

The Effect of FoMO as a Mediator of Big-Five Personality Relationship with Problematic Internet Use Among Emerging Adulthood

Ruyandy Ruyandy¹ Sandi Kartasasmita^{1*}

¹Faculty of Psychology, Universitas Tarumanagara, West, Jakarta, DKI Jakarta 11440, Indonesia

* Corresponding author. Email: Sandik@fpsi.untar.ac.id

ABSTRACT

Internet use in Indonesia continues to increase every year. The terminology that is often heard from the negative impact of internet use is problematic internet use (PIU), The phenomenon of fear of missing out (FoMO) is thought to be a mediator between problematic internet use and big-five personality traits. The objective of this study is to determine the effect of FoMO as a mediator of the relationship between big-five personality traits and problematic internet use (PIU) on emerging adulthood. The method used in this research is descriptive quantitative method. Participants in this study were men (N = 200) and women (N = 200 people), aged 18-25 years, namely emerging adulthood with a total number of 200 participants, and active in using the internet every day. The measuring instruments used in this study were the problematic internet use (PIU) scale, the personality scale and the fear of missing out (FoMO). The results obtained by the researchers were that extraversion personality traits did not affect FoMO ($a = -0.318, p < 0.000$), and FoMO significantly affected PIU ($b = 10.638, p < 0.000$). Trait extraversion affects PIU via FoMO ($c = -5.809, p < 0.000$). Then agreeableness affected FoMO significantly negatively ($a = -2.127, p < 0.000$), and FoMO affected PIU significantly ($b = 10.045$). The agreeableness trait affected PIU via FoMO was significantly negative ($c = -5.623$). Trait conscientiousness affected FoMO significantly negatively ($a = -2.026, p < 0.000$), and FoMO affected PIU significantly ($b = 10.059, p < 0.000$). Trait conscientiousness affected PIU via FoMO ($c = -5.001, p < 0.000$). Neuroticism traits affected FoMO significantly ($a = 5.690, p < 0.000$), and FoMO affected PIU significantly ($b = 8.782$). Neuroticism traits affected PIU via FoMO significantly ($c = -5,392$). Meanwhile, trait openness has no effect on PIU through FoMO.

Keywords: *Fear of Missing Out (FoMO), Big-five, Problematic Internet Use (PIU), Emerging Adulthood*

1. INTRODUCTION

As claimed by the data obtained from the Indonesian Internet Service Providers Association (APJII) [1]; [2] in collaboration with the Indonesian Polling Institute (LPI) it was reported that in 2017, of the 262 million people who used the internet, 143.26 million people or around 54.68% of the population in Indonesia, in 2018, the survey showed Internet users have increased, namely from the 264.16 million people who use the internet to 171.17 million or 64,8% of the total population of Indonesia, which means that there has been a quite large increase of 10,12% of the population. The survey continues to be conducted by APJII in collaboration with the Indonesia Survey Center (ISC) until the second quarter of 2019 to 2020, the results obtained are from 266,9 million people, who use the internet reaching 196.7 million people, or around 73,7% of Indonesia's population, which means an increase of 8,9% or 25,5 million [3].

The survey that has been conducted found that the age range with the highest use of the internet is 15-24 years [2]. At the age of 15-19 years internet users are 91% of 100% and at the age of 20-24 internet users are 88.5% of 100% [2]. The increasing use of the internet occurs because the internet has become one of the means that provide various facilities with fast access, an example of the convenience provided by the internet, namely, the means to communicate, with the internet one can communicate remotely, and provide direct and real information [4]. The rapid development of the internet provides various kinds of positive sides that can be enjoyed by various groups, but on the other hand, the internet also has various negative impacts, and there is a growing literature that shows a negative impact on user behavior [5].

Problematic internet use (PIU) can be characterized by an inability to control oneself in using the internet and an impulsive urge to use internet, that can result in distress and functional disorders in carrying out daily activities [6]. Caplan [7] identify the constructs of problematic internet

use (PIU) in terms of intellectual and behavior of individuals experiencing problematic internet use (PIU), namely: (a) preference for Online Social Interaction (POSI); (b) Mood Regulation; (c) deficient self-regulation (consisting of cognitive preoccupation, and compulsive internet use and (d) negative outcomes. There are harmful psychological effects of problematic internet use (PIU) such as pathologic gambling, paraphilias, compulsive buying, mood disorders, low self-esteem anxiety disorder, low life satisfaction, more depression and experiencing fear of missing out (FoMO) [8]; [6]; [5]; [9].

Furthermore, according to Stead and Bibby [5] Problematic Internet Use (PIU) can also be affected by the characteristics of the personality. Researcher on personality with problematic internet use (PIU) have been found, and personality can be used as a predictor for problematic internet use (PIU) [10]. The researchers found that there are basically five broad personality dimensions that are represented in natural language, and used to describe traits, called big-five personality [11]; [12]. There are five traits from the big-five factors of personality, namely, extraversion, openness, agreeableness, conscientiousness and neuroticism. which is commonly called OCEAN [13].

There are several studies which reveal that extraversion and conscientiousness traits have a negative correlation with problematic internet use (PIU) [14]; [15]; [5]. However, in research conducted by Jackson and colleagues as well as research conducted by Thorsteinsson & Davey, found that trait extraversion has a positive correlation with problematic internet use (PIU) [16]; [17]. In neuroticism traits there is a positive correlation with problematic internet use (PIU) [5]; [15]; [16]; [17]; [14]. This is in line with the research obtained from Angesti and Oriza [10] that neuroticism trait and conscientiousness correlate with problematic internet use (PIU). Whereas the agreeableness trait shows a negative correlation with problematic internet use (PIU) [14]; [5]. However, according to Angesti and Oriza [10] The correlation between the two is still not strong, because the research found is still small.

According to Stead and Bibby [5] Problematic Internet Use (PIU) can also be affected by the phenomenon of Fear of Missing Out (FoMO). This is also in line with research by Alt. Alt found that the term Problematic Internet Use (PIU) is closely related and is associated with the phenomenon of Fear of Missing Out (FoMO) [18]. Survey conducted by JWT Intelligence [19] reported that in the United States and England, young adults aged 18-34 years still rank the highest affected by Fear of Missing Out (FoMO), namely 70%, and the majority of adolescents aged 13-17 years who are affected by FoMO have increased to 65 %.

Furthermore, research conducted by the Australian Psychological Society [20], reported that individuals aged 18-35 years experienced the highest FoMO phenomenon. Then research in Indonesia conducted by Christina, Yuniardi and Prabowo, found that the FoMO rate that occurs in adolescents aged 13-18 years, tends to be high, namely 36%, this shows that 40 out of 110 adolescents feel worried that they cannot get the opportunity to experience as much fun as everyone else [21]. According to Arnett, at the age of 18-25 years, adolescents enter a transition period

from adolescence to adulthood, known as emerging adulthood [22]; [23]; [24]; [20]. One of the characteristics of the emerging adulthood phase is instability in various aspects of life such as instability in love, work, and education [23].

Fear of Missing Out (FoMO) itself can be interpreted as a feeling of worry when individuals miss an important opportunity or moment that is valuable and involves a group of friends when the individual is not present in their interactions, thus making individuals fearful and anxious being ignored because they are not involved with the experience [9]. Fear of Missing Out (FoMO) can be characterized by impulsive urge to hang around and connect with others and what other people are doing [9]. Macro theory of human motivation which is useful for understanding and empirically based to explain Fear of Missing Out (FoMO), namely the theory of self-determination (SDT) [25]. Based on self-determination theory, psychological health is based on three basic psychological needs, namely competence, namely the capacity to behave effectively in daily life, autonomy, namely self-initiative and relatedness, namely closeness and connectivity with others, with the low three basic psychological needs, can be linked to the Fear of Missing Out (FoMO), FoMO is also explained as an individual's crisis in regulating himself as a result of not fulfilling these three basic needs [9].

1.1. Formulation of the problem

The formulation of the problem of this study is to determine the effect of FoMO as a mediator of the relationship between big-five personality and problematic internet use (PIU) on emerging adulthood?

2. RESEARCH METHOD

2.1. Research Participants

2.1.1. Characteristics of Study Participants

In this study, the participant criteria used were emerging adulthood or the transition period from adolescence to adulthood who was male or female, who had an age range of 18-25 years. [22]; [23]; [24]; [26]. The selected criteria are aged 18-25, and use the internet more than two hours per day [27]. Users who spend < 2 hours for internet are considered low users, users who spend 3 hours until 5 hours for internet are considered moderate users, and users who spend more than 6 hours for internet are considered high users [28].

2.1.2. Description of Research Subjects Based on Age

Based on age, the results of data showed that the data used a descriptive statistical analysis of the frequencies obtained with the minimum number of 25 years, totalling 15 people

(3.8%) and the highest number being 21 years, totalling 113 people (28.2%). The results can be seen more clearly in Table no 1.

Table 1 *Description of Research Subjects by Age*

Age	Frequency	Percentage
18	10	2.5
19	43	10.8
20	86	21.5
21	113	28.2
22	69	17.3
23	42	10.5
24	22	5.5
25	15	3.8
Total	400	100.0

2.1.3. Description of Research Subjects Based on Gender

Based on gender, the results of data processing using a descriptive statistical frequency analysis showed that the male participants in this study amounted to 200 people (50%) and 200 female participants (50%). The results can be seen more clearly in Table 2.

Table 2 *Description of Research Subjects Based on Gender*

Gender	Frequency	Percentage
Male	200	50.0
Women	200	50.0
Total	400	100.0

2.1.4. The Description of Research Subjects Based on the Duration of Using the Internet Every Day

Based on the duration of using the internet in one day, the results of data processing show that the data using descriptive statistical frequencies obtained by the least amount is the length of time using the internet in one day, namely 30 minutes - 1 hour in one day with a total of 7 people (1.8%), and the highest number was at > 7 hours in one day with 217 people (54.3%). The results can be seen more clearly in Table 3.

Table 3 *Description of Research Subjects Based on the Duration of Using the Internet Every Day*

Long time using the internet in one day	Frequency	Percentage
> 7 hours in one day	217	54.3
1 hour - 2 hours in one day	15	3.8
3 hours - 4 hours in one day	46	11.5
30 minutes - 1 hour in one day	7	1.8
4 hours - 5 hours in one day	44	11.0
5 hours - 6 hours in one day	71	17.8
Total	400	100.0

2.1.5. Sampling Technique

This study uses a sampling technique with a non-probability sampling method because the selection of participants is not random but according to the accessibility or availability of participants [29]. Non-probability sampling technique used in this research is purposive sampling technique, namely the random selection of the sampling unit in a population segment with the most information about the characteristics of interest [30]. This sampling technique was chosen in order to support the success of the research, and to avoid mistakes in determining the research sample that would affect the results of the analysis.

Study participants were selected using a table created by Krejcie & Morgan [31] which is used to determine the sample by taking into account the number of population, with an estimated population of 1,000,000 people, then to determine the population sample is 384 people [31].

2.2. Types of Research

This research is descriptive (descriptive research) It is a research method that aims to describe existing phenomena occurring at this time or in the past. According to Furchan, descriptive research has the following characteristics: (a) descriptive research tends to describe a phenomenon because it is checked regularly, prioritizing objectivity and proceeding cautiously; (b) Lack of given or controlled treatment, and lack of testing h [32]. With a quantitative approach, quantitative research is a method of testing certain theories by examining the relationship between variables and measuring these variables so that data made up of numbers can be analyzed based on statistical procedures. [33]. This study has independent variables, namely Big-five Personality Trait, Dependent Variable, namely Problematic Internet Use (PIU) and Mediator Variable Fear of Missing Out (FoMO).

2.3. Research Measurement Tools

In the Problematic Internet Use (PIU) items, participants were asked to assess their level of agreement with each of the 15 items in GIPUS 2, ranging from 1 (strongly disagree) to 8 (strongly agree) Cronbach's alpha coefficient = 0.930, the measurement tool achieves internal consistency. In the Fear of Missing Out (FoMO) variable, participants were asked to assess their level of agreement with each of the 10 FoMOS items by responding to the Likert scale. The Likert scale consists of response options, namely STS (strongly disagree), TS (disagree), RR (doubt), S (agree), SS (completely agree), this measurement tool achieves internal consistency, cronbach's alpha coefficient = 0.844. In the BFI questionnaire, participants were asked to assess their level of agreement with each of the 46 statement items, which on the Likert scale composed of response options best reflected their personality, namely STS (strongly disagree), TS (disagree), RR (doubt), S (agree), SS (totally agree). The stimulus used to generate the response to the scale is ordered in the form of question items according to

the dimensions of the Big-five Inventory (BFI). These items are divided into favorable and unfavorable items. This measurement tool achieves internal consistency for extroversion cronbach alpha coefficient = 0.703, for agreeableness with cronbach alpha coefficient = 0.660, for neuroticism with cronbach alpha coefficient = 0.786, for conscientiousness with a Cronbach alpha coefficient = 0.712, and for openness with a Cronbach alpha coefficient = 0.812. Research data processing was carried out entirely using the assistance of the Statistical Product and Service Solution (SPSS) version 25.00 program.

3. RESEARCH FINDINGS AND DATA ANALYSIS

3.1. Test of the Effect Big-five (Extraversion) Trait with Fear of Missing Out (FoMO) (Mediator) on Problematic Internet Use (PIU)

The next regression analysis tested whether there was an effect of fear of missing out (FoMO) as a mediator between the big-five personality trait (extraversion) and problematic internet use (PIU) on emerging adulthood. It can be seen by the presence of a mediator variable, namely fear of missing out (FoMO) sig 0.000 (< 0.05) tc= -5.809 and the problematic internet use (PIU) value with the fear of missing out (FoMO) becomes tc 10,634 sig 0.000 (< 0.05), but the personality trait value (extraversion) on the fear of missing out (FoMO) tc = - 0.318 so that the fear of missing out (FoMO) variable has no effect as a mediator variable. It can be concluded that the fear of missing out (FoMO) is not a mediator between the big-five (extraversion) and problematic internet use (PIU). So that the big-five (extraversion) variable with problematic internet use (PIU) has a direct effect.

Table 4 Overview of the Big-five (Extraversion) Trait Regression Test Results on Fear of Missing Out (FoMO) (Mediator) Problematic Internet Use (PIU)

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1.	(Constant)	3.546	0.356	9.947	0.000
	Mean_Total_BFIE	-0.504	0.087	-5.809	0.000
	Mean_Total_FoMO	0.807	0.076	10.634	0.000

3.2. Test of the Effect Big-five Trait (Agreeableness) with Fear of Missing Out (FoMO) (Mediator) on Problematic Internet Use (PIU)

The next regression analysis tested whether there was an effect of fear of missing out (FoMO) as a mediator between the big-five personality traits (agreeableness) and problematic internet use (PIU) on emerging adulthood. It can be seen when tested between iv (independent variable)

big-five trait (agreeableness) and dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc -6.014, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.000 (< 0.05) tc = -5.623 and the value of problematic internet use (PIU) with fear of missing out (FoMO) increases with tc 10.045 sig 0.000 (< 0.05) so that the fear of missing out (FoMO) variable has a significant negative effect as a mediator variable. It can be concluded that the effect of the big-five (agreeableness) with problematic internet use (PIU) is more significant if there is a mediator variable fear of missing out (FoMO). It can be concluded that fear of missing out (FoMO) is a partial mediator, in which without the mediator the fear of missing out (FoMO) big-five (agreeableness) still has a significant effect, but with the presence of fear of missing out (FoMO) as a mediator variable. which is partial can strengthen the effect of the big-five (agreeableness) with problematic internet use (PIU) on emerging adulthood.

Table 5 Overview of the Results of the Big-five (Agreeableness) Trait Regression Test on Fear of Missing Out (FoMO) (Mediator) Problematic Internet Use (PIU)

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1.	(Constant)	4.350	0.487	8.933	0.000
	Mean_Total_BFIA	-0.608	0.108	-5.623	0.000
	Mean_Total_FoMO	0.768	0.076	10.045	0.000

3.3. Test of the Effect Big-five Trait (Conscientiousness) with Fear of Missing Out (FoMO) (Mediator) on Problematic Internet Use (PIU)

The next regression analysis tested whether there was an effect of fear of missing out (FoMO) as a mediator between the big-five personality traits (conscientiousness) and problematic internet use (PIU) on emerging adulthood. It can be seen when tested between iv (independent variable) trait big-five (conscientiousness) with dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc -5.406, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.000 (< 0.05) tc = -5.001 and the problematic internet use (PIU) value with fear of missing out (FoMO) increases with tc 10.059 sig 0.000 (< 0.05) so that the fear of missing out (FoMO) variable has a significant negative effect as a mediator variable. It can be concluded that the effect of the big-five (conscientiousness) with problematic internet use (PIU) is more significant if there is a mediator variable fear of missing out (FoMO). It can be concluded that the fear of missing out (FoMO) is a partial mediator, where without the fear of missing out (FoMO) the big-five

(conscientiousness) mediator still has a significant effect, but with the fear of missing out (FoMO) as a mediator variable, which is partial in nature can strengthen the effect of the big-five (conscientiousness) with problematic internet use (PIU) on emerging adulthood.

Table 6 Overview of the Results of the Big-five (Conscientiousness) Trait Regression Test on Fear of Missing Out (FoMO) (Mediator) Problematic Internet Use (PIU) (Appendix 43).

Model	1	Unstandardized Coefficients			
		B	Std. Error	t	Sig.
1.	(Constant)	3.918	0.459	8.531	0.000
	Mean_Total_BFIC	-0.558	0.112	-5.001	0.000
	Mean_Total_FoMO	0.775	0.077	10.059	0.000

3.4. Test of the Effect Big-Five Trait (Neuroticism) with Fear of Missing Out (FoMO) (Mediator) on Problematic Internet Use (PIU)

The next regression analysis tested whether there was an effect of fear of missing out (FoMO) as a mediator between the big-five personality traits (neuroticism) and problematic internet use (PIU) on emerging adulthood. It can be seen when tested between iv (independent variable) big-five trait (neuroticism) and dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc 7,432, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0,000 (< 0.05) tc = 5,392 and the value of problematic internet use (PIU) with fear of missing out (FoMO) increases with tc 8,782 sig 0,000 (< 0.05) so that the variable fear of missing out (FoMO) has a significant effect as a mediator variable. It can be concluded that the effect of the big-five (neuroticism) with problematic internet use (PIU) is more significant if there is a variable fear of missing out (FoMO) as the mediator. It can be concluded that the fear of missing out (FoMO) is a partial mediator, where without the fear of missing out (FoMO) the big-five (neuroticism) mediator still has a significant effect, but with the presence of fear of missing out (FoMO) as a mediator variable, which are partial in nature can strengthen the effect of the big-five (neuroticism) with problematic internet use (PIU) on emerging adulthood.

Table 7 Overview of the Results of the Big-Five (Neuroticism) Trait Regression Test on Fear of Missing Out (FoMO) (Mediator) Problematic Internet Use (PIU)

Model	1	Unstandardized Coefficients			
		B	Std. Error	t	Sig.
	(Constant)	0.735	0.305	2.409	0.016
	Mean_Total_I_BFIN	0.463	0.086	5.392	0.000
	Mean_Total_I_FoMO	0.697	0.079	8.782	0.000

3.5. Test of the Effect Big-Five Trait (Neuroticism) with Fear of Missing Out (FoMO) (Mediator) on Problematic Internet Use (PIU)

The next regression analysis tested whether there was an effect of fear of missing out (FoMO) as a mediator between the big-five personality traits (openness) and problematic internet use (PIU) on emerging adulthood. It can be seen when tested between iv (independent variable) trait big-five (openness) and dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.160 (< 0.05), with tc -1.407, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.249 (> 0.05) tc = -1.154 and the problematic internet use (PIU) value with fear of missing out (FoMO) increases with tc 10,260 sig 0.000 (< 0.05).

Table 8 An overview of the results of the Big-Five (Openness) Trait Regression Test on Fear of Missing Out (FoMO) (Mediator) Problematic Internet Use (PIU) (Annex 45)

Model	1	Unstandardized Coefficients			
		B	Std. Error	t	Sig.
1.	(Constant)	2.331	0.439	5.309	0.000
	Mean_Total_BFIO	-0.114	0.099	-1.154	0.249
	Mean_Total_FoMO	0.810	0.079	10.260	0.000

4. CONCLUSION AND DISCUSSION

4.1. Conclusion

Based on the data analysis performed, the test results show that there is an effect on the big-five personality trait on the dimensions of agreeableness, conscientiousness, neuroticism, with problematic internet use (PIU), but it will be more significant if there is a mediator variable, namely fear of missing out (FoMO). The extraversion dimension with problematic internet use (PIU) has a direct effect compared to the fear of missing out (FoMO) variable as a

mediator variable, and the Openness dimension has no effect on problematic internet use (PIU) even with the fear of missing out (FoMO) variable. as a mediator variable. The researcher concludes that the fear of missing out (FoMO) is a partial mediator variable, it can be said that without the mediator variable of fear of missing out (FoMO), the big-five personality trait on the dimensions of agreeableness, conscientiousness, neuroticism, still has an effect significant, but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the big-five personality trait with problematic internet use (PIU) on emerging adulthood.

4.2. Discussion

Researchers tested the independent variable (IV) big-five which has five dimensions, namely extraversion, agreeableness, conscientiousness, neuroticism, and openness with the mediator variable fear of missing out (FoMO) on problematic internet use (PIU). On the extraversion dimension with fear of missing out (FoMO) to the problematic internet use (PIU), the researcher got the test results that the fear of missing out (FoMO) had no effect as a mediator variable between the big-five personality trait in the extraversion dimension with problematic internet use (PIU), with the results obtained in iv (independent variable) trait big-five (extraversion) with dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc -5.281, after the mediator variable, namely fear of missing out (FoMO), becomes sig 0.000 (< 0.05) tc = -5,809 and the value of problematic internet use (PIU) with fear of missing out (FoMO) increases with a tc value of 10.634 sig 0.000 (< 0.05), but the value personality trait (extraversion) to fear of missing out (FoMO) tc = -0.318, which means insignificant.

This shows that the big-five personality trait in the extraversion dimension still has a significant effect on problematic internet use (PIU), without the fear of missing out (FoMO) as the mediator variable. Researchers get results that are not similar to previous studies, the results obtained in previous studies are trait extraversion has an effect on problematic internet use (PIU) mediated by fear of missing out (FoMO) [34]. This can be explained that high extraversion has a tendency to get appreciation rather than low extraversion, so that individuals with high extraversion use social media excessively to get social appreciation from others [34]. Because individuals always want to seek appreciation socially, when individuals don't get what they want, individuals will experience fear of missing out (FoMO).

Furthermore, in the dimensions of agreeableness with the fear of missing out (FoMO) on problematic internet use (PIU), the researcher got the test results that fear of missing out (FoMO) has a negative significant effect as a mediator variable between the top five personality traits on the conformity dimension with problematic internet use (PIU). With the results obtained in iv (independent variable) the big-five (agreeableness) with dv (dependent variable)

problematic internet use (PIU) before the mediator variable, namely Fear of Missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc -6.014, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.000 (< 0.05) tc = -5.623 and the problematic internet use (PIU) value with fear of missing out (FoMO) increases with tc 10.045 sig 0.000 (< 0.05).

This shows that without the fear of missing out (FoMO) mediator the big-five personality trait on the agreeableness dimension still has a significant effect, but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the agreeableness dimension with the problematic internet. use (PIU). Individuals with high trait agreeableness related to social activities and want to provide inspiration for others [35]. This is what triggers individuals with high agreeableness to experience the fear of being left behind with new things on the news, social activities on social media. [36]. The fear of being left behind is something that individuals feel is related to the phenomenon of fear of missing out (FoMO).

Furthermore, in the dimension of conscientiousness with fear of missing out (FoMO) on problematic internet use (PIU), the researcher found the test results that the fear of missing out (FoMO) had a significant negative effect as a mediator variable between big-five personality traits in the conscientiousness dimension and problematic internet use. (PIU), with the results obtained on iv (independent variable) big-five trait (conscientiousness) with dv (dependent variable) problematic internet use (PIU) before the presence of the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc -5.406, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.000 (< 0.05) tc = -5.001 and the value of problematic internet use (PIU) with fear of missing out (FoMO) increases with tc 10.059 sig 0.000 (< 0.05).

This shows that without the fear of missing out (FoMO) mediator the big-five personality trait on the conscientiousness dimension still has a significant effect, but with the fear of missing out (FoMO) as a partial mediator variable it can strengthen the effect of the conscientiousness dimension with the problematic internet. use (PIU). Researchers found consistent results in research Angesti & Oriza [10], which states that conscientiousness has a significant effect on problematic internet use (PIU) mediated by fear of missing out (FoMO). According to Ryan & Xenos [37] Individuals with high conscientiousness traits have a characteristic to get a high achievement, so that individuals do not have much time to access the internet. A further explanation of the high trait of conscientiousness is more involved in structured activities such as participation in organizations, and other extracurricular activities [38]. Meanwhile, individuals with low conscientiousness personality traits tend to have unstructured characters, lack enthusiasm, and are sometimes late or not on time, which may reduce the quality of their relationship with their friends [39]. Crawford [40] explained that individuals with low conscientiousness are less in regulating emotions, if the individual's conscientiousness is low, have less tendency to regulate emotions, especially negative emotions such as

anxiety and fear [41]. This can trigger the phenomenon of fear of missing out (FoMO) by fear of not being involved in fun activities with friends [10].

Furthermore, in the neuroticism dimension with fear of missing out (FoMO) on problematic internet use (PIU), the researcher found the test results that the fear of missing out (FoMO) had a significant positive effect as a mediator variable between big-five personality traits on the neuroticism dimension and problematic internet use (PIU), with the results obtained in iv (independent variable) big-five trait (neuroticism) with dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.000 (< 0.05), with tc 7,432, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0,000 < 0.05 tc = 5,392 and the value of problematic internet use (PIU) with fear of missing out (FoMO) increases with tc 8,782 sig 0,000 (< 0.05).

This shows that without the fear of missing out (FoMO) mediator the big-five personality trait in the neuroticism dimension still has a significant effect, but with the fear of missing out (FoMO) as a partial mediator variable it can strengthen the effect of the neuroticism dimension with problematic internet use (PIU). Researchers found a link with previous research which explains that neuroticism trait affects the problematic internet use (PIU) and is mediated by the fear of missing out (FoMO) phenomenon. but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the neuroticism dimension with problematic internet use (PIU). Researchers found a link with previous research which explains that neuroticism trait affects the problematic internet use (PIU) and is mediated by the fear of missing out (FoMO) phenomenon. but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the neuroticism dimension with problematic internet use (PIU). Researchers found a link with previous research which explains that neuroticism trait affects the problematic internet use (PIU) and is mediated by the fear of missing out (FoMO) phenomenon. but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the neuroticism dimension with problematic internet use (PIU). Researchers found a link with previous research which explains that neuroticism trait affects the problematic internet use (PIU) and is mediated by the fear of missing out (FoMO) phenomenon. but the presence of fear of missing out (FoMO) as a partial mediator variable can strengthen the effect of the neuroticism dimension with problematic internet use (PIU). According to Christina et al., [21] this is because individuals who have high neuroticism, and act on the basis of negative emotions. Individuals who have high neuroticism are also associated with attachment anxiety, which in general, individuals will make the mind that they are not accepted in their social environment [41] While individuals still need to socialize, one way is to pay attention to their friends via the internet [9]. Changes in mood and anxiety will make the individual feel that other people are having a more pleasant experience than what he has experienced, so that the feeling of being afraid of not being able to experience it will arise, on the other hand also individuals who have low neuroticism tend to be low also experiencing feelings these feelings. Further Alt, Boniel-Nissim [34] Finding an increase in internet or social media use could be related to fear of missing out (FoMO). This can be explained by the Kardefelt-Wither internet use compensatory theory, [42] which explains that individuals who are neurotic to a certain extent, are more likely to fear being left behind, and therefore, individuals will use social media to meet their psychological needs for

social interactions. This can cause problems that can interfere with their daily lives.

Furthermore, in the openness dimension with the fear of missing out (FoMO) on problematic internet use (PIU), the researcher found the test results that the fear of missing out (FoMO) had no effect on the mediator variable between the big-five personality traits on the openness dimension and problematic internet use (PIU), with the results obtained on iv (independent variable) trait big-five (openness) with dv (dependent variable) problematic internet use (PIU) before the mediator variable, namely fear of missing out (FoMO), can be seen from sig 0.160 (< 0.05), with tc -1.407, after the presence of the mediator variable, namely fear of missing out (FoMO) becomes sig 0.249 (> 0.05) tc = -1.154 and the problematic internet use (PIU) value with fear of missing out (FoMO) increases with tc 10,260 sig 0.000 (< 0.05).

This shows that with or without the fear of missing out (FoMO) mediator the big-five personality trait in the openness dimension still has no effect on problematic internet use (PIU). The results obtained by researchers were different from previous studies, researchers explained that Openness to experience was very interested and open to something new [39], with features and easy access, low costs, and lots of information obtained, the internet can provide all of that, so this allows for negative impacts, namely problematic internet use (PIU). When the openness trait doesn't get what it needs via the internet, it will experience fear of missing out (FoMO).

REFERENCES

- [1] APJII. (2017). *Infografis: Penetrasi & perilaku pengguna internet indonesia*. Accessed from: <https://apjii.or.id/survei2017>
- [2] APJII. (2018). *Infografis: Penetrasi & perilaku pengguna internet indonesia*. Accessed from: <https://apjii.or.id/survei2018>
- [3] APJII. (2020, November) *Survei pengguna internet apjii 2019-q2 2020: Ada kenaikan 25,5 juta pengguna internet baru di ri*. Accessed from: <https://apjii.or.id/download/file/BULETINAPJIIDISI74November2020.pdf>
- [4] Lenhart, A., Smith, A., & Anderson, M. (2015). Teens, technology and romantic relationships. *Pew Research Center*, 1-77.
- [5] Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534–540. DOI:10.1016/j.chb.2017.08.016
- [6] Shapira, N. A., Goldsmith, T. D., Keck, P. E., Khosla, U. M., & McElroy, S. L. (2000). Psychiatric features of

- individuals with problematic internet use. *Journal of Affective Disorders*, 57(1-3), 267–272. doi:10.1016/s0165-0327(99)00107-x
- [7] Caplan, S. E. (2010). Theory and measurement of generalized problematic Internet use: A two-step approach. *Computers in Human Behavior*, 26(5), 1089-1097.
- [8] Black, D. W., Belsare, G., & Schlosser, S. (1999). Clinical features, psychiatric comorbidity, and health-related quality of life in persons reporting compulsive computer use behavior. *The Journal of clinical psychiatry*, 60(12), 839-844.
- [9] Przybylski, A. K., Murayama, K., DeHaan, C., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29, 1841-1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- [10] Angesti, R., & Oriza, I. D. I. (2018). Peran fear of missing out (fomo) sebagai mediator antara kepribadian dan penggunaan internet bermasalah. *Jurnal Muara Ilmu Sosial, Humaniora, dan Seni*, 2(2), 790-800.
- [11] Costa, P. T., & McCrae, R. R. (2006). Age changes in personality and their origins: Comment on Roberts, Walter, and Viechtbauer (2006). *Psychological Bulletin*, 132(1), 26–28. <https://doi.org/10.1037/0033-2909.132.1.26>
- [12] Costa, P. T., & McCrae, R. R. (2013). A theoretical context for adult temperament. In T. D. Wachs & others (Eds.), *Temperament in context*. Psychology Press.
- [13] John, O. P., Angleitner, A., & Ostendorf, F. (1988). The lexical approach to personality: A historical review of trait taxonomic research. *European Journal of Personality*, 2(3), 171–203. DOI:10.1002/per.2410020302
- [14] Floros, G., & Siomos, K. (2014). Excessive Internet use and personality traits. *Current Behavioral Neuroscience Reports*, 1(1), 19-26.
- [15] Kopuničová, V., & Baumgartner, F. (2016). Osobnosť, depresivita a problematické používanie internetu. *Psychologie a její kontexty (Psychology & Its Contexts)*, 7(1), 81-92.
- [16] Jackson, L. A., von Eye, A., Biocca, F., Barbatsis, G., Fitzgerald, H., & Zhao, Y. (2003). Personality, cognitive style, demographic characteristics and Internet use: Findings from the HomeNetToo. *Swiss Journal of Psychology*, 62, 79–90.
- [17] Thorsteinsson, E. B., & Davey, L. (2014). Adolescents' compulsive Internet use and depression: A longitudinal study. *Open Journal of Depression*, 3, 13–17.
- [18] Alt, D., & Boniel-Nissim, M. (2018). Links between adolescents' deep and surface learning approaches, problematic Internet use, and fear of missing out (FoMO). *Internet Interventions*, 13, 30-39.
- [19] JWT Intelligence. (Maret, 2012). *Fear of Missing Out (FoMO)*. Retrieve from: www.jwtintelligence.com/wp-content/uploads/2012/03/F_JWT_FOMO-update_3.21.12.pdf.
- [20] Australian Psychological Society. (2015, Oktober 8) *Teens suffer highest rates of fomo*. Retrieved from: https://psychology.org.au/news/media_releases/8Nov2015-fomo/
- [21] Christina, R., Yuniardi, M. S., & Prabowo, A. (2019). Hubungan Tingkat Neurotisme dengan Fear of Missing Out (FoMO) pada Remaja Pengguna Aktif Media Sosial. *Indigenous: Jurnal Ilmiah Psikologi*, 4(2), 105-117.
- [22] Arnett, J. J. (2004). *Emerging adulthood*. Oxford University Press.
- [23] Arnett, J. J. (2006). *Emerging adulthood: Understanding the new way of coming of age*. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America*. American Psychological Association.
- [24] Arnett, J. J. (2007). Socialization in emerging adulthood. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization*. Oxford University Press.
- [25] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.
- [26] Arnett, J. J. (2010). Oh, grow up! generational grumbling and the new life stage of emerging adulthood. *Perspectives on Psychological Science*. 5(1), 89–92.
- [27] Aboujaoude, E. (2010). Problematic internet use: An overview. *World Psychiatry*, 9, 85-90.
- [28] Thayer, S. E., & Ray, S. (2006). Online communication preferences across age, gender, and duration of Internet use. *Cyber Psychology & Behavior*, 9(4), 432-440.
- [29] Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparison of snowball sampling and sequential

sampling technique. *Biometrics and Biostatistics International Journal*, 3(1), 55.

[30] Guarte, J. M., & Barrios, E. B. (2006). Estimation under purposive sampling. *Communications in Statistics-Simulation and Computation*, 35(2), 277-284.

[31] Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. DOI:10.1177/001316447003000308

[32] Furchan, A. (2004). *Pengantar penelitian dalam pendidikan*. Pustaka Pelajar.

[33] Creswell, J.W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Pearson.

[34] Alt, D., & Boniel-Nissim, M. (2018). Using multidimensional scaling and PLS-SEM to assess the relationships between personality traits, problematic internet use, and fear of missing out. *Behaviour & Information Technology*, 1-13. DOI: 10.1080/0144929x.2018.1502353

[35] Marshall, T.C., Lefringhausen, K., Ferenczi, N. (2015). The big-five, self-esteem, and narcissism as predictors of the topics people write about in facebook status updates. *Personality and Individual Difference*, 85, 35-40.

[36] Tresnawati, F. R. (2016). Hubungan antara the big-five personality traits dengan fear of missing out about social media pada mahasiswa. *Jurnal Intuisi*, 8(3), 179-186.

[37] Ryan, T., & Xenos, S. (2011). Who uses facebook? An investigation into the relationship of the big-five, shyness, narcissism, loneliness, and facebook usage. *Computers in Human Behavior* (27), 1658-1664.

[38] Landers, R. N., & Lounsbury, J. W. (2006). An investigation of big-five and narrow personality traits in relation to Internet usage. *Computers in human behavior*, 22(2), 283-293.

[39] McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective*. Guilford Press.

[40] Crawford, T. N., Shaver, P. R., & Goldsmith, H. H. (2007). How affect regulation moderates the association between anxious attachment and neuroticism. *Attachment & Human Development*, 9, 95-109.

[41] Holmberg, D., McWilliams, L. A., & Patterson, A. (2013). Conscientiousness and attachment avoidance as moderators of the association between attachment anxiety and neuroticism: An interpersonal perspective. *Journal of Social and Personal Relationships*, 30(4), 515-525.

[42] Kardefelt-Winther, D. (2014). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, 31, 351-354.

[43] Tuten, T. L., & Bosnjak, M. (2001). Understanding differences in Web usage: The role of need for cognition and the five factor model of personality. *Social Behavior and Personality*, 29, 391-398.

[44] Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in human behavior*, 26(2), 247-253.