

# The Relationship between Problematic Internet Use and Fear of Missing Out among College Students Participate in Hybrid Learning

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## ABSTRACT

Problematic internet use is risky and can lead to harmful consequences for the user, characterised by impulsive and excessive usage. Fear of missing out is pervasive when individuals believe others are experiencing something enjoyable or beneficial. They fear being left out of those experiences, leading to constant desire to stay connected. This study examines the relationship between problematic internet use and fear of missing out among students participating in hybrid learning. The study involved 119 students from various universities in Jakarta who participated in hybrid learning programs. Data collection was conducted using a quantitative approach through a questionnaire in the form of a Google Form. The research sample was selected using a purposive sampling technique. The measurement instruments used in this study were the Generalized Problematic Internet Use Scale 2 (GPIUS 2) and the Fear of Missing Out scale (FoMOs). The study's results revealed a significant positive relationship between problematic internet use and fear of missing out among students participating in hybrid learning. The findings indicate that as problematic internet use increases among students, the fear of missing out also increases. In conclusion, this research provides evidence of the association between problematic internet use and anxiety of missing out among students in hybrid learning. The findings suggest that higher levels of problematic internet use are associated with higher levels of fear of missing out among students.

Keywords: Problematic Internet Use, Fear of Missing Out, College Students

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## Introduction

### A. Overview

Coronavirus disease, or commonly known as COVID-19, is an infectious disease characterized by acute respiratory syndrome. COVID-19 was first discovered in December 2019 in Wuhan, China. Since then, it has rapidly spread globally, and on March 11, 2020, the World Health Organization (WHO) declared it as a pandemic. In response to this crisis, governments in various countries have implemented a series of systems aimed at reducing the impact of the pandemic. WHO has also conducted various testing and contact tracing efforts to prepare healthcare systems and limit the spread of the disease within populations (Király et al., 2020).

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In the education sector in Indonesia, the learning system which is usually carried out using the Face-to-Face Learning system, has changed to a Distance Learning system due to limitations in face-to-face interaction. However, in 2021, the Ministry of Education and Culture will begin establishing lectures with a hybrid learning system (Arofah, 2020). Hybrid learning is a combination of synchronous and asynchronous learning systems. In the synchronous learning system, learning activities between teachers and students are carried out online using interactive video applications with a predetermined schedule. In the asynchronous learning system, the teacher designs material that can be accessed online by students (Zainudin et al., 2021).

Hybrid learning is a learning system that combines technological advances and traditional learning activities with teachers designing learning and materials online and then accessible to students (Makhin, 2022; Zainudin et al., 2021). Based on the phenomenon observed by researchers, hybrid learning applied to learning in higher education is Face-to-Face Learning and Distance Learning combined. In addition, students are given information about the schedule of the learning system that will take place, so that the number of college students on university remains normal and health protocols are maintained.

The use of the internet undoubtedly provides convenience for students to engage in their academic activities during hybrid learning. However, excessive and uncontrolled internet use can also have negative effects. Excessive internet use can lead to Problematic Internet Use (PIU). PIU refers to the cognitive, emotional, and behavioral problems experienced by individuals due to a lack of control over their internet use (Alt & Boniel-Nissim, 2018; Caplan et al., 2009). Students use the internet to access social media to keep up with activities happening outside, engage in online work and learning, and access news or information from the outside world. The use of the internet becomes an alternative to compensate for the lack of information about news, trends, and activities of others outside. Additionally, due to limited face-to-face interactions, the intensity of direct interpersonal interactions is significantly reduced. Individuals become curious about the activities and social lives of others, and they turn to the internet to obtain information. Constant use of the internet, particularly social media, can lead individuals to experience Fear of Missing Out (FoMO). FoMO is a condition in which individuals feel uncomfortable and worried about missing out on what others are experiencing, owning, or knowing, and they desire it themselves (Abel & Buff, 2016; Alt & Boniel-Nissim, 2018; Przybylski et al., 2013). Online social support, including emotional support provided through social media activities, and FoMO play important roles in social networking site use indirectly (Zhang et al., 2023).

## **B. Problematic Internet Use**

Problematic internet use (PIU) is defined as a multidimensional syndrome consisting of various symptoms, including cognitive, emotional, and behavioral aspects, that make it difficult for individuals to control their lives when they are offline or not accessing the internet (Caplan et al., 2009). PIU is a psychological issue often associated with internet addiction. However, PIU has distinct characteristics compared to internet addiction. PIU is associated with compulsive internet use and psychosocial and cognitive-behavioral problems, while internet addiction describes internet use that meets clinical criteria (Caplan, 2010). In the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association (DSM-V), internet addiction is not classified as a specific addictive disorder or behavioral addiction, which is why the term PIU is frequently used in theoretical studies. PIU reflects excessive concerns about internet-related relationships that are difficult to control and affect daily life functioning (Cebollero-salinas et al., 2022).

According to Alt and Boniel-Nissim (2018), there are several factors that predict problematic internet use (PIU), including personality traits, parenting styles and family factors, alcohol use, and social anxiety. In addition to these factors, Tam and Walter (2013) suggest that low self-esteem, family conflicts, high attraction to technology, proactive parenting styles, offline activities, and strong commitment to academic demands contribute to PIU. According to Duan et al. (2020), many students, parents, and teachers have expressed concerns about the lack of effectiveness of online learning. Students face difficulties such as a lack of face-to-face interaction, socialization, and being distracted by social media and internet-related issues. Students also tend to have difficulty concentrating during online learning due to problematic internet use behaviors, such as spending excessive time online (Liu et al., 2022). In conclusion, individuals experiencing problematic internet use are likely to have difficulties concentrating on offline activities and spend a significant amount of time online.

PIU also has psychological impacts such as loneliness, low self-esteem and academic aspirations, increased Fear of Missing Out (FoMO), depression and hostility, and peer-to-peer blaming behavior. Additionally, research findings indicate that PIU can contribute to cybergossip and cyberbullying (Cebollero-salinas et al., 2022). Problematic internet use can also negatively affect relationships with family and friends as individuals spend more time online, resulting in reduced time for socializing with loved ones. Poor relationships with family and friends can lead to increased depression and anxiety, making adolescents vulnerable to insomnia. These psychopathological symptoms can limit learning opportunities and impact academic engagement (Liu et al., 2022).

### **C. Fear of Missing Out**

Fear of Missing Out (FoMO) is defined as the fear that one might miss out on valuable experiences that others are having and the desire to constantly stay updated with what others are doing (Przybylski et al., 2013). According to another source, FoMO can also be defined as an individual's anxiety about missing opportunities to interact with others, enjoyable events, and beneficial or advantageous situations (Alt & Boniel-Nissim, 2018). Chai et al. (2018) propose that FoMO is an pervasive worry driven by the fear that others may be experiencing fantastic stories or positive events in which one is not present. As a result, individuals feel sadness when they open social media and discover that their friends are experiencing positive events in which they cannot participate. Consequently, they become more vigilant about their social media presence to avoid similar occurrences in the future.

Like other psychological disorders, Fear of Missing Out (FoMO) also exhibits certain characteristics. However, according to Przybylski et al. (2013), these characteristics can only be observed at higher levels of FoMO. Some of these characteristics include: (a) unconscious tendency to excessively use social media, whether upon waking up, before going to bed, or during meals; (b) experiencing ambivalent feelings towards social media and being more inclined to use it during class or lectures; and (c) being unable to resist the temptation to respond to messages, check texts, and emails while driving.

According to Przybylski et al. (2013), the phenomenon of FoMO is a self-regulatory condition that arises from the lack of satisfaction of psychological needs. Therefore, low levels of need satisfaction are associated with FoMO and interest in internet use. Individuals with low levels of basic psychological need satisfaction use the internet as a medium to connect or communicate with others, a means to develop social competence, and an opportunity to strengthen social bonds. The low satisfaction of basic psychological needs is one of the factors that contribute to FoMO. Basic psychological needs are divided into three aspects: competence, autonomy, and relatedness. In terms of competence, a lack of capacity to act effectively in the world is a factor that leads to FoMO. In terms of autonomy, a lack of self-initiative is a factor that contributes to FoMO. Lastly, in terms of relatedness, a lack of relationships or closeness with others is a factor that causes FoMO.

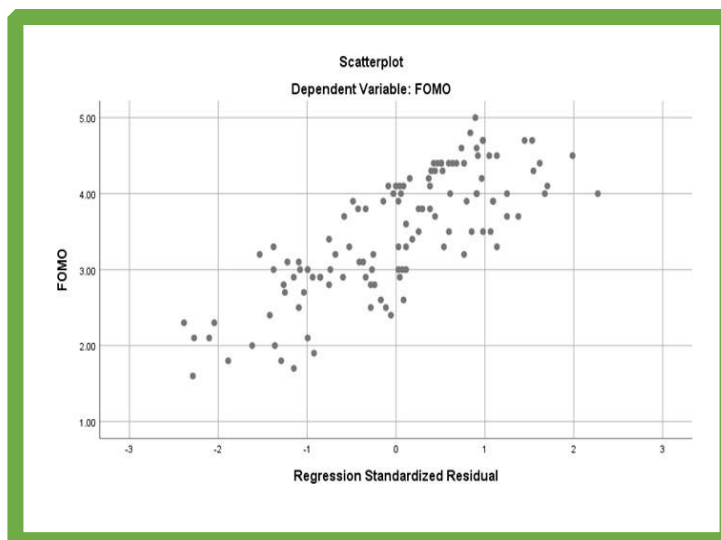
## **Material And Methods**

The participants in this study were active university students from various universities in Jakarta. The participants belonged to the category of emerging adulthood, with an age range of 18 to 25 years, and consisted of both male and female individuals. The participants were also active students who were engaged in hybrid learning, attending both online and in-person classes.

This research was conducted using a quantitative research method. The sampling technique employed in this study was purposive sampling. Data collection for this research was done through an online questionnaire created using Google Forms, which was then distributed through social media platforms. The measurement instrument used to assess problematic internet use in this study was The Generalized Problematic Internet Use Scale 2 (GPIUS2) developed by Caplan (2010), while the Fear of Missing Out was measured using the Fear of Missing Out scale (FoMOs) developed by Przybylski et al. (2013). The GPIUS2 consists of 15 items across 5 dimensions, rated on an 8-point Likert scale ranging from 1 (strongly disagree) to 8 (strongly agree). The FoMOs scale comprises 10 unidimensional questions rated on a 5-point Likert scale ranging from 1 (not at all true of me) to 5 (extremely true of me).

## **Results**

The data analysis was conducted using IBM SPSS version 25. The researcher performed assumption tests, including tests for normality, linearity, and homoscedasticity, as well as hypothesis testing using correlation analysis. Based on the assumption tests, the results indicated that the data in this study were normally distributed, with a significance value (Sig.) of 0.200 for the problematic internet use variable and 0.187 for the fear of missing out variable (See Table 1). The results of the linearity test indicated that the data in this study exhibited a linear relationship, with a p-value of 0.067 (See Table 2). Furthermore, the homoscedasticity test revealed a positive relationship in the data. This can be concluded from the scatterplot, where the points form a line from the bottom left to the top right, indicating an increase in the problematic internet use variable followed by an increase in the fear of missing out variable (See Figure 1).



**Fig. 1.** Scatterplot Result of Homoscedasticity Test

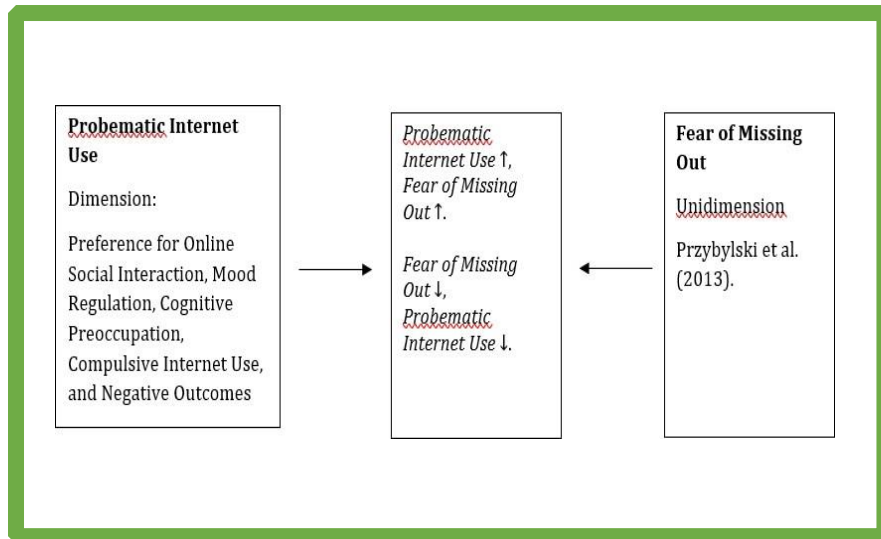
**Table 1.** Result of Normality Test for the Variables Problematic Internet Use and Fear of Missing Out

Variable	Sig.	t	Description
Problematic Internet Use	0.200	0.060	Normal distribution
Fear of Missing Out	0.187	0.072	Normal distribution

**Table 2.** Result of Linearity Test for the Variables Problematic Internet Use and Fear of Missing Out

Independent Variable	Dependent Variable	Deviation from Linearity	F	Description
Problematic Internet Use	Fear of Missing Out	0.067	1.480	Linear

Based on the research conducted using Pearson Correlation analysis, it is found that problematic internet use has a significant positive relationship with fear of missing out among students who engage in hybrid learning. The study revealed a significant positive correlation between the variables of problematic internet use and fear of missing out, with a correlation coefficient of 0.618. This indicates that as the level of problematic internet use increases, the level of fear of missing out also increases in individuals, and vice versa (See Figure 2).



**Fig. 2.** Correlation between Problematic Internet Use and Fear of Missing Out

Furthermore, the researcher conducted correlation tests between each dimension of problematic internet use and fear of missing out, and the results showed that all dimensions of problematic internet use had a significant positive relationship with fear of missing out (See Table 3).

**Table 3.** Correlation between Dimensions of Problematic Internet Use and Fear of Missing Out

Dimension	r	P	Description
Preference for Online Social Interaction	0.455**	0.000	Significant Positive
Mood Regulation	0.271**	0.003	Significant Positive
Cognitive Preoccupation	0.551*	0.000	Significant Positive
Compulsive Internet Use	0.568**	0.000	Significant Positive
Negative Outcomes	0.598**	0.000	Significant Positive

In addition, the researcher conducted a gender-based comparison analysis on participant demographic data. Based on the results of the gender-based comparison, it was found that there was no significant difference between male and female participants in terms of problematic internet use. However, a significant difference was found between male and female participants in terms of fear of missing out (See Table 4).

**Tabel 4.** The Results of the Analysis Comparing the Variables Problematic Internet Use and Fear of Missing Out Based on Gender

Variable	Description	p
Problematic Internet Use	There is no significant difference	0.146
Fear of Missing Out	There is significant difference	0.010

Note: Male participants had higher levels of fear of missing out compared to females

## Conclusion

Based on the research conducted on problematic internet use and fear of missing out among students participating in hybrid learning, there is a significant positive relationship between problematic internet use and fear of missing out. It can be concluded that higher levels of problematic internet use are associated with higher levels of fear of missing out, and conversely, lower levels of problematic internet use are associated with lower levels of fear of missing out. These findings are consistent with the research conducted by Aygar et al. (2019) who obtained similar results in their study. The phenomenon of problematic internet use and fear of missing out is common among young individuals. Several studies have identified problematic internet use as a serious public health issue. Fear of missing out in social media usage is a relatively new area of research with limited studies conducted. The widespread use of social networking platforms can increase interactivity among young individuals and create a constant urge to be online intensively and frequently update their social situations (Aygar et al., 2019).

Regarding the significant positive relationship between problematic internet use and fear of missing out among students participating in hybrid learning, when examining this relationship based on the dimensions of problematic internet use, the research findings indicate that all five dimensions of problematic internet use are positively associated with fear of missing out. The five dimensions of problematic internet use that show a positive relationship with fear of missing out are preference for online social interaction, mood regulation, cognitive preoccupation, compulsive internet use, and negative outcomes. It can be concluded that all dimensions of problematic internet use have a positive association with fear of missing out.

In one dimension of problematic internet use, mood regulation, individuals are motivated to use the internet to regulate their mood (Caplan, 2010). When individuals feel anxious or worried about their social lives, they tend to use the internet to alleviate or distract themselves from those feelings of anxiety and worry. Przybylski et al. (2013) conducted



research on fear of missing out among emerging adults. The study revealed that the fear of missing out is associated with overall levels and feelings related to Facebook use, social media use during lectures, and distracted driving. Individuals with high levels of fear of missing out are more likely to use Facebook upon waking up, before going to bed, and while eating. Individuals who feel anxious and fearful of missing out on information online tend to immediately write and check text messages and emails, even while driving.

In the additional data analysis, the researcher conducted a comparative analysis based on the age and gender of the study participants. The results of the analysis showed that there were no significant differences in problematic internet use based on the age of the participants. However, significant differences were found in fear of missing out based on the age of the participants. From the findings of the study, it was observed that male participants tended to have higher levels of problematic internet use compared to females. These results align with the findings of a study conducted by Liu et al. (2022) which reported similar results. Additionally, the study also found that male participants tended to have higher levels of fear of missing out compared to females. This finding is consistent with the research conducted by Reer et al. (2019) which yielded similar results.

### **Limitation and Suggestions**

This study has several limitations that may have influenced the research process. The researcher acknowledges that limitations can pose obstacles to the continuity of the study. One limitation of this research is the constraint of time, which limited the amount of data that could be collected and the scope of the study. Another limitation is that the study was conducted using a quantitative method, with data collection through online questionnaires using Google Forms. The results obtained from the data may not always reflect the true opinions or conditions of the respondents. This can be attributed to differences in understanding the questions or respondents not being fully focused when completing the questionnaire. Therefore, it is recommended that future research on similar topics consider using alternative methods such as qualitative research or mixed methods to complement the findings and address potential limitations.

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