

# *Relationship between Impulsivity, Value Orientations and Impulsive Buying*

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The aim of this study was to examine the role of impulsivity and value orientations in impulsive buying on a convenience sample from the City of Zagreb ( $N = 220$ , 44% male), ages ranged from 20 to 55 years ( $M_{age} = 26.07$ ,  $SD = 7.14$ ). A Barratt impulsivity scale, Buying Impulsivity Scale, and Value Orientation Scale was administered. The result showed that impulsive buying is associated with attention, motor and non-planning impulsivity. Also, the results have revealed a positive association between impulsive buying tendencies and hedonistic value orientation. Hierarchical regression analysis showed that motor and non-planning impulsivity, but not attention impulsivity, positively predict impulsive buying tendencies. Additionally, impulsivity and value orientations explained 35% of the variance in impulsive buying tendencies. The results suggest that impulsive buying behavior is primarily associated with a hedonistic value orientation.

*Key Words:* impulsivity, value orientations, impulsive buying

*JEL Classification:* A13, D12, D87, D91

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## **Introduction**

Although impulsive buying behaviours have already been investigated as early as Freud (1911), this early work was focused on motivation, mainly associating impulse buying with the hedonic id, which is driven by pleasure, selfishly and irrationally seeking instant gratification, without any regard for the consequences. However, prior to Rook (1987) the research in the area of impulse buying behavior focused primarily on external stimuli, i.e. product characteristics rather than buyer's personality traits.

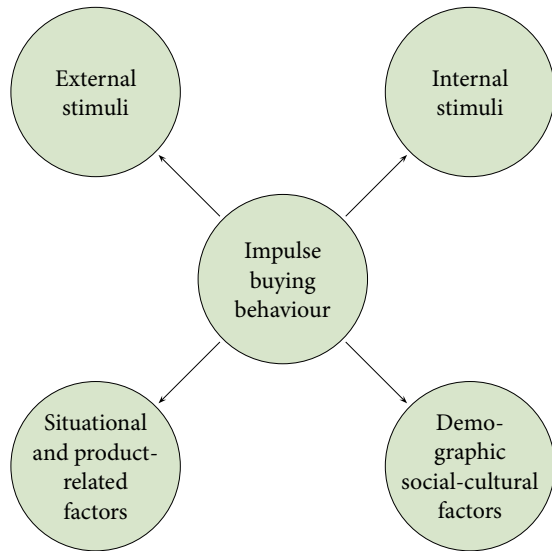


FIGURE 1  
Impulse Buying Behavior  
Framework (adapted  
from Muruganatham  
and Bhakat 2013)

Compiling relevant literature on the topic into a detailed review, Muruganatham and Bhakat (2013) offer an extensive insight into findings in the area of impulse buying, distinguishing four different sources of stimuli: (1) external, (2) internal, (3) situational and product related, and (4) demographics socio-cultural factors.

Majority of authors focus their research on external stimuli as marketers and corporations use it for their campaign and sales purposes, and although external and internal stimuli have repeatedly been proven to closely interact in their impact on impulsive buying behaviours, internal reasons for such behaviours have still been thoroughly under-investigated, particularly in the Croatian context. As this study examines the influence of impulsivity and value orientation on impulsive buying tendencies, primary interest of the research is in the area of internal stimuli, linking personality traits to impulsiveness and hedonism.

Relevant literature studying buying behavior identifies Openness, Extraversion, and Neuroticism as personality traits positively associated with impulsive buying tendencies, while Conscientiousness and Agreeableness are identified as negatively associated with the impulsive buying behavior. However, previous studies have not clearly suggested whether impulsiveness was more closely related to Extraversion or to Neuroticism, which is attributed mostly to the complexity of the impulsiveness construct. In an attempt to resolve these concerns, Lange et al. (2017) used

data from student and clinical samples in three studies with the subscales of the Barratt Impulsiveness Scale (BIS): IM (motor impulsiveness – involves acting without thinking), IA (Attentional Impulsiveness – refers to the inability to focus on the task at hand) and INP (non-planning impulsiveness – reflects a lack of future orientation), which helped them place different facets of impulsiveness in different places of a multidimensional personality framework. Their results suggest that student samples show positive correlations between IM and Extraversion and between IA and Neuroticism. In the clinical sample ‘involving individuals with elevated levels of impulsiveness, the relationship between IM and Extraversion was found to be weakened whereas the relationship between IA and Neuroticism was substantially stronger when compared to the non-clinical sample.’

Among the first to study impulsive buying tendencies in Croatia were Bošnjak, Bandl, and Bratko (2007). They made a methodological contribution proposing their own instrument – an 8-item preliminary scale to assess cognitive (e.g. lack of planning and deliberation) and affective aspects (e.g., feeling of pleasure, excitement, compulsion, lack of control, regret) of impulsive buying tendencies. They adapted the instrument originally developed by Verplanken and Herabadi (2001), and though citing certain limitations of the preliminary scale, the instrument they developed might be of wide application assisting all – from market researchers who want to identify consumer segments particularly susceptible to impulsive buying to screening impulsive buying tendencies in clinical applications. On the research side, Bošnjak, Bandl, and Bratko (2007) open room for descriptive comparisons of impulsive buying tendencies and behaviours in different cultures as well as a line of research in exploring ‘cultural comparability of the generic base of such tendencies, i.e. by relating impulsive buying to more general personality traits in different cultures.’

Farid and Ali (2018) study the impact of personality on impulse buying behavior, emphasizing that the need for this kind of studies in developing countries might be greater than in developed ones due to rapid growth in the international and local retailing sector in developing countries. Hoping to discover unique behavior of Pakistani consumers compared to other developed countries, their results only confirmed the role of personality in encouraging impulse buying at retail outlets, with openness, conscientiousness, extraversion and neuroticism being the dimensions that showed positive correlation with impulse buying.

Similar to Bošnjak, Bandl, and Bratko (2007), Badgaiyan, Verma, and

Dixit (2016) provided their indigenous scale for measuring impulsive buying tendency in an attempt to better grasp its impact on impulsive buying behavior in consumers in different cultures. Badgaiyan, Verma, and Dixit (2016) made an important contribution to studying impulsive buying tendency by initially developing a new impulsive tendency measurement two factor scale comprising of 8 items. The scale was validated in the second study by studying the relationship between impulsive buying tendency and self-control, impulsive buying behavior, and the Big Five personality traits of emotional stability, agreeableness, extraversion, conscientiousness, and openness to experience. Their results confirmed that personality constructs of extraversion and conscientiousness were significantly related to impulsive buying tendency. They also found positive relationship between impulsive buying tendency and impulsive buying behavior, and a negative relationship between impulsive buying tendency and self-control, which in turn validated the measurement qualities of their scale. Kacen and Lee (2002) wrote about these cultural differences when studying the impact of culture on consumer behavior in impulse purchasing. Their results point to essential underlying differences between consumers in Western individualist societies and those in Eastern collectivist cultures suggesting that the interaction of culture and consumers needs to be taken into account when attempting to better understand impulsive buying behavior.

Shehzadi et al. (2016) investigated relationship between personality traits and compulsive buying behavior with mediating role of impulsive buying. They found that individuals who score higher on agreeableness, neuroticism, and openness could be 'compulsive buyers with existing propensity of impulsivity.' Also, they confirmed some previous research in this area suggesting insignificant relationship between conscientiousness and with impulsive buying because these buyers plan their spending. However, neurotic personalities are emotionally instable so they buy excessively and on the spur of the moment to reduce stress.

Chen and Lee (2015) empirically examined hierarchical relationships of personality traits and impulsiveness in online buying. The results show that agreeableness, need for arousal, and need for material were predictive of online buying impulsiveness. On the other hand, value conscientiousness was negatively related to online buying impulsiveness as this study proposed and positively related to conscientiousness. Defining conscientiousness as an 'organized, orderly, and efficient carrying out of tasks,' authors showed that it could also be useful for predicting the tendency

to carry out purchase tasks efficiently. Furthermore, variety seeking tendency was proved to be related but not antecedent variable of online buying impulsiveness.

Cai et al. (2015) studied narcissism in relation to impulsive buying. They hypothesized that narcissism, characterized by impulsivity and materialism, might serve as a potential antecedent to impulsive buying. In two separate studies, they found that adaptive narcissism was not correlated with impulsive buying, while maladaptive narcissism was significantly predictive of the impulsive buying tendency. Furthermore, the results indicate that global narcissism and its two components, adaptive and maladaptive narcissism, as well as the impulsive buying tendency were heritable. Connections between global narcissism and impulsive buying, and between maladaptive narcissism and impulsive buying were genetically based, helping thus identify the origins of that link between narcissism and impulsive buying.

Values play an important role in understanding consumer behavior. Values are the sources of both attitudes and behavior, and represent what people believe is important in their lives; they are the internal guidelines (guides) of human behavior (Schwartz 1994; Schwartz and Bilsky 1990). Values are the result of socialization, personal experiences and the environment, and they significantly affect the attitudes and behavior of the individual (Schwartz 1996; Rohan and Zanna 2001). One of the most commonly used value models is the Schwartz model (1992), which links values to Maslow's theory. The model emphasizes that values arise from the needs of the individual.

Authors studying values (e.g. Rokeach 1973; Schwartz 1992) agree that there is a number of universal values that all people have, but their composition varies with respect to their significance to the individual. Differences are conditioned by the personality and social environment in which the individual grows up and acts, which leads to different value systems. According to Franc, Šakić, and Ivičić (2002), values are grouped into three value orientations: conventional, self-realizing and hedonistic. These authors emphasize that conventional value orientation is a protective factor of socialization, while hedonist value orientation is a risk factor of different forms of maladaptive behaviours such as alcohol and drug abuse. Hedonistic orientation includes thrill-seeking, proneness to comfortable life, striving for a high standard of living and seeking fun and excitement. It is positively related to disinhibition, a construct similar to impulsivity, which encompasses negative affects and problems of impulse

control (Ljubin Golub and Sokić 2016). In contrast, conventional orientation includes educational aspiration, helping others and honesty, and living in accordance with one's moral principles and is negatively related to disinhibition (Ljubin Golub and Sokić 2016).

Relationship between impulsivity and impulsive buying is clear at first sight. It is reasonable to assume that these two constructs have a positive association due to the impulsive tendencies that underlie them.

In this paper we focus on the BIS model of impulsivity (Patton, Stanford, and Barratt 1995), which includes three dimensions of impulsivity: attention, motor and non-planning. Attention impulsivity reflects the inability to focus on the task and includes attention and cognitive instability. Motor impulsivity is a combination of quick and reckless action and inconsistent lifestyle. Non-planning impulsivity reflects a lack of self-control (planning and careful reflection) and lack of cognitive complexity (enjoyment of complex mental tasks). The study by Mao et al. (2018), which uses BIS-11 as a measure of impulsivity, has shown a positive association between impulsivity and neuroticism, and a negative association between impulsivity and self-control.

### **Literature Review**

There has been a long history of impulsive buying behavior, initially associated with acts of childishness, immaturity, stupidity and lack of intelligence (Farid and Ali 2018). Impulsive buying, today widely recognized as a complex behaviour, is thoroughly researched not just as psychological multifaceted phenomena, but for its economic significance as well. Impulsive shopping is an intriguing area of consumer behavior and a key field of marketing considerations (Kesić and Kursan 2008). According to some researchers, impulsive buying behavior has become the most significant trend in today's world (Shakaib and Ali 2018). Thus, investigating and discovering the factors surrounding impulsive buying may lead to creating such profit oriented sales strategies that, in economically favourable environment, may induce and stimulate impulsive buying. Impulse buying may result due to external stimuli, controlled by marketers to lure customers into impulse buying (Shakaib and Ali 2018). For example, some research results show that the impulsive buying to some extent is affected by use of sales promotions at the point of sale and the dynamic display of merchandise in creating an adequate atmosphere and an attractive, smart and purchase stimulating store (Mihic and Kursan 2010).

Impulsive buying, seemingly simply defined as unplanned purchase, or purchasing without planning in advance, is rather complex worldwide phenomena related with emotions, cognitive, and behavioural characteristics of individuals in general. Furthermore, certain analysis have shown that cultural context and cultural differences factors (individualist culture as compared to collectivism culture) moderate many aspects of consumer's impulsive buying behavior, including self-identity, normative influences, the suppression of emotion, and the postponement of instant gratification (Kacen and Lee 2002). Not surprisingly, because of its attributions related to availability of purchasing channels, disposable income, etc. the phenomenon of impulsive buying is thoroughly studied in developed, i.e. consumer oriented countries. The Muruganantham and Bhakat (2013) thoroughly reviewed and classified wide opus of studies that investigate impulsive buying behaviour. Only few studies that investigate the phenomena of impulsive buying is available for developing countries, e.g. Shakaib and Ali (2018).

With rapid globalization and technologically backed development of e-commerce, Internet buying channels, and availability of 'one-click' buying it can be argued that this phenomena is gaining momentum in other countries as well. With dramatic increases in personal disposable income, life style and credit availability have made impulse buying a widespread phenomena across the different retail formats (Muruganantham and Bhakat 2013). The need of studying impulsive buying is more in developing countries as compared to developed countries due to the recent development in the retailing sector in developing countries (Kacen and Lee 2002).

Hausman (2000) argues that impulse shopping is complicated, huge and multi-dimensional concept due to which very large number of products and services are sold yearly. Some researchers thus found that 'individual' are responsible for impulsive buying contrarily to previous believe that the 'product' contributes impulsive buying (Jalees 2009). From individual customer perspective, impulsive buying can be simply described as as a very spontaneous purchase or taking ownership of the product without any deeper thinking (Shakaib and Ali 2018). More compound definition of impulsive buying described it as a hedonically complex purchasing behavior in which the rapidity of the impulse purchase decision process precludes thoughtful, deliberate consideration of all information and choice alternatives (Kacen and Lee 2002). In that context, simple classification of individuals on impulsive and non-impulsive buyers may be

tempting. Nevertheless, it was also found the level of impulsiveness in reference to purchasing, varied from time to time for both the impulsive buyers and non-impulsive buyers (Jalees 2009).

Contrary to some studies that individual personality consider as a main determinant of impulsive buying, Kesić and Kursan (2008) oppose two paradigms of modern marketing related to impulsive buying. According to situational paradigm, the consumer becomes a passive participant in the process of behavior, and that his purchasing decisions are mainly influenced by external factors. Hyperreal paradigm considers impulsivity as determined by individual personality. The authors conclude that impulsivity as a personal characteristic of the consumer potentially exists, but situational factors are important for the manifestation of impulsive buying because research has shown that they determine the intensity and frequency of impulsive consumer behavior.

This evidence is confirmed from Mihić and Kursan (2010) that investigated the correlation between situational factors and impulsive buying behavior in Croatia. They conclude that most situational factors to some extent induce shoppers to buy on impulse and thus proposed several practical suggestions to retailers and their sales staff. Iyer et al. (2020) conducted the meta-analysis that integrates findings from 231 samples and more than 75,000 consumers in order to determine relationship between impulse buying and its determinants, associated with several internal and external factors. They concluded that traits (e.g., sensation-seeking, impulse buying tendency), motives (e.g., utilitarian, hedonic), consumer resources (e.g., time, money), and marketing stimuli emerge as key triggers of impulse buying.

The relationship between impulsivity measured by the BIS, impulsive buying and values is intriguing, but not well explored and the current study aims to examine the relationship between different dimensions of impulsivity as indexed by the BIS-11, impulsive buying and value orientations. Previous research has shown that impulsivity is related to socially unacceptable behaviours, like aggression (Houston et al. 2003) and destructive communication (Tan, Jarnecke, and South 2017). Additionally, impulsivity traits correlate negatively with self-regulation (Hofmann et al. 2014). Impulsivity per se is a diagnostic criterion for a wide range of mental disorders including ADHD, borderline personality disorder, bulimia, antisocial personality disorder (American Psychiatric Association 2013), and is therefore expected to be unrelated to conventional and self-realization values.



## The Present Study and Hypotheses

The aim of this study was to investigate relationships between impulsivity, values, and impulsive buying. We suggest that understanding of these relationships can help clarify the mechanisms underlying reckless and harmful consumer's decisions.

Consistent with Rook and Fisher's (1995) conceptualization of impulsive buying, and in line with previous research (e.g., Sokić, Horvat, and Krakan 2019; Bratko, Horvat, and Krakan 2013), we hypothesize that impulsive buying will be positively associated with attention, motor, and non-planning impulsivity (Hypothesis 1).

Consistent with previous findings (Ljubin Golub and Sokić 2016) and conceptualization of values (Franc, Šakić, and Ivičić 2002) we predict a positive association between impulsive buying and hedonistic value orientation, and negative association between impulsive buying and conventional values (Hypothesis 2).

## Methodology

### PARTICIPANTS AND PROCEDURE

In this research we used convenience sample ( $N = 220$ , 56% women). Participants' ages ranged from 20 to 55 years ( $M_{age} = 26.07$ ,  $SD = 7.14$ ). Most of them were married (65%) and employed (92%). All participants were informed about the nature of the study and they participated on a voluntary basis.

### MEASURES

Impulsivity was measured by the Barratt impulsivity scale (BIS-11; Patton, Stanford, and Barratt 1995). This questionnaire is a 4-point Likert-type scale and consists of 30 items which assess attention (e.g. I don't 'pay attention,' I 'squirm' at plays or lectures, I often have extraneous thoughts when thinking), motor (e.g. I change jobs, I act on the spur of the moment, I buy things on impulse), and non-planning (e.g. I say things without thinking, I am more interested in the present than the future) impulsivity.

Values were measured using Value Orientation Scale (VOS; Franc, Šakić, and Ivičić 2002) which consists of 18 items grouped into three value orientations: conventional (5 items), self-realizing (6 items) and hedonistic (7 items). The VOS is five-point Likert scale (from 1 = not important at all to 5 = very important).

TABLE 1 Descriptive Statistics and Internal Consistency Values

Item		(1)	(2)	(3)	(4)	(5)
BIS-11	Attentional impulsivity	16.82	3.37	0.44	0.39	0.67
	Motor impulsivity	21.31	3.92	0.45	0.94	0.71
	Non-planning impulsivity	22.67	4.22	-0.08	-0.38	0.72
Values Orientations	Conventional	25.16	3.05	-0.55	0.19	0.78
	Self-realization	22.67	2.06	-1.27	1.68	0.80
	Hedonistic	26.20	4.35	-0.26	0.87	0.76
	Impulsive buying	25.87	6.65	0.39	-0.13	0.89

NOTES Column headings are as follows: (1) median, (2) standard deviation, (3) skewness, (4) kurtosis, (5) Cronbach's  $\alpha$ .  $N = 220$ .

Impulsive buying was measured by the Impulsive Buying Scale (IBS; Rook and Fisher 1995). This seven-point Likert scale consists of nine items (e.g. I buy things according to how I feel at the moment, I often buy things spontaneously, I carefully plan most of my purchases).

## Results

### DESCRIPTIVE STATISTICS

Results of descriptive statistics are presented in table 1. Alpha coefficient scores as indicator of internal reliabilities are adequate for all scales (in a range from 0.67 to 0.89).

Additionally, results of all scales showed adequate range. According to Gravetter and Walnau (2014), skewness and kurtosis scores were acceptable (i.e. in a range from -2 to +2).

### CORRELATION AND REGRESSION ANALYSES

Pearson's correlation coefficients are displayed in table 2. Intercorrelations between impulsivity scales are low to moderate (from 0.30 between attention and non-planning impulsivity to 0.48 between attention and motor impulsivity), which is in line with earlier findings (e.g., Gatner, Douglas, and Hart, 2016; Sokić and Ljubin Golub 2019).

Values orientations scale demonstrated low to moderate intercorrelations (from 0.20 between conventional and hedonistic values to 0.55 between conventional and self-realization values).

As predicted, impulsive buying is positively associated with attention, motor, and non-planning impulsivity. In line with hypotheses, impulsive

TABLE 2 Pearson's Correlation Coefficients

	2	3	4	5	6	7
1. Attention impulsivity	0.48**	0.30**	-0.23**	-0.13*	0.17**	0.28**
2. Motor impulsivity	-0.31**	-0.13*	-0.05	0.19**	0.54**	
3. Non-planning impulsivity	-0.15*	-0.18**	-0.04	0.30**		
4. Conventional v.o.	-0.55**	0.20**	0.02			
5. Self-realization v.o.	-0.27**	0.07				
6. Hedonistic v.o.	-0.16**					
7. Impulsive buying						

NOTES \* $p < 0.05$ , \*\* $p < 0.01$ .  $N = 220$ .

buying showed a positive association with hedonistic values, but not a negative association with conventional values.

Results of multiple regression analysis (table 3) showed that hedonistic values and motor and non-planning impulsivity positively predicted impulsive buying.

As we have seen, predictors explained 35% of the variance in impulsive buying. Value orientations entered in Step 2 explained 6% of the variance in impulsive buying, thus partially confirming Hypothesis 2. Impulsivity components accounted for 29% of unique predictive variance beyond values. As expected, motor and non-planning impulsivity but not attention impulsivity, were positive predictors of impulsive buying, partially confirming Hypothesis 1. However, the positive relationship between impulsive buying and hedonistic value orientation became non-significant after adding impulsivity dimensions. This result suggests that we can attribute positive relationship between impulsive buying and hedonistic values to the overlap of hedonistic values with impulsivity.

#### Conclusion and Practical Implications

The main goal of this study was to explore relations between impulsive buying, impulsivity and values. Results of correlation analysis partially confirmed our hypotheses. As predicted, at a bivariate level, impulsive buying was positively associated with all impulsivity dimensions. These results were expected and logical because Rook's construct of impulsive buying is based on behavioural, cognitive, and emotional features of impulsivity. Therefore, impulsive buying and impulsivity are partially overlapping constructs underlying similar psychological mechanisms. First, these are the lack of impulse control, impaired affect regulation and behavioural restraint. As expected, impulsive buying was positively related

TABLE 3 Multiple Hierarchical Regressions Predicting Impulsive Buying from the Impulsivity and Values

Predictors	(1)	(2)	(3)	(4)	(5)	(6)
Step 1			0.04**	0.04**	5.48**	
Gender	0.21	3.22**				
Age	-0.09	-1.36				
Step 2			0.08*	0.06*	4.27**	0.04**
Gender	0.24	3.58**				
Age	-0.05	-0.74				
Conventional v.o.	-0.07	-0.98				
Self-realization v.o.	0.04	0.46				
Hedonistic v.o.	0.20	2.93**				
Step 3			0.37**	0.35**	17.34**	0.29**
Gender	0.18	3.21**				
Age	-0.18	-0.32				
Conventional v.o.	0.03	0.45				
Self-realization v.o.	0.08	1.30				
Hedonistic v.o.	0.06	1.14				
Attention impulsivity	0.06	1.02				
Motor impulsivity	0.46	7.50**				
Non-planning impulsivity	0.14	2.47*				

NOTES Column headings are as follows: (1) standardized beta coefficients, (2)  $t$ , (3) coefficient of determination ( $R^2$ ), (4) adjusted  $R^2$ , (5)  $F$ , (6) change for impulsivity dimensions entered in a separate step after controlling for gender, age, and values. \*  $p < 0.05$ , \*\*  $p < 0.01$ .  $N = 220$ . Criterion: impulsive buying.

to hedonistic values. This result is in line with the conceptualization of hedonistic value orientations (Franc, Šakić, and Ivić 2002) as values characterized by thrill-seeking, aspiring towards comfortable life, striving for a high standard of living and seeking fun and excitement.

Also, our result corresponds to previous findings which show positive associations of all BIS-11 scales and hedonistic values but only in female sample (Ljubin Golub and Sokić 2016). In this study, we did not investigate gender differences between examined variables, which should be done in future research.

As expected, hedonistic values were found to be positively related to impulsive buying and explained 4% of the variance. Contrary to our

hypotheses, conventional value was insignificant predictor of impulsive buying. Impulsivity dimensions explained an additional 29% of variance over the values, with values becoming insignificant. Our results suggest that impulsivity dimensions (especially motor and non-planning impulsivity), outperform values and are more relevant to impulsive buying than values. Although impulsive buying is partly explained by impulsivity dimensions and value orientations, a large amount of the variance in impulsive buying (i.e., 65%) remains unexplained, suggesting that other factors are also important. Among such factors, the environmental/contextual factors are probably among most influential.

Thus, impulsive buying, despite numerous studies and empirical evidences, still remains complex psychological and economical phenomena. Although intriguing from psychological standpoint, it can be argued that discovering determinants and factors inducing individuals to impulsive buying still remains Holy Grail to marketers and profit seekers in retail industry all around the world. Current study shows that some aspects of impulsivity (e.g., motor, and non-planning dimensions of this construct) have a very important role in understanding impulsive buying tendencies. Also, hedonistic values significantly predict impulsive buying. Gender explained a significant amount of variance in impulsive buying, thus future research should explore the role of gender in relations between examined variables. Overall, this study can help us better understand impulsive buying, which has an important role in consumer behavior and is becoming a growing problem today.

This study has some limitations. The first limitation of this work is the use of self-report measures given the impact of shared method variance. The use of a convenience sample may not exhibit the full range of impulsivity. Therefore, future studies should use general population samples, and clinical and incarcerated samples. Future research also needs to include other impulsive buying measures, primarily different cognitive and affective aspects of impulsive buying, aimed at better understanding of the relationship between examined variables. Likewise, using behavioural tasks consideration should be given to measuring both, impulsivity, and impulsive buying. In addition, future research should be conducted with control of socio-demographic variables, such as monthly income, marital status, and educational level. As mentioned above, the results show that a large amount of the variance in impulsive buying remains unexplained. Thus, future research should explore the role of regret, depression, anxiety, stress, but also other emotions in the context of impulsive buying.

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