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Conference Paper

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Suggested Citation: Sokić, Katarina; Horvat, Đuro; Gutić Martinčić, Sanja (2019) : The Role of Impulsivity in Post-Purchase Consumer Regret, In: Proceedings of the ENTRENOVA - ENTERprise REsearch INNOVATION Conference, Rovinj, Croatia, 12-14 September 2019, IRENET - Society for Advancing Innovation and Research in Economy, Zagreb, pp. 590-595

This Version is available at:

<https://hdl.handle.net/10419/207723>

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The Role of Impulsivity in Post-Purchase Consumer Regret

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Abstract

Post-purchase consumer regret includes outcome regret and process regret. The aim of present study was to examine relationships between consumer regret, as indexed by the Post-Purchase Consumer Regret Scale (PPCR scale), attentional, motor and non-planning impulsivity, as measured by the Barratt Impulsiveness Scale (BIS-11), and Emotionality dimension of personality, as assessed by the HEXACO-60, in 211 undergraduates (96 men). Results partially supported hypotheses: motor and non-planning impulsivity were associated with outcome regret, and attentional impulsivity was related to outcome and process regret. Contrary to the hypothesis, emotionality was not related to process regret. Additionally, these findings suggested that attentional impulsivity moderated the relationship between emotionality and outcome regret and that motor impulsivity moderated emotionality-process regret relationship.

Keywords: consumer regret, attention, motor, non-planning impulsivity, emotionality

JEL classification: Z1, A12

Consumer regret

Regret is a distressing emotion, which can be experienced about decision processes and decision outcomes (Zeelenberg et al., 2007). Regret is a complex construct. Some of the most important components of regret are responsibility, self-accusation, and counterfactual thinking (CFT). CFT is a psychological construct that involves the tendency of creating alternative outcomes for what has already happened (Kahneman et al., 1986). Regret includes affective and cognitive elements. Affective element of regret is related to negative mental health symptoms such as emotional distress, depression, anxiety, low level of well-being, and cognitive element of regret is associated with positive and functional outcomes such as a positive impact on future behavior, improve decisions-making (Buchanan et al., 2016).

Decision Justification Theory (DJT) (Connolly et al., 2002) proposed that decision-related regret consists of two components: outcome-evaluation regret and self-blame regret. Based on DJT, Lee et al., (2009) set out a definition of post-purchase consumer regret and developed Post-Purchase Consumer Regret Scale (PPCR Scale). According to Lee et al., (2009) post-purchase consumer regret is multidimensional construct, which encompasses outcome regret and process regret. Outcome regret is the result of a comparison between what was bought and what it might have been bought. Process regret appears when an individual compares the decision-making process before buying considering another alternative process as better. Outcome

regret consists of two dimensions: regret due to foregone alternatives and regret due to a change in significance. Process regret includes regret due to under-consideration and regret due to over-consideration (Lee et al., 2009).

Impulsivity, emotionality and consumer regret

Impulsivity is a multidimensional construct which consists of different cognitive, behavioural and emotional features including a low inhibitory control, irresponsibility, impatience, a lack of planfulness and foresight, alienation and distrust, often linked to socially deviant behaviors (Moeller et al., 2001; Stanford et al., 2009). Impulsivity encompasses a range of maladaptive traits such as problems with the attention, thrill adventure seeking, inability to delay gratification, antisociality, aggression (Smith et al., 2006), but also with depression, self-harming, suicide attempts (Swann et al., 2005; Swann et al., 2008) and substance abuse (Lane, 2007). According to these findings, it can be assumed that impulsiveness is associated with both, externalizing problems (e.g. conduct disorders, antisociality behavior, rule-breaking, aggression, defiance, substance dependence) (Verona et al., 2004) and internalizing symptoms (e.g. depression, anxiety, withdrawal) (Forns et al., 2001).

The Barratt Impulsiveness Scale (BIS-11; Patton et al., 1995), one of the most commonly used scales to measure the construct of impulsivity, assessed three personalities/behavioural dimensions of impulsivity: attentional, motor and non-planning impulsivity. Attentional impulsivity reflected an inability to focus attention, motor impulsivity involved acting without thinking, and non-planning impulsivity defined as lack of future orientation or forethought (Patton et al., 1995). BIS scores are associated with normal and pathological personality traits. All three BIS subscales were negatively correlated with conscientiousness, motor impulsivity was positively related to extraversion, whereas attentional impulsivity was positively related to neuroticism (Lange et al., 2017).

According to HEXACO model of personality, Emotionality includes fearfulness, anxiety, dependence and sentimentality (Ashton et al., 2014). "High scorers on anxiety tend to become preoccupied even by relatively minor problems" (Ashton et al., 2014, p. 142).

The relation between consumer regret and impulsivity is not sufficiently tested so we will examine this relationship in this study. It is reasonable to assume that impulsivity and some other personality traits such as emotionality influence on regret considering that these traits, as well as regret, include emotional reactivity and anxiety.

The goal of the present study and hypotheses

The main goal of the present study was examining the role of impulsivity in post-purchase consumer regret. Moreover, we investigated associations between consumer regret and emotionality.

Based on the above discussion and earlier studies, following hypotheses were postulated:

- H1** Attentional impulsivity would be positively related to both, outcome regret and process regret.
- H2** Motor impulsivity will be positively related to outcome regret.
- H3** Non-planning impulsivity would be positively related to outcome regret.
- H4** Emotionality would be positively associated with process regret.

Methodology

Sample

Sample consisted of 211 Croatian college students (96 men). The age of the participants ranged from 19 to 35 years ($M = 23.30$, $SD = 5.98$). The research was anonymous and voluntary and participants were informed that they can withdraw from the research at any time.

Measures

Consumer regret

Consumer regret was measured by Post Purchase Regret Scale (PPCR; Lee et al., 2009). This scale consists of 16 items (8 items measured Outcome regret and 8 item measured Process regret). The items are answered using a 7-point Likert scale.

Impulsivity

Impulsivity was measured by Barratt Impulsiveness Scale-11 (BIS-11; Patton et al., 1995). This BIS-11 is a 30-item self-report measurement of impulsiveness, which consists of three second-order factors: attention impulsiveness (e.g., I don't „pay attention“), motor impulsiveness (e.g., I do things without thinking), and non-planning impulsiveness (e.g., I am more interested in the present than the future). A total score is obtained by summing the second-order factors. The items are answered using a 5-point Likert scale.

Emotionality

Emotionality was measured by the 10-item Emotionality scale from the 60-item Croatian version of HEXACO-60 (Ashton et al., 2009, for Croatia version see Babarović et al., 2013). Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Results

The results of descriptive statistic, scale reliabilities and correlations among measured variables are shown in Table 1. All scales demonstrated adequate reliabilities (all Cronbach's α values were more than .70).

The results of correlations analysis partially supported our hypotheses; according to Hypothesis 1, attentional impulsivity showed positive relationships with outcome regret and process regret. Also, motor impulsivity and non-planning impulsivity demonstrated positive relationships with outcome regret, thus supporting Hypothesis 2 and Hypothesis 3. However, Hypothesis 4 has not been confirmed because it has been shown that emotionality is not related to process regret.

Table 1

Descriptive Statistics, Scale Reliabilities and the Zero Order Correlations Among Measured Variables

	<i>M</i>	<i>SD</i>	α	1.	2.	3.	4.	5.	6.
1. Outcome regret	25.17	10.11	.93	-	.71**	.32**	.24**	.20*	.13
2. Process regret	27.62	9.88	.87		-	.22**	.06	.12	.13
3. Attentional impulsivity	16.88	3.31	.73			-	.48**	.27**	-.11
4. Motor impulsivity	21.29	3.73	.71				-	.34**	-.05
5. Non-planning impulsivity	22.50	4.10	.72					-	.07
6. Emotionality	28.11	5.55	.81						-

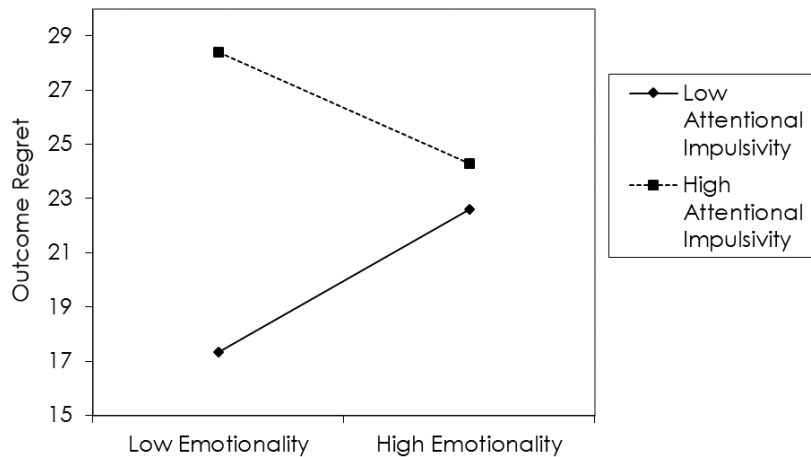
Note: α = Cronbach's α .

* $p < .05$, ** $p < .01$.

Source: Authors' work

Results showed (Figure 1.) that attentional impulsivity moderated the relation between emotionality and outcome regret ($\beta=-.25, p<.01; \Delta R^2=.06$). On the high level of attentional impulsivity, emotionality showed a negative effect on outcome regret, while low-level attentional impulsivity showed a positive effect on the relationship between emotionality and outcome regret.

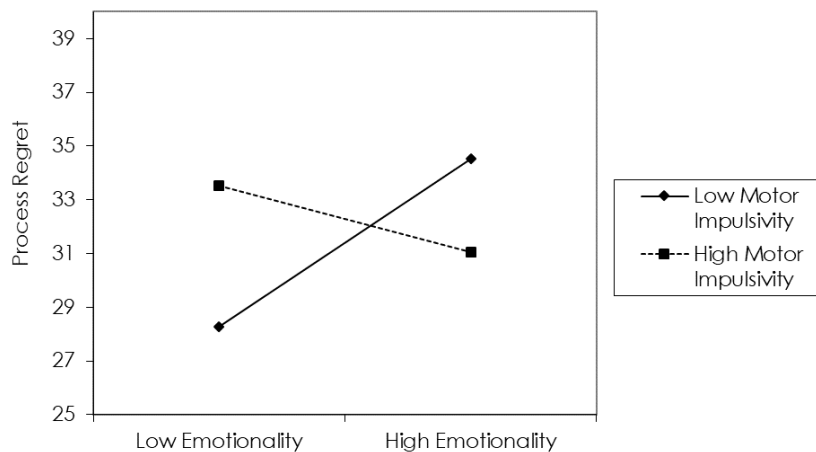
Figure 1
Interaction Between Emotionality and Attentional Impulsivity in the Prediction of Outcome Regret



Source: Authors' work

As shown in Figure 2 motor impulsivity moderated the relationship between emotionality and process regret ($\beta=-.22, p<.05; \Delta R^2=.05$). On the high level of motor impulsivity, the negative relationship between emotionality and process regret was more pronounced, while on the low-level motor impulsivity showed a positive effect on the relationship between emotionality and process regret.

Figure 2
Interaction Between Emotionality and Motor Impulsivity in the Prediction of Process Regret



Source: Authors' work

Discussion and conclusion

In this study, we explored the role of impulsivity as a multidimensional construct and emotionality in post-purchase consumer regret. Results of correlations analyses showed that attentional impulsivity was positively related to outcome regret and process regret. As predicted, motor and non-planning impulsivity showed positive relations to outcome regret. Contrary to our hypothesis, emotionality did not show a positive association with process regret. However, results showed a moderating effect of attentional impulsivity on the relation between emotionality and outcome regret as well as the moderating effect of motor impulsivity on the relation between emotionality and process regret. It has been shown that the relationship between emotionality and outcome regret depends on the level of attentional impulsivity.

Namely, at the low levels of attentional impulsivity, emotionality has shown a positive relationship with the outcome regret. Also, results showed that motor impulsivity has a moderating role in the relation between emotionality and process regret. On the low level of motor impulsivity, emotionality has shown a positive relationship with the process regret.

Results of this study suggested that different dimensions of impulsivity play an important role in understanding consumer behaviour because of the impact on post-purchase consumer regret. The results have shown that all the dimensions of the impulsivity were positively associated with outcome regret, while the attention impulsivity was also positively associated with process regret. Given that regret is a disturbing, unpleasant emotion, these findings provided an additional confirmation with the association of impulsiveness and internalizing symptoms such as anxiety and neuroticism involving negative emotions.

These findings have some limitations. The first limitation of this work is the use of a student sample that may not exhibit the full range of impulsiveness. Therefore, future studies should also use general population samples. Second, the use of self-report measures is also a limitation given the impact of shared method variance. Using behavioural tasks would be an advance over the current design.

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