

Correlation Between Fear of Missing Out and Academic Stress Medical Students Tanjungpura University

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Abstract: Students tend to be at risk of experiencing mental health disorders. One example of a mental health disorder is Fear of Missing Out. This feeling of fear of being left behind will trigger anxiety and end up disrupting a student's academic performance, including medical students. As a result of the disruption of academic performance, it will end in academic stress. This study was an observational analytical study with a cross-sectional design. The research sample consisted of 168 medical students selected using the proportionate stratified random sampling technique. Variables were measured using the Fear of Missing Out questionnaire and the Student Academic Stress Scale (SASS). The analysis was conducted using the Spearman correlation test. Most students had high levels of FOMO (81,5%) and were not academically stressed (54,2%). The results indicated a significant positive correlation with a moderate strength between FOMO and academic stress among medical students in the Medical Study Program, Faculty of Medicine, Tanjungpura ($p = 0.000$; $r = 0.492$). The novelty Examining the relationship of FoMO with academic stress in medical students in a specific university setting that has not been widely studied. Focusing on a population with

high academic stress makes these findings relevant for more targeted psychological interventions.

Keywords: Fear of Missing Out, Academic Stress, Medical Student, Cross-sectional design.

A. Introduction

The use of the internet and social media is increasing in the current era of globalization, along with the need for each individual to access the latest information. However, the pervasiveness of social media can have a psychological impact on its users, such as feelings of anxiety, fear, and a tendency to compare their personal lives with what they see online (Polii AFR, Solang DJ, 2023).

Losing access to communication or not being able to access information through digital devices can lead to anxiety called nomophobia, or the excessive fear of losing connection with the digital world. Research conducted on students in the 2020-2022 batch of the Faculty of Medicine, Tanjungpura University showed that 125 students experienced a moderate level of nomophobia (Przybylski AK, Murayama K, Dehaan CR, 2013). This is related to the high use of the internet and smartphones as a means to study lecture material, access presentation slides, and listen to lecture recordings, which encourages dependence on digital devices (R, 2023).

This high internet usage is related to the phenomenon of Fear of Missing Out (FOMO), which is the fear of missing out on information that occurs in the digital world. Previous research by Felix in 2020 showed that final year students at the Faculty of Medicine, Unika Atma Jaya University Jakarta experienced high FOMO, with a long duration of social media use, as well as the influence of geographical differences that trigger increased information lag, especially in big cities like Jakarta (Setiadi F, 2020) In the context of university students, differences in academic

achievement between freshmen, sophomores, and seniors have the potential to increase anxiety, with students often relying on social media for coping with the academic pressure they face (R, 2023).

This FOMO phenomenon risks triggering academic stress can affect students' learning outcomes and reduce their life satisfaction (Pratiwi A, Fazriani A, STIKes YATSI Tangerang D, 2020) Research conducted on first-year students at Tanjungpura University in 2019 showed that more than half of the students experienced high levels of academic stress (Fidhiani, 2020). Academic FOMO often arises when students feel pressured by the academic achievements of their friends, which causes them to strive to keep up, although sometimes at the expense of personal comfort (Hye S, 2022).

Research that studies the correlation between FOMO and academic stress at the Faculty of Medicine, Tanjungpura University has never been done before. Therefore, this study aims to examine whether there is a correlation between FOMO and academic stress levels in students of the Faculty of Medicine.

B. Methods

This research is an observational analytic study of cross-sectional design. The study sample was 168 medical students selected using proportionate stratified random sampling technique. Variables were measured using the Fear of Missing Out and Student Academic Stress Scale (SASS) questionnaires. Analysis was carried out using the Spearman correlation test. Data collection was carried out on Google Form with respondents of Medical Study Program students of the Faculty of Medicine, Tanjungpura University, class of 2021, 2022, and 2023.

Data from respondents who met the inclusion and exclusion criteria were processed using Microsoft Excel then editing, scoring, and coding based on the questionnaire. Furthermore, data entry

and tabulation were carried out through the help of Statistical Product and Service Solution (SPSS) 29.0.2.0 software. for normality, univariate, and bivariate processes. This study has received approval from the Research Ethics Committee of the Faculty of Medicine, Tanjungpura University through a Certificate of Passing Ethical Review with letter number No. 9208/un22.9: 9208/UN22.9/PG/2024.

C. Results and Discussion

Result

Most of the respondents in this study were dominated by the class of 2022 as many as 65 people (38.8%). **Table 1** also shows that most of the respondents were female as many as 98 people (58.3%), while the male respondents were 70 people (41.7%) with the average age of respondents aged 20 years as many as 59 people (35.1%).

Table 1. Characteristic Responden

No	Characteristic	Frequency (n)	Percentage (%)
1.	Batch		
	2021	58	34,5
	2022	65	38,8
	2023	45	26,7
	Total	168	100
2.	Gender		
	Female	98	58,3
	Male	70	41,7
	Total	168	100
3.	Age		
	18 year	22	13,1
	19 year	36	21,4
	20 year	59	35,1
	21 year	43	25,6
	22 year	6	3,6
	23 year	2	1,2

Total	168	100
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Distribution Fear of Missing Out

Table 2 shows that most of the research respondents experienced severe FOMO, namely 137 people (81.5%) and research respondents with no FOMO likely as many as 1 person (0.6%).

Table 2. Distribution Analysis *Fear of Missing Out*.

No	<i>Fear of Missing Out</i>	Frequency (n)	Percentage (%)
1.	Severe FOMO	137	81,5
2.	Medium FOMO	20	11,9
3.	At risk for FOMO	10	6
4.	No FOMO likely	1	0,6
Total		168	100

Distribution of Academic Stress

Table 3 shows that respondents with no academic stress have the highest number of 91 people (54.2%) and very high academic stress is only 1 person (0.6%).

Table 3 Distribution Analysis of Academic Stress

Academic Stress	Frequency (n)	Percentage (%)
No Stress	91	54,2%
Low	49	29,2%
Medium	15	8,9%
High	12	7,1%
Very High	1	0,6%
Total	168	100

Distribution of Academic Stress Based on Batch

The distribution shows that there were 30 respondents with no academic stress in the class of 2021 (17.3%), 38 people (22.48%) in the class of 2022, and 23 people (13.7%) in the class of 2023, while

students with very high academic stress levels in the class of 2021 were only 1 person (0.6%). In the 2022 and 2023 batches, there were no respondents with very high academic stress.

Distribution of Academic Stress by Gender

Distribution of Academic Stress Based on Gender shows that most of the research respondents were female with no academic stress, namely 51 people (52.03%) and male respondents, namely 40 people (57.14%).

Bivariate Analysis

Table 4 shows results of the SPSS 29.0.2.0 analysis with the Spearman correlation test to test the correlation of Fear of Missing Out with academic stress of Tanjungpura University medical students showed a significance value of 0.000 or less than 0.05. These results significance value of 0.000 indicate that there is a relationship between Fear of Missing Out and academic stress of Tanjungpura University medical students. The correlation coefficient number shows a positive result, which is 0.492. This shows that the relationship between Fear of Missing Out and academic stress is a unidirectional relationship and has a moderate or fairly strong relationship strength. Thus, it can be concluded that the higher the level of Fear of Missing Out, the higher the level of academic stress.

Table 4. Correlation Analysis of Fear of Missing Out with Academic Stress

<i>Fear of Missing Out</i>	Stres Akademik					Total	
	Sangat tinggi	Tinggi	Sedang	Rendah	Tidak	N	%
Severe FOMO	1	12	14	46	65	138	80,9
Medium FOMO	0	0	1	3	16	20	12,09
At risk for FOMO	0	0	1	0	9	9	6,5

No FOMO likely	0	0	0	0	1	1	0,5
Total						168	100%
Spearman's Rho	<i>Sig. (2-tailed) = 0,000, r = 0,492</i>						

Discussion

Fear of Missing Out

Fear of Missing Out (FOMO) is a form of anxiety that arises from the fear of missing out on the latest information or trends, which has an impact on physical and mental health. Individuals with FOMO tend to feel anxious if they do not know the latest activities or events around them (Sultan U, 2022). In this study, the majority of respondents, 81.5%, had a severe level of FOMO. In the context of medical students, who often have to sacrifice free time and social activities for the sake of their studies, FOMO is a significant stressor (Przybylski AK, Murayama K, Dehaan CR, 2013). This difference may be due to the characteristics of the respondents in this study, where most did not have psychological needs met, good life satisfaction, or adequate emotional support (Amadea, S. Saputera, M. Chris, 2022).

Severe FOMO is mostly found in sophomores (class of 2022) with an average age of 20 years. This is related to the characteristics of emerging adulthood, where individuals at this stage more often explore social relationships and personal identity (Aisyah, 2024). In addition, the phenomenon of severe FOMO in this study was experienced more by women (85.7%) than men (74.3%). According to (Beyens, I. Prison, E. Eggermont, 2016), women have higher levels of FOMO than men because they are more sensitive to social dynamics and engagement in digital social networks.

Meanwhile Misra, R., & Castillo, (2004) stated that women tend to report higher levels of stress in academic environments due to the emotional burden and social expectations they feel. This study also found that women experience academic stress more often than

men. Physiologically, women tend to be more responsive to negative emotions due to the dominance of the limbic system, which processes emotions primarily (Purwati, M. Rahmandani, 2020)(Maryama, 2015)(Dhull I, 2015) Meanwhile, men rely more on the prefrontal area, which focuses on rational problem solving. As a result, women more often use emotion-based coping mechanisms, while men tend to use problem-solving-based mechanisms (Mukholil, 2018).

Research shows that women are more susceptible to Fear of Missing Out (FoMO) because they generally have a higher need for social connection and emotional involvement in interpersonal relationships. This makes them use social media more often to maintain these connections, which can actually increase feelings of being left behind or not being socially engaged enough. In the context of medical students who have a high academic load, this pressure can exacerbate academic stress, especially in women.

Stress Academic

This study showed that the majority of respondents (54.2%) did not experience academic stress, while only a small proportion (7.1%) experienced high levels of academic stress. This result is different from some previous studies, such as Wahyudi's research on medical students at Riau University which showed that the majority of students experienced moderate stress (56.63%)(Wahyudi R, Bebasari E, 2017). Pala's research at Nusa Cendana University also indicated similar results with a dominant level of moderate stress (63.6%) (Pala MGT, Nurina RL, 2021). In contrast, Fidhiani's study noted that most first-year medical students actually experienced very high levels of stress (53.8%)(Fidhiani, 2020).

This difference in results could be due to several factors, including the time of data collection in this study which was carried out after

the lecture period ended, allowing respondents to have lower stress levels than during the exam period. In addition, students who do not experience stress or have low levels of stress may have good coping mechanisms in dealing with academic stressors (Permata KA, 2019).

High levels of academic stress are more dominant in sophomores (class of 2022). This can be attributed to greater academic pressure, such as thesis completion, which involves various obstacles, including difficult meetings with supervisors, repeated revisions, and other final assignment burdens (Hamid, A. Martha, 2022) Students with positive reactions to this pressure tend to be more motivated, diligent in consulting, and confident in completing their assignments. Conversely, negative reactions can result in procrastination, avoidance, thus slowing down the task completion process (Nadyandra, K. R. Nio, 2023).

Thus, the higher the level of FOMO experienced by students, the higher the level of academic stress felt. This result is in line with Polii's research which found that FOMO can be a trigger for academic stress, especially in final year students (Polii AFR, Solang DJ, 2023). This is influenced by the fear of being left behind by peers' information or achievements, especially through social media. This condition creates anxiety, which to some extent can be a positive motivation. However, if this anxiety is excessive, the impact becomes negative, disrupting the physical and psychological condition of the individual.

The inability to control FOMO can exacerbate academic stress, for example by increasing burnout due to coursework, exams, or lack of confidence in completing academic responsibilities. FOMO also makes it difficult for individuals to manage their time between social and academic activities, which in turn increases academic stress. Conversely, self-management efforts such as reducing social media use, focusing on academic goals, and practicing mindfulness can help reduce the negative impact of FOMO (Fitri AG, Harahap

MYA, Sitarani DA, 2023). Mindfulness plays an important role in improving concentration and managing emotions so that academic stress can be minimized (Cacha LA, Poznanski RR, Latif AZA, 2019). From a neurophysiological perspective, stress and anxiety involve several parts of the brain, such as the hypothalamus, amygdala, prefrontal cortex, and hippocampus. Excessive stress activation can disrupt the function of the amygdala and hippocampus which should help regulate anxiety. The release of stress hormones such as CRH, cortisol, and glucocorticoids can have long-term effects, such as brain damage and impaired cognitive function, emotions, and behavior (Yaribeygi H, Panahi Y, Sahraei H, Johnston TP, 2017).

D. Conclusions

Based on the research findings and discussion there is a significant relationship between Fear of Missing Out (FoMO) and academic stress in medical students at Tanjungpura University. Most students in this study experienced severe FOMO as many as 137 people (81.5%), followed by medium FOMO as many as 20 people (11.9%), at risk for FOMO as many as 10 people (6%), and only 1 person (0.6%) who experienced no FOMO likely. Nevertheless, the majority of students did not experience academic stress, as many as 91 people (54.2%). Others experienced low academic stress as many as 49 people (29.2%), moderate academic stress as many as 15 people (8.9%), high academic stress as many as 12 people (7.1%), and very high academic stress as many as 1 person (0.6%).

Further research is also recommended to use a longitudinal design to see the development of the relationship between FoMO and academic stress over time, especially during the important phases of medical education (pre-clinical and clinical). In addition, it is recommended that studies be conducted on a population of students from non-medical faculties as a comparison, in order to determine whether high levels of FoMO and academic stress are typical characteristics of medical students or are more common.

Qualitative research is also recommended to explore more deeply the psychosocial factors that influence the emergence of FoMO and stress in students.

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