

Intensity of Instagram Related Fear of Missing Out in Medical Student Community

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Article Info

Article history:

Received July 23, 2023

Revised July 27, 2023

Accepted August 08, 2023

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ABSTRACT

Introduction: Internet and mobile phone have made access to wide range of information easy, whenever and wherever we are, and as a result, many of us spend a lot of time online with social media. One of the most popular social media sites is Instagram. Excessive use of Instagram indicated users have a higher level of fear of missing out (FoMO) which is a fear of others having a more pleasant experience than themselves. It is estimated that there are 175.4 social media users in Indonesia and around 160 million people are active on social media. It was found that around 64% of teenagers interacted with social media excessively, causing internet addiction, especially Instagram. **Method** This study is an observational analytic study with a cross sectional design. Sampling purposive sampling, data analysis with Somer's correlation test. **Results:** There is a significant relationship between the intensity of using Instagram and Fear of Missing Out with a value of $p=0.001$, $p<0.005$. The intensity of Instagram users is moderate (41.7%), FoMO is in the low category (56.7%) and is found more in women (58.3%). **Conclusion:** There is a relationship between the intensity of Instagram usage and FoMO, even though the strength is weak but has a positive correlation.

Keywords: Fear of Missing Out, Instagram, Social Media.

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1. INTRODUCTION

The advancement of digital technology in recent times has brought about rapid developments in both hardware and software. These developments have not only introduced new devices but have also led to the creation of software applications that aid in various activities, from work-related tasks to entertainment. One such example is the ongoing development of internet-based applications that can be accessed through devices and cater to users of all ages. Social media platforms are a notable example of such applications, as they provide an accessible means of communication and networking [1].

The internet and social media have become integral aspects of everyday life for the general population. The number of internet users in Indonesia has been consistently growing, with a recorded figure of 196.71 million users in 2019-2020, out of a total population of 266.91 million individuals. Social media platforms, which serve as wireless communication channels, have gained significant popularity, with approximately 175.4 million people having access to and around 160 million people, or roughly 64% of the population, actively using Instagram as a social media platform [2].

In Indonesia, Instagram holds the third position as one of the most widely used social media platforms, with a usage rate of 82%. It follows behind YouTube, which has an 88% usage rate, and WhatsApp, which has an 84% usage rate [3].

The continuous utilization of the internet and mobile phones has resulted in the ease of accessing information from any location at any given time. However, this convenience has also led to the emergence of internet addiction, particularly in relation to the excessive use of social media platforms [4].

The problems associated with social media usage are frequently connected to the Fear of Missing Out (FoMO), which presents itself as an excessive worry about potentially not being aware of the most recent information or experiences in comparison to others. This can result in impulsive actions, such as an insatiable need to stay connected and a continuous curiosity about other people's activities through frequent browsing on social media platforms [5].

The adverse effects of Fear of Missing Out (FoMO) can have a profound impact on daily life, leading to challenges in maintaining focus and a diminished connection with one's immediate environment, even in particular circumstances. Ultimately, this can contribute to heightened levels of stress, anxiety, and depression [6].

In a study conducted in Surabaya involving 120 teenagers, it was found that there exists a direct correlation between Fear of Missing Out (FoMO) and addiction to social media. The research indicated that adolescents who experience anxiety and fear of missing out on new information tend to engage in frequent social media usage, leading to addictive behaviors [7].

The escalating frequency of social media usage, coupled with interconnectivity between various platforms, indicates a rising level of Fear of Missing Out (FoMO) [8].

Studies have demonstrated that Fear of Missing Out (FoMO) plays a mediating role between internet addiction and symptoms related to psychological disorders such as depression and anxiety. The research highlights the important connection between FoMO and the negative impact of internet addiction on mental well-being [9]. Building on the aforementioned explanation, the researcher aims to investigate the association between the extent of Instagram usage and Fear of Missing Out (FoMO), specifically among students from the Faculty of Medicine, Islamic University of North Sumatra, graduating in 2019.

2. METHOD

This study has received approval from the Research Ethics Commission of FK UISU, No. 378/EC/KEPK.UISU/III/2023. This research is prospective with analytical methods of cross sectional studies collected simultaneously or at the same time. This study was conducted at the Faculty of Medicine UISU Jl. STM No. 77, zip code 20219, Medan City, North Sumatra, Indonesia.

The population of this study were students of the Faculty of Medicine, Islamic University of North Sumatra in 2019. The sampling technique in this study was carried out by purposive sampling. In this study, the formula used to calculate the sample size was the Slovin formula, and a sample of 60 people was obtained. The inclusion criteria for this study were respondents who were willing to participate as samples, actively using Instagram with >20 minutes / day. The exclusion criteria for this study are respondents who do not fill out the questionnaire completely, academic leave, absent, do not use Instagram and actively use business Instagram. The instruments used in this study are Instagram intensity scale with validity and reliability values with a Cronbach's Alpha value coefficient of 0.808 and Fear of Missing Out Scale with validity and reliability values with a Cronbach's Alpha value coefficient of 0.816

3. RESULTS AND DISCUSSION

RESULTS

Univariate analysis

Table 1. Frequency Distribution of Respondent Characteristics Based on Gender

| Gender | Frequency | Percentage (%) |
|--------------|-----------|----------------|
| Male | 25 | 41,7 |
| Female | 35 | 58,3 |
| Total | 60 | 100 |

In this study, there were 60 FK UISU student respondents in 2019 with the majority of respondents being female, 35 people (58.3%).

Table 2. Frequency Distribution of Instagram User Intensity

| Intensity Instagram use | Frequency | Percentage (%) |
|-------------------------|-----------|----------------|
| High | 22 | 36,7 |
| Moderate | 25 | 41,7 |
| Rendah | 13 | 21,7 |
| Total | 60 | 100 |

Based on the table above, out of 60 respondents it shows that the majority of Respondents have a moderate intensity of Instagram use as many as 25 people (41.7%).

Table 3. Fear of Missing Out Frequency Distribution

| Fear of Missing Out | Frequency | percentage (%) |
|---------------------|-----------|----------------|
| High | 12 | 20,0 |
| Moderate | 14 | 23,3 |
| Low | 34 | 56,7 |
| Total | 60 | 100 |

Based on the table above, out of 60 respondents it shows that the majority of respondents have a low level of Fear of Missing Out as many as 34 people (56.7%).

Bivariate Analysis

Table 4. Relationship between the intensity of Instagram user with Fear of Missing Out

| Intensity Instagram user | Fear of Missing Out | | | | | | Total | val | sig | |
|--------------------------|---------------------|------|----------|------|-----|------|-------|------|-------|-------|
| | High | | Moderate | | Low | | | | | |
| | fn | % | fn | % | fn | % | | | | |
| High | 10 | 45,5 | 3 | 13,6 | 9 | 40,9 | 22 | 36,6 | 0,402 | 0,001 |
| Moderate | 2 | 8,0 | 10 | 40,0 | 13 | 52,0 | 25 | 41,6 | | |
| Low | 0 | 0,0 | 1 | 7,7 | 12 | 92,3 | 13 | 21,6 | | |
| Total | 12 | 20,0 | 14 | 23,3 | 34 | 56,6 | 60 | 100 | | |

The analysis of the data revealed interesting findings regarding the correlation between the intensity of Instagram usage and Fear of Missing Out (FoMO). Among respondents with a high intensity of Instagram use, 40.9% experienced a low level of FoMO, 13.6% experienced a moderate level, and 45.5% experienced a high level. For respondents with a moderate intensity of Instagram use, 52.0% experienced a low level of FoMO, 40.0% experienced a moderate level, and 8.0% experienced a high level. In contrast, respondents with a low intensity level of Instagram use had 92.2% experiencing a low level of FoMO, 7.7% experiencing a medium level, and none experiencing a high level.

The statistical analysis performed on the data demonstrated a significant relationship between the intensity of Instagram use and Fear of Missing Out, with a p-value of 0.001 ($p < 0.05$). The strength of this relationship was determined to be weak, with a correlation coefficient of 0.402. The direction of the correlation was positive (+), indicating a unidirectional relationship between the two variables.

DISCUSSION

The results of this study showed that there were more female respondents than male respondents, namely 35 people (58.3%). Researchers distributed questionnaires, female respondents participated more and were willing to take the time to fill out questionnaire questions. Additionally, women make up the majority of Instagram users due to the platform's ability to provide a space for them to express their emotions and share their thoughts openly. Instagram serves as a medium for various activities, including the expression of emotions, engaging in activities like stalking, posting selfies, seeking attention, and participating in online shopping. This aligns with the preferences of female users, leading to their higher representation on the platform. [10]. This research is in line with research was found that women are the majority of Instagram users, namely 82 respondents (82%) of 98 respondents [10]. Women are drawn to the artistic aspects of Instagram, as the platform offers a sense of comfort and attractiveness through visually appealing and aesthetically pleasing posts. The display of beauty and captivating images on Instagram creates an impressive impression, further appealing to female users. Moreover, women's affinity for

shopping contributes to their frequent engagement with the platform. The desire to stay updated on the latest products, particularly exclusive or unreleased items that others may not possess, adds to their satisfaction and fuels the necessity of regularly viewing Instagram for online shopping purposes [11].

An overview of the intensity of Instagram use from 60 respondents with the majority having moderate levels of Instagram use intensity, this study is in line with what was conducted it was found that the majority of respondents as many as 50.0% had moderate levels of Instagram usage intensity [12].

In contrast to the previous study, the research conducted with a sample size of 100 respondents revealed that the majority, specifically 61 individuals (61%), exhibited a high level of Instagram usage intensity. The study further suggests that the more intensive the use of this social network, the higher the likelihood of smartphone addiction. Conversely, the impact of smartphone addiction can also contribute to increased Instagram usage [13].

This study obtained a picture of Fear of Missing Out from 60 respondents with the majority of respondents having a low level of Fear of Missing Out. This can happen because students of the Class of 2019 are busy undergoing dense academic activities so it is difficult to continue to follow other people's activities on social media, especially Instagram. This research is not in line with research obtained from 150 respondents, the majority of which 56 respondents (37.33%) had a moderate level of Fear of Missing Out. This is because the frequency of opening Instagram is in a reasonable category, so the anxiety caused by the frequency of opening Instagram to see other people's posts and see Instastory is not too significant to influence the emergence of fear of missing out. The duration of seeing posts and seeing Instastory which is still in the moderate category also does not shape the emergence of fear of missing out for students, this is because seeing Instagram is only a reference for students regarding the development of information that is viral among teenagers [14].

The findings of this study indicated that the majority of respondents exhibited a moderate level of Instagram usage intensity, coupled with a low level of Fear of Missing Out (FoMO). Several factors could explain these results. Firstly, personal preferences and interests play a significant role. Each individual has unique preferences regarding social media usage, and some may choose to use Instagram moderately or infrequently due to prioritizing offline activities, other interests, or maintaining a sense of balance in their lives. Secondly, self-control plays a crucial role. Individuals with good self-control are more likely to effectively manage the intensity of their Instagram use. They can set limits on the time and frequency of social media usage, including Instagram, thereby avoiding excessive engagement [15].

Individual priorities and values play a significant role in determining one's level of Fear of Missing Out (FoMO). Those with lower FoMO may have different priorities and values in life, and they may not feel strongly influenced by social comparisons or the need to constantly stay updated through platforms like Instagram. Additionally, having a high level of self-awareness can aid individuals in recognizing the potential negative impacts of excessive social media use. This awareness enables them to make informed choices regarding their Instagram usage and consciously limit the time they spend on the platform [15].

Social environment: The social environment can also affect the intensity of a person's Instagram use. If someone is in an environment where there isn't too much social comparison or pressure to stay connected to social media, they may be inclined to use Instagram moderately. In this test, statistical test results were obtained with Somer's D test between the relationship between the intensity of Instagram use and Fear of Missing Out. A significance value of $P = 0.001$ ($p < 0.05$) was obtained which showed that there was a significant relationship between the intensity of Instagram use on Fear of Missing Out, with the strength of the relationship between the intensity of Instagram use on Fear of Missing Out had a value of 0.402 where the strength of this relationship is weak ($p = 0.2-0.4$) and the direction of correlation is positive (+), that is, there is a unidirectional relationship with medical students at the Faculty of Medicine, Islamic University of North Sumatra, Stambuk 2019.

The hypothesis that states there is a significant positive relationship between the intensity of Instagram use and Fear of Missing Out (FoMO) in FK UISU students until 2019 is accepted. This is in line with research there is a positive relationship between the intensity of Instagram use and Fear of Missing Out. This is indicated by a coefficient of 0.402, with a significance value of 0.000 ($P < 0.05$), which means the higher the intensity of Instagram use, the higher the Fear of Missing Out [13].

Another study that there is a positive relationship between the intensity of Instagram use and Fear of Missing Out in adolescents which shows a unidirectional correlation and a weak relationship concluded from the results of the Pearson's correlation test with a correlation coefficient value of 0.331 and a real level set ($0.001 < 0.05$) [13].

Studies conducted on emerging adult students have shown a correlation between Fear of Missing Out (FoMO) and the inclination towards internet addiction. This finding is consistent with previous research

that has established a link between FoMO and internet addiction among high school students. One of the criteria indicating internet addiction is the high intensity of internet usage [17].

This research aligns with previous studies that have found a notable and positive correlation between the intensity of social media usage and Fear of Missing Out (FoMO). It is explained that FoMO can arise from unfulfilled needs for competence, autonomy, and connectedness, which subsequently motivate individuals to seek fulfillment by engaging in social media usage. Additionally, the pursuit of certain goals through social media serves as a contributing factor to the intensified use of these platforms [18]–[22].

The results obtained in this study are in accordance with the results of previous research which stated that there is a positive relationship between FoMO and social media use, in the study revealed individuals who have a high tendency to use social media also have high levels of FoMO [5] [23]–[26].

Based on the results of the hypothesis test from this study, it is known that the correlation that occurs is weak, which means that there are other factors that have a stronger correlation to FoMO than the intensity of Instagram use. From the previous explanation, the researcher stated that FoMO originated from the motivation of individuals to meet their basic psychological needs, so there is a possibility that if the use of Instagram is not based on motivation to meet basic psychological needs, individuals can be prevented from FoMO. The high level of intensity of Instagram use in this study can also be caused by motivation other than meeting basic psychological needs that do not correlate with FoMO or can even prevent the individual from experiencing FoMO and make the correlation weak, where it is known that the majority of subjects in this study have low levels of FoMO, while the level of intensity of Instagram use tends to be moderate, which occurs weakly, where it is known that the majority of subjects in this study have low levels of FoMO, while the intensity level of Instagram use tends to be moderate.

4. CONCLUSION

In this study, the results of statistical tests with Somer's d test between the relationship between the intensity of Instagram use and Fear of Missing Out were obtained. A significance value of $P = 0.001$ ($p < 0.05$) was obtained which shows that there is a significant relationship between the intensity of Instagram use and Fear of Missing Out, with a strength value of 0.402, the strength of this relationship is weak ($p = 0.2-0.4$) and the direction of the correlation is positive (+), namely there is a unidirectional relationship. The majority of FK UISU students are female. The majority of FK UISU students have moderate Instagram usage intensity. The majority of FK UISU students have a low level of Fear of Missing Out.

ACKNOWLEDGEMENTS

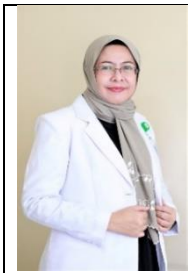
Thank you to dean, vice dean education unit, Research section Faculty of Medicine Universitas Islam Sumatera Utara for financial support.

REFERENCES

- [1] K. R. S. Dianelia, "Hubungan antara Kesepian dan Kecendrungan Narsistik pada Pengguna Jejaring Sosial Media Instagram," 2017.
- [2] M. Rustam, "Internet dan Penggunaannya," 2017. [Online]. Available: <http://www.the>
- [3] N. Anisah, M. Sartika, and H. Kurniawan, "Penggunaan Media Sosial Instagram dalam Meningkatkan Literasi Kesehatan pada Mahasiswa," 2021.
- [4] Ł. Tomczyk and E. Selmanagic-Lizde, "Fear of Missing Out (FOMO) among youth in Bosnia and Herzegovina — Scale and selected mechanisms," *Child Youth Serv Rev*, vol. 88, pp. 541–549, May 2018, doi: 10.1016/j.chilyouth.2018.03.048.
- [5] A. K. Przybylski, K. Murayama, C. R. Dehaan, and V. Gladwell, "Motivational, emotional, and behavioral correlates of fear of missing out," *Comput Human Behav*, vol. 29, no. 4, pp. 1841–1848, Jul. 2013, doi: 10.1016/J.CHB.2013.02.014.
- [6] S. Nikmah and M. S. H. Theresia, "Pengaruh Intensitas Penggunaan Media Sosial Instagram," 2022.
- [7] A. F. Hariadi, "Hubungan antara Fear of Missing Out (FoMO) dengan Kecanduan Media Sosial pada Remaja," 2018.

- [8] S. L. Buglass, J. F. Binder, L. R. Betts, and J. D. M. Underwood, "Motivators of online vulnerability: The impact of social network site use and FOMO," *Comput Human Behav*, vol. 66, pp. 248–255, Jan. 2017, doi: 10.1016/j.chb.2016.09.055.
- [9] E. Wegmann and M. Brand, "A narrative Overview About Psychosocial Characteristics as Risk Factors of a Problematic Social Networks Use," *Current Addiction Reports*, vol. 6, no. 4. Springer, pp. 402–409, Dec. 01, 2019. doi: 10.1007/s40429-019-00286-8.
- [10] A. Soraya, "Pengaruh Penggunaan Media Sosial Instagram Terhadap Gaya Hidup Mahasiswa Universitas Sumatera Utara," 2019.
- [11] R. Engeln, R. Loach, M. N. Imundo, and A. Zola, "Compared to Facebook, Instagram use causes more appearance comparison and lower body satisfaction in college women," *Body Image*, vol. 34, pp. 38–45, Sep. 2020, doi: 10.1016/j.bodyim.2020.04.007.
- [12] L. M. Gunawan, "'I DON'T WANT TO MISS A THING!!' Korelasi Intensitas Penggunaan Instagram dengan Fear of Missing Out (FoMO) pada Remaja," 2019.
- [13] A. P. T. Antonius, "Hubungan antara Fear of Missing Out dengan Intensitas Penggunaan Media Sosial Instagram pada Mahasiswa di Universitas Kristen Satya Wacana," 2017.
- [14] D. S. Wibowo and R. Nurwindasari, "Hubungan Intensitas Penggunaan Instagram terhadap Regulasi Diri dan Fear of Missing Out," 2019.
- [15] Irwan, *Etika dan Perilaku Kesehatan*. 2017.
- [16] R. Widyana and S. Esterlita Purnamasari, "Do Fear of Missing-out Mediated by Social Media Addiction Influence Academic Motivation Among Emerging Adulthood?," 2020.
- [17] N. Setyaningsih, Widodo Sarjana, and Natalia Dewi Wardani, "The Correlation Between Fear of Missing Out (FoMO) and Internet Addiction in Vocational High School Students," *Jurnal Psikiatri Surabaya*, vol. 12, no. 1, pp. 44–55, May 2023, doi: 10.20473/jps.v12i1.30653.
- [18] I. U. Bestari and I. W. Widayat, "Hubungan antara Fear of Missing Out Dengan Intensitas Penggunaan Jejaring Sosial pada Mahasiswa Universitas Airlangga," 2018.
- [19] J. M. Romero-Rodríguez, I. Aznar-Díaz, J. A. Marín-Marín, R. Soler-Costa, and C. Rodríguez-Jiménez, "Impact of problematic smartphone use and instagram use intensity on self-esteem with university students from physical education," *Int J Environ Res Public Health*, vol. 17, no. 12, pp. 1–10, Jun. 2020, doi: 10.3390/ijerph17124336.
- [20] F. Sutanto, R. Sahrani, and D. Basaria, "Fear of Missing Out (FoMO) and Psychological Well-Being of Late Adolescents Using Social Media," 2020.
- [21] Trifiro, "Instagram Use and Its Effect on Well-Being and Self-Esteem," 2018. [Online]. Available: <https://digitalcommons.bryant.edu/macomm/4>
- [22] K. Aburezeq and L. Kasik, "Romanian Journal of Psychological Studies the Relationship between Social Problem Solving and Psychological Well-Being," 2021. [Online]. Available: www.hyperion.ro
- [23] S. Fathadhika and - Afriani, "Social Media Engagement sebagai Mediator antara Fear of Missing Out dengan Kecanduan Media Sosial pada Remaja," *Journal of Psychological Science and Profession*, vol. 2, no. 3, p. 208, Dec. 2018, doi: 10.24198/jpsp.v2i3.18741.
- [24] K. Moore and G. Craciun, "Fear of Missing Out and Personality as Predictors of Social Networking Sites Usage: The Instagram Case," *Psychol Rep*, vol. 124, no. 4, pp. 1761–1787, Aug. 2021, doi: 10.1177/0033294120936184.
- [25] Z. Zhang, F. R. Jiménez, and J. E. Cicala, "Fear Of Missing Out Scale: A self-concept perspective," *Psychol Mark*, vol. 37, no. 11, pp. 1619–1634, Nov. 2020, doi: 10.1002/mar.21406.
- [26] F. Salim, W. Rahardjo, T. Tanaya, and R. Qurani, "Are Self-Presentation Influenced by Friendship-Contingent Self-Esteem and Fear Of Missing Out?," *Makara Human Behavior Studies in Asia*, vol. 21, no. 2, p. 70, Dec. 2017, doi: 10.7454/mssh.v21i2.3502.

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