



Original Article

The Relationship Between Self-Control and Impulsive Buying Tendencies among Cryptocurrency Investors in Bekasi City

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Abstract:

The development of cryptocurrency investment in Indonesia has driven increased impulsive buying behavior due to the highly volatile market characteristics and easy access to digital transactions. One psychological factor suspected to be related to this behavior is self-control. This study aims to determine the relationship between self-control and impulsive buying tendencies among cryptocurrency investors in Bekasi City. The study used a quantitative approach with a correlational design. The study sample consisted of 97 cryptocurrency investors aged 18–40 years residing in Bekasi City, selected using incidental sampling techniques. The research instruments consisted of a self-control scale based on the theory of Tangney, Baumeister, and Boone and an impulsive buying tendency scale based on the concept of Verplanken and Herabadi. Reliability test results showed a Cronbach's Alpha value of 0.775 for the self-control scale and 0.755 for the impulsive buying tendency scale. Based on the Shapiro-Wilk normality test, the data were not normally distributed, so the hypothesis analysis used Spearman correlation. The analysis results show a significant relationship between self-control and impulsive buying tendencies among cryptocurrency investors in Bekasi City ($\rho = 0.603$; $p < 0.001$). This finding indicates a strong correlation between self-control and impulsive buying tendencies in the context of cryptocurrency investment. The research findings are expected to serve as a reference for the development of social psychology studies, particularly regarding digital investment behavior and financial decision-making.

Keywords: Self-Control, Impulsive Buying, Cryptocurrency

Introduction

Cryptocurrency is a digital asset that uses cryptography and blockchain technology to secure transactions and prevent the creation of new assets without the assistance of a third party, such as a central bank. Crypto can also be used as a means of

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payment within certain ecosystems, where the system is known for its decentralization. However, crypto is also considered an asset because it is seen as potentially profitable despite its high volatility and inherent risks (Alfariz et al., 2023) . This has led many people to invest in the crypto industry, risking the risks involved.

Recently, the wider public has begun to learn about crypto assets, prompting many to enter the world of digital investment and engage in buying and selling transactions. The Fear of Missing Out (FOMO) phenomenon is a psychological factor that often drives impulsive buying or investing tendencies among cryptocurrency investors. In the highly volatile crypto market, FOMO arises when individuals fear missing out on opportunities for significant profits after witnessing rising digital asset prices or the success of other investors, leading them to impulsively purchase assets without adequate analysis. Research shows that FOMO is more strongly related to ownership and investment intentions in cryptocurrency than in traditional investment instruments like stocks, due to the speculative nature of the crypto market (Gerrans et al., 2023) .

In Indonesia, the number of crypto investors has increased significantly along with the growing evolution of digital technology. According to data from CNBC, the number of crypto investors in Indonesia reached 18.08 million as of August 2025, and has increased to 19.56 million (CNBC, 2025) . The prevalence of crypto investors in Indonesia has indeed experienced a fairly steady increase, with data indicating approximately 20.19 million investors at the end of 2025, a consistent increase from approximately 14 million investors at the beginning of the same year (OJK, 2026) . This indicates that Indonesians have consciously understood and are open to the world entering the era of digitalization and technology.

This surge in growth could mean that many Indonesians, especially those interested in entering the cryptocurrency industry, are taking risks in the hope of reaping significant profits. However, the reality is not so easy; many people end up trapped in risks that can lead to personal and social problems. This occurs because the majority of people are solely focused on profits and not on the actually significant risks. Quoting from Blockchainmedia.id, an online motorcycle taxi (ojol) driver was trapped in online loan debt of up to 40 million rupiah. This began because the ojol driver wanted to change his fate by taking out an online loan. However, instead of profit, he suffered losses, ultimately leaving him with a large debt (Blockchainmedia.id, 2026) .

Another piece of news rocked the crypto world, citing a news site (Investortrust, 2025) , a well-known man in the crypto industry named Kostya Kudo from Ukraine was found dead, allegedly by suicide, in his Lamborghini after a major drop in the crypto market capitalization of nearly 10%. This suicide incident is said to be because most people are unprepared for the shock and turmoil that occurs because they are focused on buying and making profits. The probability of profit and loss must also be measured, considering that most crypto players tend to ignore this (Investortrust, 2025) .

In this rapidly evolving digital era, particularly in the context of digital asset investment, impulsive buying, particularly in the crypto market, is a common occurrence in the crypto industry. Investors tend to make purchases based on emotional decisions rather than rational analysis. A study shows that crypto investors tend to engage in irrational and impulsive behavior, particularly when influenced by social pressures and specific financial circumstances (Tjondro et al., 2023) . Furthermore, experts note that crypto investors often make decisions based on trend sentiment and herding behavior, where purchasing decisions are often based on public opinion and trend sentiment

rather than fundamental analysis (Almeida & Gonçalves, 2023) . This is further exacerbated by the 24-hour availability of the crypto market, making transactions accessible at any time.

From a social psychology perspective, self-control, which relates to an individual's ability to control internal impulses, is inseparable from the influence of social factors. Therefore, self-control is seen as a psychological factor related to impulsive buying tendencies. In this context, someone with a low level of self-control tends to be easily influenced by social pressure, group norms, and environmental stimuli, thus enabling that person to engage in impulsive buying behavior (Morits et al., 2025) . Within the framework of social psychology, self-control is seen as a psychological factor related to how individuals respond to various external influences, such as social media, parasocial relationships, and marketing stimuli that can encourage impulsive buying tendencies (Sheruly et al., 2023) . This can be interpreted as an individual with a high level of self-control tends to be less impulsive in purchasing and tends to be rational.

Method

This study employed a quantitative approach, aiming to objectively measure the relationship between independent and dependent variables through numerical data. The research method used was a correlational study, as it aimed to explore the extent to which self-control is related to impulsive buying tendencies. The sample consisted of 97 cryptocurrency investors aged 18–40 years residing in Bekasi City, selected using incidental sampling.

To measure impulsive buying tendencies, the researcher will develop a scale for impulsive buying tendencies in cryptocurrency investors based on the impulsive buying aspects of the theory proposed by Verplanken and Herabadi (Jyoti et al., 2016) . And to measure self-control, this study will use a measuring instrument developed by referring to the theory of Tangney, Baumeister, & Boone (Unger et al., 2016) .

Both measuring instruments will be tested for validity and reliability before being measured in the main study. Validity and reliability tests will be conducted on 30 individuals, using the 8-item impulse buying tendency measure and the 10-item self-control measure. Testing will be conducted on a minimum of 30 respondents, as this number is considered sufficient for initial testing. Therefore, 30 respondents is the recommended minimum number for a pilot questionnaire study. (Al-hadi et al., 2026) . The validity of both measuring instruments will be tested in this study using the *Pearson Product Moment correlation technique*, and to measure reliability, *Cronbach's Alpha* will be used. Data analysis in this study was carried out using *JASP* software version 0.19.2.0.

Before conducting the hypothesis test, the researcher first conducted a normality test using *Shapiro-Wilk* to determine the appropriate type of correlation analysis to use. If the data is normally distributed, then the analysis is carried out using *the Pearson Product Moment correlation test* because it is able to measure the linear relationship between variables with parametric data, however, if the data is not normally distributed, then the analysis is carried out using *the Spearman Rank* correlation test as a nonparametric alternative used to measure the relationship between variables based on data ranking (Nuryadi, 2017) .

Research result

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Validity testing is carried out by comparing the score of each item with the total score, where an item is declared valid if it has a positive correlation value and significance of less than 0.05 ($p < 0.05$) or the calculated r value is greater than the r table (Puspasari & Puspita, 2022). Below is a table of validity tests for measuring instruments.

Table 1. Item Validity Results for the Self-Control Construct by Aspect and Indicator

Aspect	Indicator	Favorite Items	Information
Self-Discipline	Focus on investment goals and be able to resist momentary temptations	1	0.02
		4	<0.01
Non-Impulsive Actions	Think before you act and consider the risks	2	<0.01
		3	<0.01
Healthy Habits	Consistency in managing daily behavior and self-management	6	0.032
		5	0.126
Work Ethics	Responsibility and sincerity in academic/professional activities	8	<0.001
		9	<0.001
Self-Reliability	Consistency, trustworthiness, and no harm to oneself	10	<0.001
		7	0.031

Based on the table above, after the validity test, one item was dropped. This item had a p -value greater than 0.05. Therefore, item 5 was dropped and not included in the main scale for this study. Reliability testing was also conducted on the self-control measurement instrument. The following table shows the reliability test.

Table 2. Reliability Analysis of the Self-Control Scale

	Reliability Value	Information
Self-Control Scale	0.775	Realizable

Reliability was measured using Cronbach's Alpha coefficient. To assess the internal consistency of the item, the reliability criterion is defined as an alpha value ≥ 0.70 , although in exploratory research, a value ≥ 0.60 is still acceptable (Mulyani et al., 2025).

Then the validity test was also carried out on the measuring tool for impulsive buying tendencies, the following is the validity test table.

Table 3. Item Information Values for the Cognitive and Affective Dimensions of Cryptocurrency Buying Behavior

Aspect	Indicator	Favorite Items	Information
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Cognitive	Lack of planning before buying crypto	8	0.376
		2	<0.001
	Lack of rational consideration	7	0.001
Affective		5	0.432
	Strong emotional drive when buying	3	<0.001
		6	0.004
	Feelings of urgency and instant gratification	4	<0.001
		1	0.178

In the table above, the validity test results for the impulse buying tendency measurement tool revealed three items that were dropped: items 1, 5, and 8. This means they were not included in the main research scale. After the validity test was conducted, the researchers conducted a reliability test. The table below shows the results.

Table 4. Reliability Analysis of the Impulse Buying Tendency Scale

	Reliability Value	Information
Impulse Buying Tendency Scale	0.755	Realizable

Based on the late test conducted, the measuring instrument for the impulsive buying tendency scale has a Cronbach's Alpha value of 0.755 and the measuring instrument for impulsive buying tendency is said to be reliable.

After that, an assumption test was conducted to determine whether the data was normally distributed. The assumption test used *the Shapiro-Wilk test*. The following table shows the assumption test for the two variables studied.

Table 5. Normality Test Results for Self-Control and Impulse Buying Tendency Variables

	Shapiro-Wilk Normality Test	Information
Self Control	0.023	Abnormal
Impulsive Buying Tendencies	0.003	Abnormal

Based on the Shapiro–Wilk normality test, a significance value of 0.023 was obtained for the self-control variable and 0.003 for the impulsive buying tendency

variable. Because both significance values were less than 0.05, it can be concluded that the data for both variables were not normally distributed.

the *Spearman Rank* test was used to test the hypothesis . The following are the results of the hypothesis test in this study.

Table 6. Spearman's Rank Correlation Analysis Between Self-Control and Impulse Buying Tendency

Variables		Self Control	Impulsive Buying Tendency
Self Control	Spearman's rho		
	p-value		
Impulse Buying Tendency	Spearman's rho	0.603	
	p-value	<001	

Based on the Spearman correlation test, the correlation coefficient was $\rho = 0.603$ with a significance value of $p < 0.001$. These results indicate a significant relationship between self-control and impulsive buying tendencies among cryptocurrency investors in Bekasi. The correlation coefficient of 0.603 indicates a strong relationship between the two variables.

Discussion

Sub 1 The Relationship Between Self-Control and Impulsive Buying Tendency

The study results indicate a significant relationship between self-control and the tendency to make impulsive purchases among cryptocurrency investors in Bekasi. Analysis using the Spearman correlation test yielded a correlation coefficient of $\rho = 0.603$ with a significance level of $p < 0.001$, confirming the research hypothesis regarding the relationship between self-control and impulsive buying tendencies. This correlation coefficient indicates a strong relationship between the two variables. Interestingly, the relationship was positive.

In theory, self-control is a person's capability to modify internal reactions, regulate desires, restrain unwanted actions, and direct behavior to align with long-term goals. (Unger et al., 2016) . In the realm of consumer behavior, people with good self-control are typically able to delay gratification, consider the consequences before making a decision, and reduce the urge to make impulsive purchases (Liu & Jin, 2025) . Therefore, in theory, self-control is often viewed as a mental process aimed at restraining the onset of hasty actions.

However, the findings of this study indicate a relationship that contradicts existing theory. The observed differences do not automatically imply that the applied theory is irrelevant, but rather suggest that the relationship between self-control and impulse buying may be influenced by the characteristics of the research context. Participants in this study were cryptocurrency investors engaged in a high-risk market, characterized by rapid price fluctuations, and saturated with live information. These characteristics make the investment decision-making process different from decisions to purchase consumer goods in general. In such situations, impulse buying decisions do not

necessarily indicate low self-control but may be an adaptive reaction to rapid market changes. This aligns with a systematic review (Kaur & Sharma, 2024), which revealed that impulsive buying behavior in a digital context is multidimensional, influenced by the interaction of individual traits, the digital environment, and marketing, and therefore cannot be understood by a single psychological variable.

Research (Johnson et al., 2023) suggests that the highly volatile nature of the cryptocurrency market can prompt investors to make sudden transactions in response to price fluctuations and short-term profit opportunities. Furthermore, (Melati et al., 2024) explain that in today's digital age, consumer behavior is increasingly influenced by various external stimuli, including digital technology, rapid information flow, social media, and easy access to transaction platforms. Consequently, purchasing decisions are often not based on a lengthy deliberation process. Therefore, seemingly impulsive purchasing behavior in the cryptocurrency context can be influenced by market dynamics that require a quick response to changing investment conditions.

The findings of this study, in the context of investment, are certainly different from the purchase of consumer products in general. Purchases of cryptocurrency assets are often driven by the expectation of financial gain. (Sharma et al., 2024) explain that psychological factors play a significant role in shaping cryptocurrency investment behavior, including spontaneous investment decision-making. Meanwhile, (Sharma et al., 2024) found that self-control is related to impulsive behavior in financial decision-making. However, impulsivity in the financial context is complex because it is influenced by the interaction between self-control ability, risk perception, market conditions, and emotional factors that arise when individuals face investment opportunities.

Thus, the results of this study indicate that the relationship between self-control and impulsive buying tendencies in cryptocurrency investors cannot be explained solely through self-control, as in conventional consumption behavior. The dynamic nature of cryptocurrency assets allows individuals with high self-control to still make spontaneous purchases in response to perceived profitable market opportunities.

Conclusion

Based on the results of research conducted on the relationship between self-control and impulsive buying tendencies among cryptocurrency investors in Bekasi City, there is a significant relationship between self-control and impulsive buying tendencies among cryptocurrency investors in Bekasi City. Therefore, the research hypothesis stating a relationship between the two variables is declared accepted. The relationship found is positive.

The results of this study indicate that impulsive buying behavior in cryptocurrency investors is not only related to self-control, but is also thought to be influenced by the dynamic characteristics of the cryptocurrency market, high price volatility, and various psychological and digital environmental factors that have not been examined in this study. This study illustrates that the relationship between self-control and impulsive buying tendencies in cryptocurrency investors is a complex phenomenon, so further research is needed that considers other variables to more comprehensively understand the mechanisms that form impulsive buying behavior in cryptocurrency investors.

Suggestion

This study has limitations because it only examines the relationship between self-

control and impulsive buying tendencies in cryptocurrency investors. Therefore, it does not consider other factors that could potentially influence this behavior, such as financial literacy, risk tolerance, overconfidence, investment experience, and the influence of the digital environment. Furthermore, this study used a correlational design, thus unable to explain the causal relationship between variables. Therefore, further research is recommended to examine these variables using a more comprehensive analytical model, such as regression, to further elucidate the mechanisms underlying impulsive buying tendencies in cryptocurrency investors.

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