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The Relationship Between Fear of Missing Out, Impulsivity Toward Stress, Anxiety, and Depression Among Crypto Asset Traders in Indonesia

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Abstract---*The COVID-19 pandemic has had a significant impact on every aspect of human life, from health issues to economic problems, where high unemployment rates and many businesses experience stagnation. When someone experiences financial anxiety, it will certainly affect their financial behavior. In this case, trading crypto assets is very attractive to investors because asset value increases can be achieved quickly, but asset value decreases can also occur just as quickly. The mental impact that occurs from this phenomenon needs to be known. Analytical observational research with a cross-sectional study design on 207 subjects who have crypto accounts and are trading crypto assets. The sample was obtained through voluntary sampling via social media and crypto communities throughout Indonesia. Out of 207 research subjects, there were 88.4% of crypto asset traders experienced FoMO, 90.33% experienced impulsivity, and there was a relationship between FoMO and impulsivity ($p=0.001$, $cc=0.228$), FoMO and stress ($p=0.000$, $cc=0.289$), FoMO and anxiety ($p=0.040$, $cc=0.143$), FoMO and depression ($p=0.000$, $cc=0.218$), impulsivity and stress ($p=0.000$, $cc=0.303$), impulsivity and anxiety ($p=0.000$, $cc=0.352$), and impulsivity and depression ($p=0.000$, $cc=0.360$). The reliability test of the FoMO questionnaire was*

(α cronbach=0.504), validity test (KMO=0.599, commonalities of each question item >0.50). There is a relationship between FoMO, impulsivity, stress, anxiety, and depression among crypto asset traders.

Keywords---anxiety, crypto assets, depression, fear of missing out, FoMO, impulsivity.

Introduction

The COVID-19 pandemic has had a huge impact on every aspect of human life, and no one can escape its direct or indirect effects. The huge domino effect started from health problems, government regulations that keep changing, restrictions on people's movement, a stagnant economy, and uncertainty about when the pandemic will end, causing negative impacts on people's quality of life, and leading to psychological problems. Psychological problems that arise include loneliness due to social restrictions, anxiety about getting infected with COVID-19 and health, the depression worsened by the surrounding conditions, and financial anxiety (Ahmad et al., 2020; Maital & Barzani, 2020). In times of financial anxiety caused by COVID-19, financial behavior also changes. Some people choose to save as much money as possible and try to find additional jobs, while others become irrational in using their money, such as buying many insurance products, gambling, taking online loans, and not a few people choose to make short-term investments in high-risk markets where trading assets or foreign currencies is very easy to access. Nowadays, asset trading activities are easily accessible, especially through mobile phones. Various applications for conducting asset trading activities continue to emerge, making someone who experiences financial anxiety tempted to get additional income, but the futures market doesn't always bring profits to its players. There are so many ads promising quick profits and can influence people in the virtual world (Delfabbro et al., 2021). The pandemic situation that is already filled with anxiety, combined with buying and selling actions in an unstable market, will certainly increase the risk of someone experiencing anxiety disorders, depression, and even impulsive behavior disorders (Mills & Nower, 2019).

Methods

Research design

This is an analytical observational study. Using a cross-sectional design, the study begins by assessing the extent of stress, anxiety, and depression among cryptocurrency traders (McKay et al., 2006). At the same time, FoMO and impulsive behavior are also assessed, along with the relationship between these variables and stress, anxiety, and depression in the population (Buglass et al., 2017).

Data source determination

This study was conducted through an online questionnaire via Google form and distributed through social media and online crypto groups, with the consent of the participants, for a period of 9 months, from April 2022 to January 2023

Population

The target population of the study is people who engage in cryptocurrency trading. The accessible population includes all individuals who have cryptocurrency assets.

Research Instrument

1. FoMO Crypto scale with 7 items of questions, Alpha Cronbach 0.504, Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0,599*, Bartlett's Test of Sphericity 0.000*, each question communalities >0.5
2. Barrat Impulsivity Scale – 11
3. DASS-21 (*Depression Anxiety and Stress Scale*) 21

Results

Basic characteristics of research subjects

Out of 207 study subjects, 72.9% were male, with a mean age of 30 years, ranging from 18 to 57 years old. Most of the study subjects worked as private corporate employees, 86 people (40.4%), while 51 people (23.9%) were self-

employed. The majority of the subjects graduated as bachelors, 103 people (49.8%), while 69 people (33.3%) were still in high school.

Table 1
Basic characteristics of research subjects

Variable	N (%)
Age (year), median (IQR)	30 (29)
<i>Education</i>	
High School	69 (33,3)
Diploma	17 (8,2)
Bachelor	103 (49,8)
Master	18 (8,7)
<i>Occupation</i>	
College Student	44 (21,3)
Private Corporate Employees	85 (41,1)
Self Employed	50 (24,2)
Civil Servant	16 (7,7)
Others	12 (5,7)
<i>Sex</i>	
Male	151 (72,8)
Female	56 (27,1)
<i>Follow Social Media/Online Groups About crypto news</i>	
Yes	198 (95,7)
No	9 (4,3)

Table 2
Distribution of crypto FoMO

Variable	N = 207	
FoMO (<i>Fear Of Missing Out</i>)	Mean Score \pm SD	28,0 \pm 6,0
	Min - Max	7 - 35
	Yes	186 (88.4%)
	No	24 (11,6)

Table 3
Distribution of impulsivity

Variable	N = 207	
<i>Barrat impulsivity scale-11</i>	Mean Score \pm SD	41,0 \pm 5,3
	Min - Maks	21 - 51
	Yes	187 (90.3%)
	No	20 (9,6)

Table 4
The relationship between FoMO and impulsivity among cryptocurrency traders

Variable	Crypto FoMO	
	r	p
<i>Barrat Impulsivity Scale-11</i>	28	0,001

Table 5
The relationship between FoMO and stress, anxiety, and depression among cryptocurrency traders

Variable	Crypto FoMO	
	r	p
Stress	89	0,000
Anxiety	43	0,040
Depression	18	0,002

Table 6
The relationship between impulsivity and stress, anxiety, and depression among cryptocurrency traders

Variable	Barrat Impulsivity Scale	
	r	p
Stress	03	0,000
Anxiety	52	0,000
Depression	60	0,000

Table 7
The linear regression analysis on the relationship between the level of FoMO, impulsivity, and the levels of stress, anxiety, and depression

Dependent Variable	Independent Variable	Coefficient b	95% CI	p
Stress	Crypto FoMO	0,155	0,075 - 0,235	0,000*
	Impulsivity	0,250	0,147 - 0,354	0,000*
	Age	0,021	-0,037 – 0,079	0,476
	Sex	1,038	-0,056 – 2,132	0,063
	Education	-,090	-0,564 – 0,384	0,709
Anxiety	Crypto FoMO	0,116	0,036 - 0,196	0,005*
	Impulsivity	0,246	0,142 - 0,349	0,000*
	Age	0,085	0,026 – 0,143	0,005*
	Sex	0,266	-0,829 – 1,362	0,632
	Education	-0,119	-0,594 – 0,356	0,622
Depression	Crypto FoMO	0,246	0,140 - 0,352	0,000*
	Impulsivity	0,235	0,099 - 0,372	0,001*
	Age	0,148	0,071 – 0,225	0,000*
	Sex	1,583	-0,137 – 3,030	0,032*
	Education	-0,313	-0,940 – 0,315	0,327

Discussion

There is a significant relationship between FoMO and stress, anxiety, and depression (Przybylski et al., 2013). FoMO can cause stress, anxiety, and depression because someone who experiences it will feel pressured to constantly obtain experiences that are deemed important and relevant to others (Lee et al., 2020; Kumar & Somani, 2020). People who experience FoMO tend to feel dissatisfied with their lives and feel that their happiness depends on the success and experiences of others (Fioravanti et al., 2021). This condition can lead to feelings of sadness, despair, and

helplessness (Gupta & Sharma, 2021). Uncontrolled impulsivity can even lead to higher losses for cryptocurrency traders, causing emotional pressure on inexperienced investors, and resulting in stress, depression, mood swings, sleep disturbances, and poor mental health (Jalan et al., 2021; Fareed et al., 2022). Even experienced traders can experience these symptoms due to the heavy stress of cryptocurrency trading (Senarathne & Perera, 2021). The majority of cryptocurrency traders in this study experience stress, anxiety, and depression with varying degrees of severity. This became the basis for the researchers to search for the causes. The levels of stress, anxiety, and depression among cryptocurrency traders in this study were found to be quite significant, this is due to the volatility of cryptocurrency assets and the 24-hour market activity that can cause sleep disturbance, fatigue, and increased anxiety (Johnson et al., 2022).

Conclusion

Based on the results of this study, the majority of the population of crypto asset traders are young men with an average age of 30 years old. As many as 88.4% experience FoMO, 90.33% have impulsivity, and 78% experience stress, anxiety, and depression. There is a relationship between FoMO and impulsivity in crypto asset traders, a relationship between FoMO and stress, anxiety, and depression in crypto asset traders, and a relationship between the level of impulsivity and stress, anxiety, and depression in crypto asset traders.

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