoption of new products and retail facilities, variety seeking in purchase behavior, browsing, looking at window displays, and recreational shopping as examples of exploratory consumer behaviors. These behaviors have the capacity to lead individuals to exciting and novel purchase experiences, offer a change of pace and relief from boredom. The unifying element underlying all these activities is that they provide consumers with a means of regulating their exposure to sensory and cognitive stimulation. These behaviors are exploratory in the sense that consumers engage in them primarily for the pleasure inherent in changing the stimulus field and not for extrinsic reasons (Baumgartner and Steenkamp, 1996).

If we focus on the immediate purchase situation, impulsive buying seems to fulfill hedonic motives (Hausman, 2000). For instance, using shopping diaries and in-store interviews, Herabadi et al. (2004) demonstrated that impulsive buyers have quite different shopping experiences than non-impulsive buyers, both at a cognitive and an affective level. At a cognitive level, impulsive buyers were shown to have hedonic rather than utilitarian considerations for their purchases. At an affective level, impulsive buyers' shopping experiences appeared to be determined by positive and high-arousal emotions such as excitement and pleasure. In contrast, non-impulsive buyers did not experience many emotions at all, making

purchases largely on the basis of utilitarian considerations.

Although impulsive buying seems fun, there are reasons to believe that there is another side of this coin when we move away from the immediate purchase situation. Evidence can be found to suggest that impulsive buying may be a way to elevate unpleasant psychological states (Baumeister, 2002; Dittmar et al., 1996). Rook and Gardner (1993) reported relationships between impulsive buying and positive as well as negative mood states. Other reports stress the compulsive aspect of impulse purchases (Dittmar and Drury, 2000; O'Guinn and Faber, 1989). Taking these views and findings together, it is not unreasonable to suspect the presence of 'darker motives' underlying the seemingly light character of impulsive buying, particularly among those who have a strong tendency to engage in such behavior. For these individuals, impulse buying may function as a self-regulatory mechanism aimed at reducing negative feelings, especially when these feelings have a structural basis such as a failure to live up to valued standards or low self-esteem.

Despite considerable efforts devoted to the theoretical framework, little success has been found in relating personality traits to impulse buying. Although several early investigators addressed the relations between personality traits and impulse buying, they failed to find significant results (Cobb and Hoyer, 1986; d'Antoni and Shenson, 1973; Kollat and Willet, 1967). The lack of significant findings may have been due to the fact that these studies: 1) defined impulse buying as unplanned buying, 2) looked at the relationships of irrelevant personality traits, and/or 3) used inadequate measures for their constructs.

There is a strong evidence for chronic individual differences in consumers' propensity to buy on impulse. For instance, Verplanken and Herabadi (2001) demonstrated that a general impulse buying tendency is strongly rooted in personality. These authors developed a scale to measure the general impulse buying tendency, which correlated significantly, substantially, and meaningfully with a number of established individual difference and personality measures, including the Big Five personality dimensions. The typical high impulse buying profile is an individual (male or female) who is low on conscientiousness, autonomy, personal need for structure, and need to evaluate, but high on extraversion and action orientation.

Big 5 personality traits

A well-accepted personality structure consisting of five factors has recently emerged in the personality literature (Barrick and Mount, 1991; Digman, 1990). Goldberg (1990) gives a comprehensive discussion of these factors. This five-factor taxonomy, commonly referred to as the Big Five, has been found in a number of

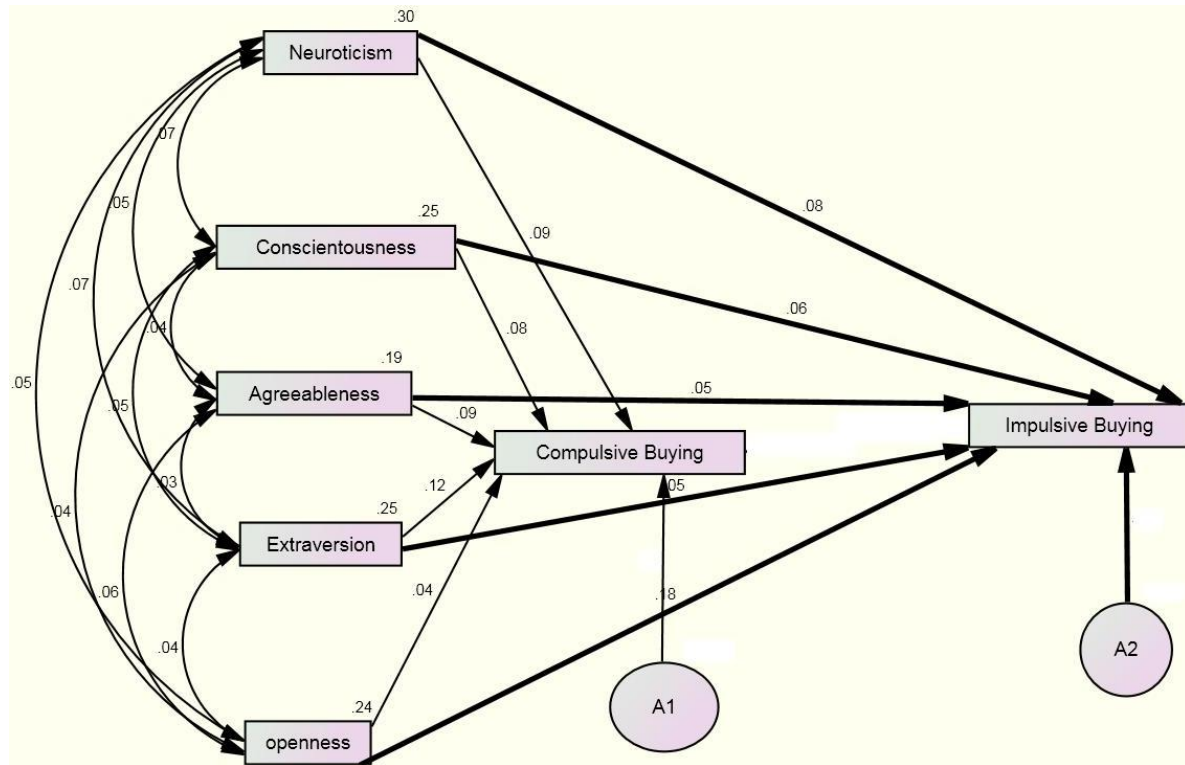


Figure 1. Theoretical framework with regression and covariance weights.

investigations with different theoretical frameworks, shown in Figure 1 with diverse instruments, across different samples (including samples from different cultures), and with ratings obtained from different sources (Digman, 1990; Goldberg, 1990; McCrae and Costa, 1985; Norman, 1963). The Big Five factors (and prototypical characteristics for each factor) are: (a) extraversion (such as, sociable, talkative, and assertive), (b) agreeableness (such as, good-natured, cooperative, and trusting), (c) conscientiousness (such as, responsible, dependable, persistent, and achievement oriented), (d) emotional stability (viewed from the negative pole; tense, insecure, and nervous), and (e) openness to experience (such as, imaginative, artistically sensitive, and intellectual).

Researchers agree that there are five robust factors of personality that can serve as a meaningful taxonomy for classifying personality attributes (Digman, 1990). This taxonomy has consistently emerged in longitudinal studies; across different sources (such as ratings by self, spouse, acquaintances, and friends); with numerous personality inventories and theoretical systems; and in different age, sex, race, and language groups. It also has some biological basis, as suggested by evidence of heritability (Costa and McCrae, 1992; Digman, 1990).

Although the names for these factors differ across researchers, the following labels and prototypical characteristics are representative: (a) extraversion (sociable,

talkative, assertive, ambitious, and active), (b) agreeableness (good-natured, cooperative, and trusting), (c) conscientiousness (responsible, dependable, able to plan, organized, persistent, and achievement oriented), (d) emotional stability (calm, secure, and not nervous), and (e) openness to experience (imaginative, artistically sensitive, and intellectual).

The emergence of the five-factor model has enabled researchers to conduct construct-oriented meta-analytic reviews of the predictive validity of personality (Barrick and Mount, 1991; Hough et al., 1990; Tett et al., 1991).

The Big-Five model offers an integrative framework for personality psychology (Costa and McCrae, 1995; Goldberg, 1993; McCrae and John, 1992). It focuses on a core set of behavioral traits -extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience - and its proponents argue that people can be understood by knowing how much they display each of these five traits in their lives.

Research questions and hypothesis

The objective of this study is not to find diagnosable compulsive and impulsive consumers among a sample of subjects. Instead, it aims at examining the relationships among Big Five personality traits, impulsive and compulsive buying tendencies that exist in the same sample of subjects.

Table 1. Distribution of participants based on age.

Age (years)	Frequency	Percent
20-30	611	95.5
30-40	23	3.6
40-50	3	0.5
50-60	2	0.3
60-70	1	0.2
Total	640	100.0

Table 2. Distribution of participants based on level of education.

Level of education	Frequency	Percent
High school	18	2.8
Bachelors	124	19.4
Masters	484	75.6
Phd.	14	2.2
Total	640	100.0

H₁: A positive relationship will be found between impulsive buying and compulsive buying.

H₂: Both impulsive buying and compulsive buying will be positively related to neuroticism

H₃: Both impulsive buying and compulsive buying will be positively related to Conscientiousness

H₄: Both impulsive buying and compulsive buying will be positively related to Agreeableness

H₅: Both impulsive buying and compulsive buying will be positively related to Extraversion

H₆: Both impulsive buying and compulsive buying will be positively related to openness

H₇: Both impulsive buying and compulsive buying will be negatively related to Age

H₈: Both impulsive buying and compulsive buying will be negatively related to Level Of education

RQ₁: How much variance in impulsive buying can be accounted for by Big Five factors?

RQ₂: How much variance in compulsive buying can be accounted for by Big Five?

METHODOLOGY

The study took place in a public sector university of Pakistan having its campuses in three different locations. A total of 640 students of the university took part in the study. The questionnaires were handed to the participants by the researchers. The researchers were available for guidance and help during the time participants were filling the forms. A total of 1000 questionnaires were distributed among the participants out of which 640 (64%) were fully and correctly completed.

The sample consisted of 366 (57.2%) males and 274 (42.8%) females. The distribution of the sample based on age is shown in Table 1 while those based on educational level is shown in Table 2.

Measures

Except from gender, age and level of education, for all the other items of the questionnaire, a 5-point Likert scale was used, ranging from 1 strongly disagree to 5 strongly agree. Original scales were used without translation.

Impulsive buying

The questionnaire included a 20 questions regarding impulsive buying ($\alpha=0.81$). Verplanken and Herabadi (2001) developed it.

Compulsive buying

A 15 item instrument ($\alpha=0.86$) used to measure compulsive buying in this study was developed by Valence et al. (1988).

Big Five personality traits

The third section was designed to examine the participant's personality traits. The 50- item personality questions were adapted from the 40-item Big Five personality scale developed by Saucier (1994), with additional question items taken by Mowen and Spears (1999) from Trapnell and Wiggins (1990), and Duijsens and Diekstra (1995).

The confirmatory factor analysis conducted by Mowen and Spears on Saucier's 40-item scale failed to confirm the structure of five-factor model. We were concerned that we would not be able to successfully confirm the structure either by simply adopting Mowen and Spears' refined scale.

Therefore, we decided to combine both of them in the hope of developing a satisfactory five-factor model out of these combined items by using confirmatory factor analysis.

The reliability for each of the Big Five personality traits ranges from $\alpha=0.81$ to 0.84.

Table 3. Inter-variable correlation matrix.

Variable	Age	Education	Impulsive buying	Compulsive buying	Neuroticism	Conscientiousness	Agreeableness	Extraversion	Openness
Age	1.000	0.108	-0.009	-0.046	-0.013	0.014	0.039	-0.033	0.034
Education	0.108	1.000	-0.112	-0.045	-0.026	0.019	-0.015	0.081	-0.092
Impulsive buying	-0.009	-0.112	1.000	0.233	0.205	0.171	0.175	0.150	0.302
Compulsive buying	-0.046	-0.045	0.233	1.000	0.218	0.191	0.178	0.218	0.165
Neuroticism	-0.013	-0.026	0.205	0.218	1.000	0.256	0.188	0.268	0.189
Conscientiousness	0.014	0.019	0.171	0.191	0.256	1.000	0.205	0.184	0.172
Agreeableness	0.039	-0.015	0.175	0.178	0.188	0.205	1.000	0.140	0.295
Extraversion	-0.033	0.081	0.150	0.218	0.268	0.184	0.140	1.000	0.152
Openness	0.034	-0.092	0.302	0.165	0.189	0.172	0.295	0.152	1.000

RESEARCH RESULTS AND ANALYSIS

The data is analyzed by using means, correlation, and regression analysis. Tables 3 to 5 show the correlation between the variables used in this study. Analyzing the table, we notice a strong correlation between Impulsive and compulsive buying behaviors ($R = 0.233$ significant at the 0.01), verifying H_1 of the study. Moreover, it is also observed that both impulsive buying (neuroticism $R = 0.21$, conscientiousness $R = 0.17$, agreeableness $R = 0.18$, extraversion $R = 0.15$, openness $R = 0.30$ significant at the 0.01) and compulsive buying are positively related with all the Big Five personality traits (neuroticism $R = 0.22$, conscientiousness $R = 0.19$, agreeableness $R = 0.18$, extraversion $R = 0.22$, openness $R = 0.17$ significant at the 0.01) hence providing support for approval of H_2 , H_3 , H_4 , H_5 and H_6 .

In addition to studying the relationship of Big Five personality traits, the relation of age and level of education with impulsive and compulsive buying was also analyzed. Age is minutely negatively correlated with both impulsive buying ($R = -0.009$) and compulsive buying ($R = -0.046$) verifying H_7 . Moreover, level of education is

considerable negatively correlated with impulsive buying ($R = -0.112$) and it negatively correlates with compulsive buying ($R = -0.112$), providing substantial proof for acceptance of H_8 .

In this study, we also had two very important research questions. First, RQ_1 : How much variance in impulsive buying can be accounted for by Big Five factors? The Big Five personality traits accounts for a total variance of 36.6% ($R^2 = 0.366$) in impulsive buying. Openness explain the most variance in impulsive buying with 18.4% ($R^2 = 0.184$). It is also worth mentioning that the variance explained by agreeableness is not significant at 95% confidence interval.

The second research question is RQ_2 : How much variance in compulsive buying can be accounted for by Big Five? For compulsive buying, the variance explained by the Big Five personality traits is 43.2% ($R^2 = 0.432$). Moreover, extraversion 13.3% ($R^2 = 0.133$) and neuroticism 10.5% ($R^2 = 0.105$) contribute the most in explaining the variance in compulsive buying. Interestingly, openness that accounted for explaining the most variance in impulsive buying, does not explain the variance for compulsive buying at 95% confidence interval.

Conclusion

This study has identified positive relationship between impulsive and compulsive buying. Among the Big Five personality traits, both impulsive and compulsive buying were positively correlated with neuroticism (emotional instability) which means that individuals that experience emotional instability, anxiety, moodiness, irritability, and sadness are more likely to display impulsive and compulsive buying behaviors. Moreover, impulsive and compulsive buying behaviors are positively affected by the other four personality traits (Table 6).

Moreover, results also show that majority of the variance in impulse buying is explained by Openness. This shows that individuals that are more imaginative, cultured, curious, original, broad minded, intelligent and artistically sensitive are more likely to display Impulsive-buying behaviors. On the contrary, a non-significant amount of variance is explained by agreeableness.

On the other hand, significant amounts of variance in compulsive buying can be accounted for extraversion. We can expect an increase in compulsive buying when individuals are scalable,

Table 4. Regression analysis of impulsive buying with independent variables.

Independent variable	Impulsive buying			
	Estimate (R^2)	S.E.	C.R.	P
Agreeableness	0.05	0.034	1.488	0.137
Conscientiousness	0.059	0.03	1.997	***
Extraversion	0.046	0.029	1.572	***
Neuroticism	0.077	0.027	2.811	***
Openness	0.184	0.03	6.125	***

***. R^2 is significant at the 0.05 level.

Table 5. Regression analysis of compulsive buying with independent variables.

Independent variable	Compulsive buying			
	Estimate (R^2)	S.E.	C.R.	P
Agreeableness	0.098	0.043	2.301	***
Conscientiousness	0.096	0.037	2.557	***
Extraversion	0.133	0.037	3.622	***
Neuroticism	0.105	0.034	3.048	***
Openness	0.072	0.038	1.903	0.057

***. R^2 is significant at the 0.05 level.

Table 6. Personality traits.

Personality trait	Effect on impulsive and compulsive buying behaviors
Conscientiousness	Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviors. Those high in conscientiousness tend to be organized and mindful of details. This traits increase the possibility of individuals to indulge in impulsive and compulsive buying behaviors.
Agreeableness	This personality dimension includes attributes such as trust, altruism, kindness, affection, and other pro-social behaviors and positive effects the ability of subjects to show impulsive and compulsive buying behaviors.
Extraversion	Excitability, sociability, talkativeness, assertiveness, and high amounts of emotional expressiveness counts for extraversion in an individual. This trait of personality is positive related with impulsive and compulsive buying behaviors.
Openness	This trait features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests. The trait is also positively correlated with impulsive and compulsive buying behaviors.

gregarious, assertive, talkative and active. It is also worth mentioning that openness was responsible for the maximum amount of variance in impulsive buying is explaining a non-significant amount of variance in impulsive buying.

Several important limitations must be kept in mind when considering the results of this study. The use of a convenience sample of students is an obvious limitation here. Moreover, it is necessary to replicate the findings using a more general sample of consumers.

Overall, this study has attempted to develop our understanding of the causes of impulse and compulsive buying behaviors. This behavior may well stem from several different causes that include personality traits as one of

the most important among it. The relationship of the underlying personality traits and impulse and compulsive buying behaviors seemed both logical and useful, and is deserving of further study.

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