

Article

# Impulsive Buying Tendencies and Personality: Cognitive and Affective Aspects

Fayyaz Hussain Qureshi \*, Katarina Sokić and Sarwar Khawaja

SK Research-Oxford Business College, Oxford OX1 2BQ, UK; katarina.sokic@obc.ac.uk (K.S.); sarwar.khawaja@obc.ac.uk (S.K.)

\* Correspondence: fayyaz.qureshi@obc.ac.uk

**Abstract:** Impulsive buying is a growing problem in modern society with significant financial and psychological consequences, and it is necessary to examine the mechanisms underlying it. Understanding the mechanisms driving this behavior is crucial. Impulsive buying consists of two key aspects: a cognitive aspect, characterized by a lack of planning and reflection, and an affective aspect, involving emotional responses that can occur before, during, or after a purchase. This study aims to explore the relationship between personality traits, as measured by the HEXACO model, and tendencies toward impulsive buying. Specifically, it examines how the HEXACO traits differentially predict the cognitive and affective components of impulsive buying tendencies. Data were collected from a sample of 420 students, with 32 excluded due to incomplete responses, resulting in a final sample of 388 students (155 men, 233 women) with an average age of 22.8. Hierarchical regression analyses revealed that HEXACO personality domains significantly predicted overall impulsive buying tendencies. As expected, Honesty–Humility and Conscientiousness were negatively associated with impulsive buying, while Emotionality and Extraversion positively predicted impulsive buying tendencies. Moreover, Honesty–Humility, Conscientiousness, and Extraversion significantly predicted the cognitive component of impulsive buying, while Honesty–Humility and Emotionality were significant predictors of the affective component. These findings suggest the importance of educating individuals, from an early age, on the negative consequences of impulsive buying, effective money-saving strategies, and the principles of mental accounting.



Academic Editor: Jonathon Reay

Received: 16 September 2024

Revised: 29 November 2024

Accepted: 23 December 2024

Published: 8 January 2025

**Citation:** Qureshi, F.H.; Sokić, K.; Khawaja, S. Impulsive Buying Tendencies and Personality: Cognitive and Affective Aspects. *Psychiatry Int.* **2025**, *6*, 5. <https://doi.org/10.3390/psychiatryint6010005>

**Copyright:** © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** impulsive buying tendencies; cognitive and affective aspects; HEXACO domains of personality

## 1. Introduction

Consumer behavior is often affected by moods, desires, and emotions rather than logical thinking [1,2]. The prevailing economic paradigm in consumer behavior views the buyer as a rational consumer, also known as *homo economicus* [3]. This model assumes that the consumer thinks consistently before making a purchase and selects a product at a reasonable and fair price [4]. A rational consumer collects knowledge regarding all options, assesses the advantages and disadvantages and thorough evaluation of the cost–benefit ratio, and selects the optimal alternative that yields the highest satisfaction at minimal expense [5,6]. However, human behavior frequently deviates from the fundamental principles of economic theory, being predominantly influenced by desires, emotions, and moods [7–11].

One example of an irrational consumer behavior is impulsive buying.

Impulse buying is the act of making an irrational purchase without giving it any consideration or planning, which frequently leads to regret later on [12,13].

In the mid-twentieth century, impulsive purchasing was a prominent topic in numerous scientific studies aimed at establishing a precise definition of the phenomenon. Verplanken and Herabadi [14] highlight two essential elements that contribute to impulsive buying. One element is the lack of planning, while the other is an emotional reaction that may occur before, during, or after the buying process. The emotional response may be positive or negative, depending on variables such as the cost or dissatisfaction with a quickly chosen product.

Impulsive buying consists of two aspects: a cognitive aspect, which implies a lack of planning and deliberation [14], and an affective aspect, which refers to the emotional response associated with the purchase that can occur before, during, or after the purchase [1,15]. This can be sadness that prompts us to buy to cheer ourselves up, a feeling of satisfaction during the purchase itself, or a feeling of regret about the purchased product after the purchase [16]. Understanding the cognitive and affective aspects of impulsive buying is critical for businesses and policymakers, as it allows for the development of strategies that can both predict and mitigate the negative outcomes of such behavior.

Moreover, impulsive behavior may be seen as a personality trait. Impulsivity denotes spontaneous actions taken without prior contemplation of the consequences of one's behavior [17]. This behavior is influenced by both emotional and situational factors, leading to decisions that are made spontaneously rather than through deliberate planning [18].

Unlike planned purchases, impulsive buying occurs without premeditation and is influenced by a complex interplay of internal and external factors such as emotional responses, social pressures, and marketing stimuli. Marketers and retailers traditionally utilize external stimuli, such as in-store promotions and advertising, to trigger impulse buying [19,20]. At times, impulsive buying can be advantageous for consumers, such as when they take advantage of in-store promotions like buy-one-get-one-free offers or substantial discounts during special occasions. However, excessive impulsive buying behavior can have negative consequences, leading to financial strain and psychological distress for shoppers [21–23]. The extent and importance of impulsive buying is best illustrated by research on its prevalence. Research in North America shows that as many as 75% of purchases are made on impulse [24,25]. Prior studies indicate that impulsive buying correlates with increased maladaptive narcissism [26], higher materialism and individualism [27], and greater hedonism [28]. The research conducted by Saad and Meaview [29] demonstrated a correlation between impulsive buying and a combination of impulsivity, enthusiasm, and satisfaction in the shopping experience. Nonetheless, the majority of studies examining the relationship between personality traits and impulsive purchasing predominantly concentrate on the five-factor model of personality (Big Five model) [30]. The Big Five model consists of the following traits: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

The HEXACO model of personality [31] is a relatively new model that originated in the psychology tradition, increasingly adopted in personality research. The HEXACO model consists of six dimensions found in lexical studies of personality in various languages [32] i.e., Honesty–Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). The HEXACO model is largely similar to the well-known Five Factor (Big Five) model of personality, but with the addition of a sixth broad dimension, Honesty–Humility. In comparison to the Big Five model, HEXACO encompasses a larger personality sphere and has better cross-cultural validity [33]. In addition, the HEXACO model of personality has been found to outperform the five factor model in relation to variables which are conceptually relevant to the Honesty–Humility

dimension (accountable for a morally relevant pro-social behavior and represents some aspects of reciprocal altruism), such as the variables concerning unethical, antisocial, and psychopathic behavior [32]. To the authors' best knowledge, there exists just one published study examining the relationship between the HEXACO personality model and impulsive buying, which highlighted the distinctions across genders [34]. This study conducted the analysis solely at the factor level, with impulsive buying operating as a general factor, without distinguishing between its cognitive and affective components.

Given the lack of knowledge concerning the HEXACO model's impact on impulsive buying, the aim of this study is to investigate the predictive power of the HEXACO dimensions in relation to the affective and cognitive components of impulsive buying.

### *1.1. Impulsivity and Impulsive Buying*

Impulsivity is a predisposition for quick, unplanned reactions to internal and external stimuli, regardless of the negative consequences these reactions will cause in the impulsive person himself or others; other words, it is defined as a tendency to act suddenly and recklessly in a harmful way [35]. Impulsive acts usually occur as a reaction to the failure of individuals to resist calls or temptations arising from internal or external stimuli [36]. Some authors [37] emphasize that impulsivity plays an important role in some forms of aggressive behavior and self-injury. The theory emphasizes that in the constellation of personality traits, impulsivity is the main component of inappropriate behavior [38]. Impulsivity is now considered to be a complex psychological construct that includes attentional deficits, motor restlessness, and absence of planning [39].

Impulsivity refers to engaging in spontaneous behavior without prior consideration of the potential repercussions [17]. It is found in different theoretical frameworks as a measure of personality qualities, including Extraversion [40], and Neuroticism [41].

Impulsivity as a construct is found in many theoretical frameworks in the psychological literature, including theories of cognitive styles, personality trait theories, Conscientiousness, emotional stability, and intelligence. Impulsivity is a consistent personality trait that encompasses various cognitive, behavioral, and emotional characteristics. Impulsivity includes a lack of self-control, a tendency to seek out new and exciting experiences, a willingness to take risks, a preference for novelty, a lack of responsibility, impatience, unreliability, and a lack of organization. This trait is characterized by a lack of careful planning [42,43]. Eysenck and Eysenck [44] propose that impulsivity can be characterized by four distinct dimensions: limited impulsivity, risk-taking, non-planning, and liveness.

There are numerous elements that influence impulse purchases. Early studies on impulse buying concentrated on categorizing different products based on their chance of being purchased impulsively. In the 1970s, researchers decided that practically any product might be purchased impulsively; therefore, they began to focus on other consumer motivations [13]. Amos, Holmes, and Keneson's meta-analysis [45] classified the factors impacting impulsive buying into three categories: situational, sociodemographic, and characteristic. Situational influences are external stimuli or conditions that the consumer is experiencing at the time of purchase [15,28]. External stimuli, such as the appearance of the product, the manner in which the products are exposed, the atmosphere in the store [14], time and money constraints, and also the customer's mood [12,15] and social influence [46], are among the most frequently studied situational influences. Aside from environmental considerations, numerous studies have investigated the impact of sociodemographic characteristics such as age, gender, education, and income on impulsive shopping, possibly owing to normative changes in personality qualities, such as impulsivity, which decrease with age [47]. According to Rook and Hoch [13], impulsive consumer behavior is characterized by five main elements: (1) a quick and spontaneous impulse to act, (2) a brief lack of

self-control, (3) psychological conflict and struggle, (4) a decrease in cognitive appraisal, and (5) spending regardless of the consequences. Impulsive buying is characterized by two aspects: cognitive (lack of planning and reflection) and affective (emotional response to the purchase before, during, or after shopping) [12,15].

### 1.2. Impulsive Buying and Personality

The relationship between the Big Five personality traits and impulsive buying has been the subject of numerous studies, with inconsistent results. However, three traits—Extraversion, Neuroticism/Emotional Stability, and Conscientiousness—repeatedly show up as strong predictors of impulsive buying. The results regarding the correlation between impulsive buying and the Big Five model of personality traits are mixed. A study [14] revealed a positive correlation between impulsive buying and Extraversion, as well as a negative correlation between impulsive buying and Conscientiousness. A study [48] found a negative correlation between Conscientiousness and impulse buying and a positive correlation between Neuroticism, Extroversion, and impulsive buying. Furthermore, studies have shown that impulsive buying is associated with high Extraversion, Neuroticism, impulsivity, and low Conscientiousness [14]. Moreover, the results of another study [29] indicated that two personality factors (impulsivity and excitement), two shop environment factors (music and layout), as well as shop enjoyment were related to impulse buying tendencies. Two twin studies have provided evidence that a propensity towards impulsive buying is genetically inheritable.

Previous findings on the relationship between five-factor model traits and impulsive buying are not entirely consistent, but three traits, Extraversion, Neuroticism/Emotional Stability, and Conscientiousness, have been identified as predictors of impulsive buying in a large number of studies [34,48–50]. The biological basis for Extraversion can explain the link between impulse purchase and this trait. People with high Extraversion have lower levels of cortical arousal; therefore, impulsive buying helps them achieve optimal cortical arousal [48]. Given that cortical arousal can be achieved in a variety of ways, including through emotional inputs, we can assume that Extraversion is linked to both components of impulsive purchase. Positive emotions, on the other hand, can have a role in the relationship between impulsive purchase and Extraversion since they increase the risk of impulsivity. This study discusses the relationship between Extraversion and the emotive component of impulsive shopping [49]. Conscientious persons are responsible, organized, and consider the repercussions of their activities. Conscientiousness is often associated with cognitive processes, such as planning and considering consequences, which might lead to impulsive purchasing. Furthermore, those with high Neuroticism scores are easily emotionally stimulated; therefore, they experience shopping-related emotions more intensely, such as pleasure, satisfaction, and regret. Neuroticism is based on emotions, and hence it is related with the emotional side of impulse buying [50].

Therefore, we can assume that there is some common factor underlying the mentioned variables, which is why we would expect that the Honesty–Humility is also one of the predictors of impulsive buying. In addition, one of the facets of the Honesty–Humility dimension is the avoidance of greed. Low results on this trait indicate people who tend to own luxurious things and show off their wealth, which additionally points to a possible connection with a tendency towards impulsive buying. In addition, research on the concordance of traits of the five-factor personality model and the HEXACO personality model indicates a significant connection between Neuroticism, i.e., Emotional Stability, and Honesty–Humility, which may point to the existence of a correlation between Honesty–Humility and the emotional component of impulse buying [51,52].

### 1.3. Aims and Hypotheses

Based on the theoretical description of the HEXACO model of personality [31–33] and previous findings relating personality traits and impulsive buying tendencies [26,34,52,53], specific hypotheses were formulated for each HEXACO personality traits.

**H1:** Honesty–Humility and Conscientiousness would be negatively related to impulsive buying tendencies.

**H2:** Emotionality and Extraversion would be positively related to impulsive buying tendencies.

**H3:** Honesty–Humility will be negatively related to the cognitive and affective components of impulse buying.

**H4:** Emotionality will be positively related to the affective components of impulsive buying.

**H5:** Conscientiousness will be negatively related to the cognitive components of impulsive buying.

**H6:** Extraversion will be positively related to both the affective and cognitive components of impulse buying.

## 2. Materials and Methods

### 2.1. Participants and Procedure

This research was conducted on a sample of 420 students from Zagreb faculties. Data from 32 students have been removed from the analysis due to missing data. Therefore, the final sample consisted of 388 students with an average age of 22.8 (standard deviation = 4.7, range = 19–27), of whom 40% were male. Participation in the study was voluntary, and students provided written agreement prior to the study's completion. They were asked to anonymously complete self-report questionnaires, and their participation was completely voluntary.

### 2.2. Measures

#### *The HEXACO personality model*

The 100-item Croatian version of the HEXACO-PI-R [33,54] was used. This inventory assesses trait dimensions of Honesty–Humility (H), Emotionality (E), eXtraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). The questionnaire consists of a total of 100 items, of which each of the 6 broad dimensions is measured by 16 items. The respondent's task is to express their degree of agreement with each statement on a 5-point Likert scale (1 = "I do not agree at all", 5 = "I completely agree"). Scores for each HEXACO trait were calculated as sums of ratings on associated items divided by number of items per scale. The interstitial aspect of altruism (4 items) is not included when calculating the six HEXACO scores since it shares its loadings with Sincerity–Humility, Emotionality, and Agreeableness [54].

*The impulse buying tendency scale* [14] was used to assess the propensity towards impulsive buying. The questionnaire assesses two aspects of impulsive buying behavior: cognitive, which pertains to a lack of preparation, and affective, which relates to the emotions experienced during purchasing. The inventory comprises a total of 20 items, with 10 items assessing the cognitive dimension of impulsive buying (e.g., "I am used to buying things 'on the spot'", "I often buy things without thinking"), and the other 10 items



evaluating the affective dimension of impulsive buying (e.g., “I always see something nice whenever I pass by shops”, “If I see something new, I want to buy it”). Participants were required to indicate their level of agreement with statements using a 5-point scale, where 1 represents complete disagreement and 5 represents full agreement. Cronbach’s alphas for the scales all exceeded 0.75 (whole scale’s  $\alpha = 0.87$ , cognitive component  $\alpha = 0.83$ ; affective component  $\alpha = 0.84$ ), indicating adequate internal consistency.

### 3. Results

#### 3.1. Descriptive Statistics and Correlation Analyses

Cronbach’s alphas for the HEXACO-PI-R domains, impulse buying tendency scale and cognitive and affective subscales indicate adequate internal consistency (Table 1). All scales demonstrate skewness and kurtosis within the acceptable tolerance limit for normal distribution (between  $-2$  and  $+2$ ) [55]. The results of the descriptive statistics indicate that the means of the HEXACO domains correspond to the approximate average value on a particular dimension. In comparison to other traits, the Agreeableness score is somewhat lower, and the Extraversion and Openness to Experiences scores are higher. We can see that participants assess their propensity for impulsive buying slightly higher on the cognitive components of impulsive buying than the affective components.

**Table 1.** Descriptive statistics, internal consistency, and reliabilities for HEXACO domains and impulsive buying tendencies (total score and cognitive and affective components of impulsive buying tendencies (N = 388).

	Mean	St. Dev.	Range Actual	$\alpha$	Sk	Ku
HEXACO PI-R						
Honesty–humility	51.20	6.94	19–75	0.83	−0.47	0.23
Emotionality	53.12	7.76	22–74	0.82	−0.78	0.56
Extraversion	58.75	8.63	24–77	0.79	−0.89	1.14
Agreeableness	45.54	8.12	23–72	0.80	0.58	0.82
Conscientiousness	54.23	7.26	26–74	0.78	0.69	0.39
Openness to experience	57.82	10.51	28–78	0.81	−0.42	−0.71
Impulsive buying tendencies						
Total score	51.56	4.67	21–86	0.87	0.54	−1.08
Cognitive component	26.78	5.80	13–48	0.83	0.69	−0.97
Affective component	23.13	4.11	11–49	0.84	0.13	−1.36

Note.  $\alpha$  = Cronbach’s  $\alpha$ . Sk—skewness, Ku—kurtosis.

Zero-order correlations (Person’s  $r$ ) between study variables are presented in Table 2. On a bivariate level, Honesty–Humility and Conscientiousness were negatively related to impulsive buying tendencies (H1), Emotionality and Extraversion were positively related to impulsive buying tendencies—total score (H2), Honesty–Humility was negatively related to the cognitive and affective components of impulse buying (H3), and Emotionality was positively related to the affective component of impulsive buying (H4). In addition, Emotionality was positively related to the cognitive component of impulsive buying. As predicted (H5), Conscientiousness was negatively related to the cognitive component of impulsive buying, but also Conscientiousness was negatively related to the affective component of impulsive buying. Extraversion was positively related to the cognitive,

but not the affective component of impulse buying. Given this result, H6 was partially confirmed.

**Table 2.** Pearson correlations among HEXACO domains and impulsive buying tendencies (total score and cognitive and affective components) for overall sample (N = 388).

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Honesty–Humility	1								
2. Emotionality	0.17 *	1							
3. Extraversion	0.08	0.16 *	1						
4. Agreeableness	<b>0.32</b>	<b>−0.31</b>	0.18 **	1					
5. Conscientiousness	<b>0.36</b>	0.06	0.20 **	0.14 **	1				
6. Openness to experience	0.10	0.19 **	<b>0.34</b>	0.09	0.17 *	1			
7. Impulsive buying—total score	<b>−0.28</b>	<b>0.38</b>	0.22 **	<b>−0.21 **</b>	<b>−0.39</b>	0.16 *	1		
8. Cognitive component of impulsive buying	<b>−0.26</b>	<b>0.29</b>	0.16 *	<b>−0.08</b>	<b>−0.32</b>	0.05	<b>0.67</b>	1	
9. Affective component of impulsive buying	<b>−0.35</b>	<b>0.41</b>	0.05	<b>−0.26</b>	<b>−0.19 *</b>	0.15 *	<b>0.73</b>	<b>0.45</b>	1

\*  $p < 0.05$ , \*\*  $p < 0.01$ . Bolded values of  $r$  indicate effects that are significant at  $p < 0.001$ .

### 3.2. Predicting Impulsive Buying Tendencies from HEXACO Domain Scores

To evaluate the distinctive contributions of the gender and HEXACO domains in impulsive buying tendencies, we performed three regression analyses for each, with the HEXACO domains included together as predictors. The criterion variables were total score on impulsive buying tendencies and the cognitive and affective components of impulsive buying. Gender was included as the control variable in all regressions. The results are presented in Tables 3–5. As we can see in Table 3, six HEXACO domains significantly predicted total score on impulsive buying tendencies (Adj.  $R^2 = 0.27$ ,  $p < 0.001$ ). In line with our prediction, Honesty–Humility and Conscientiousness negatively predicted total score on impulsive buying, and Emotionality and Extraversion positively predicted total score on impulsive buying. In addition, high Openness to Experience showed positive association with this criterion ( $\beta = 0.15$ ,  $p < 0.05$ ). Gender was a significant predictor of this criterion ( $\beta = 0.21$ ,  $p < 0.001$ ). All HEXACO domains and gender explained 27% of the variance in total score on impulsive buying tendencies (Table 3).

**Table 3.** Hierarchical regression analyses with HEXACO domains as predictors of impulsive buying tendencies—general factor on overall sample (N = 388).

Criterion	Predictors	$\beta$	$R^2$	Adj. $R^2$	$F$
Total score on impulsive buying			0.32 ***	0.27 ***	22.60 ***
	Gender	0.21 **			
	Honesty–Humility	<b>−0.28 ***</b>			
	Emotionality	0.31 ***			
	Extraversion	0.16 *			
	Agreeableness	−0.11			
	Conscientiousness	<b>−0.38 ***</b>			
	Openness to Experience	0.15 *			

Note. Standardized regression coefficients ( $\beta$ ) and  $R^2$  (squared multiple R) are from regression models including gender as control and HEXACO domains as predictors of total score on impulsive buying tendencies. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

**Table 4.** Hierarchical regression analyses with HEXACO domains as predictors of cognitive components of impulsive buying tendencies on overall sample (N = 388).

Criterion	Predictors	$\beta$	$R^2$	Adj. $R^2$	$F$
Cognitive component of impulsive buying			0.22 ***	0.19 ***	25.04 ***
	Gender	0.19 **			
	Honesty–Humility	–0.22 **			
	Emotionality	0.10			
	Extraversion	0.25 ***			
	Agreeableness	–0.08			
	Conscientiousness	–0.42 ***			
	Openness to Experience	0.09			

Note. Standardized regression coefficients ( $\beta$  and  $R^2$  (squared multiple R) are from regression models including gender as control and HEXACO domains as predictors of total score on cognitive components of impulsive buying. \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

**Table 5.** Hierarchical regression analyses with HEXACO domains as predictors of affective component of impulsive buying tendencies on overall sample (N = 388).

Criterion	Predictors	$\beta$	$R^2$	Adj. $R^2$	$F$
Affective component of impulsive buying			0.28 ***	0.24 ***	27.04 ***
	Gender	0.24 ***			
	Honesty–Humility	–0.19 *			
	Emotionality	0.36 ***			
	Extraversion	0.13			
	Agreeableness	–0.06			
	Conscientiousness	–0.17 *			
	Openness to Experience	0.05			

Note. Standardized regression coefficients ( $\beta$ ) and  $R^2$  (squared multiple R) are from regression models including gender as control and HEXACO domains as predictors of total score on affective components of impulsive buying. \*  $p < 0.05$ , \*\*\*  $p < 0.001$ .

As expected, Honesty–Humility, Conscientiousness, and Extraversion significantly predicted the cognitive components of impulsive buying ( $\beta = -0.22$ ,  $-0.42$ , and  $0.25$ , all  $p < 0.001$ ). Gender was a significant predictor of this criterion ( $\beta = 0.19$ ,  $p < 0.01$ ). All predictors together explained 19% of the variance in the cognitive components of impulsive buying (Table 4).

Honesty–Humility and Emotionality significantly predicted the affective components of impulsive buying, which is in line with our predictions. Contrary to our expectations, Extraversion was not found to be a significant predictor of the affective component of impulsive buying ( $\beta = 0.13$ ,  $p > 0.05$ ). Gender was a significant predictor of this criterion ( $\beta = 0.24$ ,  $p < 0.001$ ). Six HEXACO domains and gender together explained 24% of the variance in the affective components of impulsive buying (Table 5).

#### 4. Discussion

The aim of this study was to investigate the predictive power of the HEXACO model in relation to the affective and cognitive components of impulsive buying. The results show that personality has a significant role in explaining impulsive buying tendencies; the HEXACO model explained significant amounts of variance in impulsive buying tendencies (27% on a general factor of impulsive buying, 19% on a cognitive component, and 24% on affective components of impulsive buying tendencies).



The results of descriptive statistics demonstrated that the mean values of the HEXACO domains correspond with the approximate average value on a specific dimension.

When compared to other characteristics, the Agreeableness score is relatively lower, but the Extraversion and openness to experience scores are higher. It is evident that participants rate their tendency for impulsive buying slightly higher on the cognitive aspect of impulsive buying compared to the affective aspect. Overall, this study's findings support the HEXACO-impulse buying association and reveal that personality traits, as well as the cognitive and affective aspects of this type of consumer behavior, are significant predictors of impulse buying tendencies generally.

Our study shows that Honesty–Humility and Conscientiousness are negatively and Emotionality and Extraversion are positively associated with general factors for impulsive buying tendencies. Honesty–Humility was negatively related to the cognitive and affective components of impulse buying, and Emotionality was positively related to the cognitive and affective components of impulsive buying. As predicted, Conscientiousness was negatively related to both the cognitive and affective components of impulsive buying. Extraversion was positively related only to the cognitive, but not to the affective components of impulse buying. This study's results are in line with our predictions and theoretical description that Honesty–Humility entails modesty and greed avoidance [33]. Also, our results are in line with previous findings showing that hedonism and narcissism are positively related to impulsive buying [26,28,53]. Our results are in line with previous findings showing that anxiety leads people to make an impulse purchase [50,56], and that Extraversion includes an excitable and dramatic interpersonal style, social boldness, a tendency to enjoy conversation, social interaction, and parties [31], and a tendency to enjoy to explore new things in life [57,58], as well as being in line with previous findings showing that impulsive buying is positively associated with Extraversion [4,48,59].

The results of the regression analyses indicate the significant independent contribution of Honesty–Humility, Emotionality, and Conscientiousness in explaining the general tendency towards impulsive buying, whereby Conscientiousness proved to be the best independent predictor of the general factor of impulsive buying. This indicates that people who rate themselves lower on the scale of Honesty–Modesty and Conscientiousness and higher on Emotionality show a greater tendency to make an impulsive purchase. In addition, the regression analysis shows that Honesty–Humility and Conscientiousness negatively predicted total score on impulsive buying, and Emotionality and Extraversion positively predicted total score on impulsive buying. As expected, Honesty–Humility, Conscientiousness, and Extraversion significantly predicted the cognitive component of impulsive buying. Furthermore, Honesty–Humility and Emotionality significantly predicted the affective component of impulsive buying. Extraversion was not found to be a significant predictor of the affective component of impulsive buying, which is contrary to our prediction. The results show that gender significantly predicted the general factors of impulsive buying, as well as the cognitive and affective components of impulsive buying. In light of this finding, future studies should explore gender differences in the relations between personality and impulsive buying tendencies. Similar results have been obtained in previous studies. For example, a study [48] found a positive relationship between impulsive buying and Neuroticism and Extraversion and a negative relationship between impulsive buying and Conscientiousness.

This study's findings can be applied in two distinct domains: advertising campaigns and the fields of psychology and consulting. Since consumers represent the foundation of a company's revenue and profit, it is imperative for the market to comprehend consumer behavior. Impulse buying captivates numerous companies, since it leads clients to expend more than intended; thus, they want to understand the motivations behind such purchases

to capitalize on these incentives. Nonetheless, the objective of such a study should remain concentrated on its consequences within counseling psychology and education. Furthermore, these findings may be utilized in a clinical setting, where the qualities identified as predictors of impulsive buying tendencies might be incorporated into questionnaires for screening persons experiencing financial difficulties.

## 5. Limitations and Concluding Remarks

This study's shortcomings must be taken into account when interpreting the results. Initially, we employed a somewhat uniform student sample, hence constraining the external validity. Hence, further research may also use samples from the general population. Furthermore, the use of self-report measures has additional limitations due to the influence of shared method variance. Incorporating behavior metrics to assess impulsive buying would be a significant improvement compared to the existing design. Specifically, the inclination to make impulsive purchases does not always translate into actual behavior, as noted by Rook and Fisher [46].

The surveyed group in this study consists of young people from generation Z and Generation Y, and it is well-explored that these generations, in general, display higher levels of impulsivity [60–63]. Measuring impulsivity in a sample that is already known for being impulsive could skew the results, and it should be taken into account. Furthermore, it is important to note that the data in this study were obtained through a self-report methodology, which possesses inherent limitations. Individuals frequently select responses in surveys that they perceive as socially acceptable rather than genuinely reflective of their own views, or they may engage in self-deception. A further limitation is the employment of a correlational study methodology, which restricts the ability to infer cause-and-effect linkages from the research findings.

Despite these limitations, the findings of the present study expand our understanding of the role of HEXACO personality traits in both cognitive and affective aspects of impulsive buying tendencies. On a bivariate level, Honesty–Humility, Agreeableness, and Conscientiousness are negatively associated with affective component of impulsive buying, while Extraversion and Emotionality showed a positive association with this component of impulsive buying. Furthermore, Honesty–Humility and Conscientiousness were negatively and Extraversion and Emotionality were positively related to the cognitive component of impulsive buying.

The results indicate that Honesty–Humility and Conscientiousness negatively predicted both the cognitive and affective aspects of impulsive buying tendencies, Emotionality positively predicted the affective component of impulsive buying, while Extraversion positively predicted the cognitive component of impulsive buying. These findings indicate that Honesty–Humility and Conscientiousness inhibit impulsive buying tendencies, whereas Emotionality and Extraversion increase the likelihood of impulsive buying.

Given that the HEXACO traits significantly influence impulsive buying tendencies, further investigations are needed to explore the impact of HEXACO personality traits on impulsive buying across a diverse age population, as this study primarily involved younger participants.

**Author Contributions:** Conceptualization: S.K. and K.S.; methodology: K.S.; validation: K.S. and S.K.; formal analysis: F.H.Q.; investigation: K.S.; resources: S.K.; data curation: K.S.; writing—original draft preparation: F.H.Q.; writing—review and editing: F.H.Q.; visualization: S.K.; supervision: F.H.Q.; project administration: S.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki and approved by the Oxford Business College Research Ethics Panel REP 170624/87.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data that support the findings of this study are available on request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Rook, D.W.; Gardner, M.P. In the mood: Impulse buying's affective antecedents. *Res. Consum. Behav.* **1993**, *6*, 1–28.
2. Solomon, M. *Consumer Behavior: Buying, Having, and Being*, 5th ed.; Prentice Hall: Englewood Cliffs, NJ, USA, 2002.
3. Melé, D.; Cantón, C.G. The Homo Economicus Model. In *Human Foundations of Management*; Palgrave Macmillan: London, UK, 2014; pp. 9–29. [\[CrossRef\]](#)
4. Verplanken, B.; Sato, A. The Psychology of Impulse Buying: An Integrative Self-Regulation Approach. *J. Consum. Policy* **2011**, *34*, 197–210. [\[CrossRef\]](#)
5. Rolls, E.T.; Grabenhorst, F.; Deco, G. Choice, difficulty, and confidence in the brain. *Neuroimage* **2010**, *53*, 694–706. [\[CrossRef\]](#) [\[PubMed\]](#)
6. Sippel, R. An Experiment on the Pure Theory of Consumer's Behaviour. *Econ. J.* **1997**, *107*, 1431–1444. [\[CrossRef\]](#)
7. Byrne, K.A.; Silasi-Mansat, C.D.; Worthy, D.A. Who chokes under pressure? The Big Five personality traits and decision-making under pressure. *Personal. Individ. Differ.* **2015**, *74*, 22–28. [\[CrossRef\]](#) [\[PubMed\]](#)
8. Furnham, A.; Milner, R. The impact of mood on customer behavior: Staff mood and environmental factors. *J. Retail. Consum. Serv.* **2013**, *20*, 634–641. [\[CrossRef\]](#)
9. Gorn, G.J.; Goldberg, M.E.; Basu, K. Mood, Awareness, and Product Evaluation. *J. Consum. Psychol.* **1993**, *2*, 237–256. [\[CrossRef\]](#)
10. Kidwell, B.; Hardesty, D.M.; Childers, T.L. Emotional Calibration Effects on Consumer Choice. *J. Consum. Res.* **2008**, *35*, 611–621. [\[CrossRef\]](#)
11. Khawaja, S.; Zia, T.; Sokić, K.; Qureshi, F.H. The impact of emotions on consumer behaviour: Exploring gender differences. *J. Mark. Consum. Res.* **2023**, *88*, 69–80.
12. Rook, D.W. The Buying Impulse. *J. Consum. Res.* **1987**, *14*, 189–199. [\[CrossRef\]](#)
13. Rook, D.W.; Hoch, S.J. Consuming Impulses. In *Advances in Consumer Research*; Hirschman, E.C., Holbrook, M.B., Eds.; Association for Consumer Research: Provo, UT, USA, 1985; Volume 12, pp. 23–27.
14. Verplanken, B.; Herabadi, A.G. Individual differences in impulse buying tendency: Feeling and no thinking. *Eur. J. Personal.* **2001**, *15*, 71–83. [\[CrossRef\]](#)
15. Beatty, S.E.; Ferrell, M.E. Impulse buying: Modeling its precursors. *J. Retail.* **1998**, *74*, 169–191. [\[CrossRef\]](#)
16. Dittmar, H.; Drury, J. Self-image—Is it in the bag? A qualitative comparison between “ordinary” and “excessive” consumers. *J. Econ. Psychol.* **2000**, *21*, 109–142. [\[CrossRef\]](#)
17. Gerbing, D.W.; Ahadi, S.A.; Patton, J.H. Toward a conceptualization of impulsivity: Components across the behavioral and self-report domains. *Multivar. Behav. Res.* **1987**, *22*, 357–379. [\[CrossRef\]](#)
18. Sokić, K.; Qureshi, F.H.; Khawaja, S. The role of impulsivity in predicting the subjective well-being of students in private higher education. *Eur. J. Educ. Stud.* **2021**, *8*, 47–65. [\[CrossRef\]](#)
19. Grigsby, J.L.; Jewell, R.D.; Campbell, C. Have your cake and eat it too: How invoking post-purchase hyperopia mitigates impulse purchase regret. *Mark. Lett.* **2021**, *32*, 75–89. [\[CrossRef\]](#)
20. Yi, S.; Jai, T. Impacts of consumers' beliefs, desires and emotions on their impulse buying behavior: Application of an integrated model of belief-desire theory of emotion. *J. Hosp. Mark. Manag.* **2020**, *29*, 662–681. [\[CrossRef\]](#)
21. Bossuyt, S.; Vermeir, I.; Slabbinck, H.; De Bock, T.; Van Kenhove, P. The compelling urge to misbehave: Do impulse purchases instigate unethical consumer behavior? *J. Econ. Psychol.* **2017**, *58*, 60–76. [\[CrossRef\]](#)
22. Chen, C.-D.; Ku, E.C.; Yeh, C.C. Increasing rates of impulsive online shopping on tourism websites. *Internet Res.* **2019**, *29*, 900–920. [\[CrossRef\]](#)
23. Dhandra, T.K. Does self-esteem matter? A framework depicting role of self-esteem between dispositional mindfulness and impulsive buying. *J. Retail. Consum. Serv.* **2020**, *55*, 102135. [\[CrossRef\]](#)
24. LaRose, R. On the Negative Effects of E-Commerce: A Sociocognitive Exploration of Unregulated on-line Buying. *J. Comput.-Mediat. Commun.* **2001**, *6*, JCMC631. [\[CrossRef\]](#)
25. Yang, J.; Cao, C.; Ye, C.; Shi, Y. Effects of Interface Design and Live Atmosphere on Consumers' Impulse-Buying Behaviour from the Perspective of Human-Computer Interaction. *Sustainability* **2022**, *14*, 7110. [\[CrossRef\]](#)

26. Cai, H.; Shi, Y.; Fang, X.; Luo, Y.L. Narcissism predicts impulsive buying: Phenotypic and genetic evidence. *Front. Psychol.* **2015**, *6*, 881. [[CrossRef](#)]
27. Zhang, Y.; Shrum, L.J. The Influence of Self-Construal on Impulsive Consumption. *J. Consum. Res.* **2009**, *35*, 838–850. [[CrossRef](#)]
28. Kacen, J.J.; Lee, J.A. The Influence of Culture on Consumer Impulsive Buying Behavior. *J. Consum. Psychol.* **2002**, *12*, 163–176. [[CrossRef](#)]
29. Saad, M.; Metawie, M. Store Environment, Personality Factors and Impulse Buying Behavior in Egypt: The Mediating Roles of Shop Enjoyment and Impulse Buying Tendencies. *J. Bus. Manag. Sci.* **2015**, *3*, 69–77.
30. Goldberg, L.R. An alternative “description of personality”: The big-five factor structure. *J. Personal. Soc. Psychol.* **1990**, *59*, 1216–1229. [[CrossRef](#)]
31. Lee, K.; Ashton, M.C. Psychometric properties of the HEXACO Personality Inventory. *Multivar. Behav. Res.* **2004**, *39*, 329–358. [[CrossRef](#)] [[PubMed](#)]
32. Ashton, M.C.; Lee, K.; De Vries, R.E. The HEXACO Honesty-Humility, Agreeableness, and Emotionality factors: A review of research and theory. *Personal. Soc. Psychol. Rev.* **2014**, *18*, 139–152. [[CrossRef](#)] [[PubMed](#)]
33. Ashton, M.C.; Lee, K. Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personal. Soc. Psychol. Rev.* **2007**, *11*, 150–166. [[CrossRef](#)] [[PubMed](#)]
34. Sokić, K.; Horvat, Đ.; Krakan, I. HEXACO Personality Traits as Predictors of Impulsive Buying in Men and Women. In *Interdisciplinary Management Research XV (IMR 2019): Book of Proceedings*; Barković, D., Crnković, B., Zekić Sušac, M., Dernoscheg, K.H., Pap, N., Runzheimer, B., Wentzel, D., Eds.; Josip Juraj Strossmayer University of Osijek, Faculty of Economics in Osijek Croatia; Postgraduate Doctoral Study Program in Management Hochschule Pforzheim University, Germany; Croatian Academy of Sciences and Arts: Opatija, Croatia, 2019; pp. 621–636.
35. Moeller, F.G.; Barratt, E.S.; Dougherty, D.M.; Schmitz, J.M.; Swann, A.C. Psychiatric aspects of impulsivity. *Am. J. Psychiatry* **2001**, *158*, 1783–1793. [[CrossRef](#)] [[PubMed](#)]
36. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed.; American Psychiatric Association: Washington, DC, USA, 2013.
37. Coocaro, E.F.; Posternak MA i Zimmerman, M. Prevalence and features of intermittent explosive disorder in a clinical setting. *J. Clin. Psychiatry* **2005**, *66*, 1221–1227. [[CrossRef](#)]
38. Krueger, R.F.; Markon, K.E.; Patrick, C.J.; Benning, S.D.; Kramer, M.D. Linking antisocial behavior, substance use, and personality: An integrative quantitative model of the adult externalizing spectrum. *J. Abnorm. Psychol.* **2007**, *116*, 645–666. [[CrossRef](#)] [[PubMed](#)]
39. Patton, J.H.; Stanford, M.S.; Barratt, E.S. Factor structure of the barratt impulsiveness scale. *J. Clin. Psychol.* **1995**, *51*, 768–774. [[CrossRef](#)] [[PubMed](#)]
40. Eysenck, H.J. *The Structure of Personality*, 3rd ed.; Methuen: London, UK, 1979.
41. Costa, P.T., Jr.; McCrae, R.R. *NEO-PI-R: Professional Manual*; Psychological Assessment Resources: Odessa, FL, USA, 1992.
42. Depue, R.A.; Collins, P.F. Neurobiology of the structure of personality: Dopamine, facilitation of incentive motivation, and extraversion. *Behav. Brain Sci.* **1999**, *22*, 491–569. [[CrossRef](#)]
43. Stanford, M.S.; Mathias, C.W.; Dougherty, D.M.; Lake, S.L.; Anderson, N.E.; Patton, J.H. Fifty years of the Barratt Impulsiveness Scale: An update and review. *Personal. Individ. Differ.* **2009**, *47*, 385–395. [[CrossRef](#)]
44. Eysenck SB, G.; Eysenck, H.J. The place of impulsiveness in a dimensional system of personality description. *Br. J. Soc. Clin. Psychol.* **1977**, *16*, 57–68. [[CrossRef](#)] [[PubMed](#)]
45. Amos, C.; Holmes, G.R.; Keneson, W.C. A meta-analysis of consumer impulse buying. *J. Retail. Consum. Serv.* **2014**, *21*, 86–97. [[CrossRef](#)]
46. Rook, D.W.; Fisher, R.J. Normative influences on impulsive buying behavior. *J. Consum. Res.* **1995**, *22*, 305–313. [[CrossRef](#)]
47. McCrae, R.R.; Costa, P.T.; de Lima, M.P.; Simões, A.; Ostendorf, F.; Angleitner, A.; Marušić, I.; Bratko, D.; Caprara, G.V.; Barbaranelli, C.; et al. Age differences in personality across the adult life span: Parallels in five cultures. *Dev. Psychol.* **1999**, *35*, 466–477. [[CrossRef](#)] [[PubMed](#)]
48. Thompson, E.R.; Prendergast, G.P. The influence of trait affect and the five-factor personality model on impulse buying. *Personal. Individ. Differ.* **2015**, *76*, 216–221. [[CrossRef](#)]
49. Myszkowski, N.; Storme, M.; Tavani, J.L. Are reflective models appropriate for very short scales? Proofs of concept of formative models using the ten-item personality inventory. *J. Personal.* **2018**, *47*, 41–58. [[CrossRef](#)] [[PubMed](#)]
50. Shahjehan, A.; Qureshi, J.A. Personality and impulsive buying behaviors. A necessary condition analysis. *Econ. Res.-Ekon. Istraživanja* **2019**, *32*, 1060–1072. [[CrossRef](#)]
51. Ashton, M.C.; Lee, K. Honesty-humility, the Big Five, and the five-factor model. *J. Personal.* **2005**, *73*, 1321–1354. [[CrossRef](#)] [[PubMed](#)]
52. Gaughan, E.T.; Miller, J.D.; Lynam, D.R. Examining the Utility of General Models of Personality in the Study of Psychopathy: A Comparison of the HEXACO PI-R and NEO PI-R. *J. Personal. Disord.* **2012**, *26*, 513–523. [[CrossRef](#)] [[PubMed](#)]

53. Khuong, M.N.; Tran, T.B. Factors Affecting Impulse Buying toward Fashion Products in Ho Chi Minh City—A Mediation Analysis of Hedonic Purchase. *Int. J. Trade Econ. Financ.* **2015**, *6*, 223–229. [[CrossRef](#)]
54. Babarović, T.; Šverko, I. The HEXACO personality domains in the Croatian sample. *Društvena Istraživanja* **2013**, *22*, 397–411. [[CrossRef](#)]
55. George, D.; Mallery, P. *SPSS for Windows Step by Step: A Simple Guide and Reference 17.0 Update*, 10th ed.; Pearson: Boston, MA, USA, 2010.
56. Silvera, D.H.; Lavack, A.M.; Kropp, F. Impulse buying: The role of affect, social influence, and subjective wellbeing. *J. Consum. Mark.* **2008**, *25*, 23–33. [[CrossRef](#)]
57. Judge, T.A.; Higgins, C.A.; Thoresen, C.J.; Barrick, M.R. The Big Five personality traits, general mental ability, and career success across the life span. *Pers. Psychol.* **1999**, *52*, 621–652. [[CrossRef](#)]
58. Leong, L.Y.; Jaafar, N.I.; Sulaiman, A. Understanding impulse purchase in facebook commerce: Does big five matter? *Internet Res.* **2017**, *27*, 786–818. [[CrossRef](#)]
59. Farid, D.S.; Ali, M. Effects of Personality on Impulsive Buying Behavior: Evidence from a Developing Country. *Mark. Brand. Res.* **2018**, *5*, 31–43. [[CrossRef](#)]
60. Sudirjo, F.; Lotte, L.N.A.; Sutaguna, I.N.T.; Risdwiyanto, A.; Yusuf, M. The Influence of Generation Z Consumer Behavior on Purchase Motivation in E-Commerce Shoppe. *Profit J. Manaj. Bisnis Dan Akunt.* **2023**, *2*, 110–126. [[CrossRef](#)]
61. Matic, M.; Vojvodic, K. Managing online environment cues: Evidence from Generation Y consumers. *Int. J. Electron. Mark. Retail.* **2017**, *8*, 77–90. [[CrossRef](#)]
62. Pavlič, I.; Vukić, M. Decision-making styles of Generation Z consumers in Croatia. *Ekon. Misao I Praksa* **2019**, *28*, 79–95. Available online: <https://hrcak.srce.hr/221026> (accessed on 11 July 2024).
63. Yadav, A.; Sharma, S.K. A conceptual perspective of online impulsive buying behavior of gen z: Role of customers' emotions and traits in the new normal era. *Prestig. Int. J. Manag. IT-Sanchayan* **2022**, *11*, 18–36. [[CrossRef](#)]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.