

The Effect of FOMO (Fear of Missing Out) on Social Media on Insomnia

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Abstract

Background: FOMO is an anxiety that a person feels when they feel left out of the experiences shared by others on social media. In today's digital era, social media has become an important element in everyday life. The phenomenon of Fear of Missing Out (FOMO) is emerging as a significant negative impact, potentially disrupting individuals' mental health and sleep quality including insomnia. **Objectives:** This study aimed to explore the relationship between FOMO and insomnia and provide recommendations for management of social media use to improve sleep quality. **Methods:** A literature review was conducted through analyzing literature from Google Scholar, Pubmed, and Mendeley (2019-2024) with a focus on the keywords FOMO, insomnia, and mental health.

Results: Findings suggest that FOMO contributes to sleep difficulties and decreased sleep quality. High social media use, especially at night, correlated with increased anxiety and sleep difficulties. The study also identified mechanisms such as rumination and negative emotional affect as factors that exacerbate insomnia among individuals experiencing FOMO.

Conclusion: There is an association

significant between FOMO (Fear of Missing Out) and insomnia, where anxiety due to FOMO disrupts sleep patterns. Therefore, implementing management strategies such as limiting social media use before bedtime is essential to improve sleep quality and reduce the negative impact of FOMO.

Keywords: *Insomnia, FOMO, Social Media*

Introduction

In this fast-paced digital age, social media has become an integral part of everyday life. Platforms such as Instagram, Twitter and Facebook provide a space for individuals to connect, share experiences and get information instantly. However, the phenomenon of Fear of Missing Out (FOMO) has emerged as a negative impact of intensive social media use. FOMO is a feeling of anxiety that a person experiences when they feel left behind or do not get the same experience as others, which is often triggered by content uploaded on social media.¹

FOMO can affect various aspects of life, including mental and physical health. One significant impact of FOMO is insomnia. Social media users often feel compelled to stay connected and monitor the activities of friends or people they follow, which can disrupt their sleep.² Anxiety about missing out on information or other interesting experiences often makes it difficult for individuals to separate themselves from the virtual world, even when they should be resting. As a result, many users have difficulty falling asleep, wake up in the middle of the night, or feel unrefreshed when they wake up.²

According to the World Health Organization (WHO), sleep disorders such as insomnia can have a serious impact on a person's mental and physical health. WHO notes that poor sleep quality can contribute to health problems such as depression, anxiety, and cardiovascular disorders.³ In Indonesia, cases of insomnia are increasing, especially among teenagers and young adults who actively use social media. Research shows that around 30% of the adult population in Indonesia experience sleep problems, and this figure tends to increase as social media use increases.^{4,5}

This study aims to explore the influence of Fear of Missing Out (FOMO) due to social media use on insomnia to identify the psychological impact of FOMO, and provide recommendations for social media use management strategies that can help improve sleep quality and mental health of individuals.

Methods

The method used is a literature review where various literature from several sources is analyzed. References were taken from Google Scholar, Pubmed, and Mendeley from 2019 to 2024. The keywords used in the search were FOMO; Insomnia; Social Media; Mental Health. This article also uses secondary data on the incidence of insomnia obtained from journals to determine the relationship between FOMO on social media and the incidence of insomnia.

Discussion

FOMO (Fear of Missing Out)

Fear of Missing Out (FoMO) is a term introduced in 2004 to describe an emerging phenomenon on social media platforms. FoMO behavior consists of two stages; first, there is a perception of the fear of missing out, which is followed by compulsive actions to keep things that are perceived as possibly missing out in place.⁶ According to Self-Determination Theory (SDT), social media-related FoMO is a condition that arises when an individual's psychological needs, such as the need to be independent (self) and the need to connect with others (relatedness), are not met. Fear of Missing Out (FoMO) is caused by constant exposure to social media, the need to connect with others, social comparison, uncertainty, consumerism culture, and peer influence that can increase anxiety about missing out on experiences.⁷

Insomnia

Insomnia is defined as difficulty in falling asleep, maintaining sleep, or waking up too early in the morning. These sleep symptoms must be accompanied by disturbances during the day, such as decreased attention or problems in concentration. To be diagnosed as an insomnia disorder, these symptoms must occur at least three times a week for at least three months.⁸ Insomnia has a negative impact on health, including impaired mental function. It can affect an individual's memory in daily life. People may feel stressed, which can make them more emotionally unstable, and changes in sleep patterns have been shown to have a significant impact on mood.⁹ If this condition persists, it could be an indication of anxiety or depression that occurs during the night or early morning.

Etiology and Epidemiology of Insomnia

There are several factors that can cause insomnia, especially in teenagers, namely stress and an unhealthy lifestyle. One example of a bad lifestyle is addiction to social media use. Excessive use of social media can have negative impacts, such as difficulty managing time, feeling bored easily when not online, and decreased social skills.¹⁰

According to the National Sleep Foundation in 2018, the worldwide prevalence of insomnia reached 67%, with 1,508 cases in Southeast Asia, of which 7.3% occurred in the student population. In Indonesia, the prevalence of insomnia is estimated to be around 10% of the total population, which means around 28 million people experience this problem.¹¹

Pathophysiology

Insomnia is a complex interaction between psychological cognitive arousal and

disrupted circadian and homeostatic mechanisms. Decreased function of the sleep-wake switch may also contribute to insomnia. Sleep progresses through a gradual transition from non-REM (sleep without rapid eye movement) to REM (sleep with rapid eye movement). The AASM classifies sleep into 5 stages: W (waking), N1 (relaxed waking), N2 (light sleep), N3 (deep sleep), and R (REM sleep).

Several brain centers work together to promote sleep or wakefulness, with the sleep-wake cycle triggered by the ascending activation reticular system (ARAS). The ARAS stimulates wakefulness, while the ventrolateral preoptic area (VLPR) supports sleep. The activity of orexin in the lateral hypothalamus helps maintain the waking state. This process is called a "flip-flop switch," which allows a person to be in a state of wakefulness or sleep, but not both simultaneously.

Circadian factors promote wakefulness in a 24-hour cycle, while homeostatic factors provide the drive to sleep after accumulated awakening. The 3P behavioral model explains how acute insomnia can become chronic, encompassing predisposing factors, triggering factors, and factors that maintain insomnia. Predisposing factors, such as genetics and personality traits, tend to be unmodifiable. Triggering factors are usually stressful events, while maintaining factors include maladaptive behaviors and beliefs about sleep that can impede recovery.¹²

Classification

According to the third edition of the International Classification of Sleep Disorders (ICSD-3), insomnia is characterized by difficulty in initiating sleep, maintaining sleep continuity, or poor sleep quality. These symptoms occur despite adequate opportunity and conditions for sleep, and result in daytime dysfunction.¹³

Treatment and Management

Insomnia management is an important aspect of healthcare, given its significant impact on an individual's quality of life. Insomnia can be caused by a variety of factors, including psychological disorders, medical conditions, and poor sleep habits. Therefore, the approach to managing insomnia should be holistic, encompassing non-pharmacological interventions such as sleep hygiene, cognitive behavioral therapy, and lifestyle modification, as well as appropriate pharmacological treatment.

Non-Pharmacological

1. Sleep Hygiene:

- Educate patients on lifestyle modifications, such as limiting naps, avoiding late dinners, and reducing alcohol and caffeine consumption.
- Encourage healthy eating, exercise and a regular sleep schedule.
- The sleep hygiene index can be used for assessment.

2. Sleep Restriction Therapy:

- Limiting sleeping hours to increase sleep drive and sleep consolidation.
- It may cause daytime sleepiness, but the total sleep time can be extended over time.

3. Stimulus Control Therapy:

- Avoid maladaptive behaviors in bed (e.g. eating, reading) and only sleep when very sleepy.

4. Relaxation Therapy:

- Breathing exercises, meditation or yoga to improve sleep patterns and reduce anxiety.

5. Cognitive Behavioral Therapy for Insomnia (CBTi):

- Showed significant improvements in sleep time and sleep quality.
- It is conducted in 6 sessions and can be conducted individually or in groups, including through telehealth.
- Limitations include a high need for self-motivation and a shortage of effective therapists.

Pharmacological

1. Drugs that Affect GABA-A Receptors:

- **Benzodiazepines and Benzodiazepine Receptor Agonists (BzRAs):** Have sedative effects but may lead to tolerance and dependence.
- **Zolpidem:** Effective for short-term insomnia with various formulations (IR, CR, sublingual).
- **Zaleplon:** Has the shortest duration of action and is effective for insomnia.
- **Eszopiclone:** Effective for insomnia with comorbid depression, with side effects such as an unpleasant metallic taste.

2. Drugs that Affect Melatonin Receptors:

- **Melatonin:** Regulates circadian rhythms, effective for sleep disorders, especially in the elderly.
- **Ramelteon:** Lowers sleep latency with minimal side effects.

- **Tasimelteon:** Effective for blind patients with non-24-hour sleep disorders.

3. Orexin Receptor Antagonists:

- **Suvorexant:** Addresses night awakening, effective in appropriate doses, but not recommended in high doses.

4. Histamine-1 Receptor Antagonist:

- **Doxepin:** Effective at low doses for maintenance insomnia, with side effects such as headache.

5. Off-Label Drugs:

- **Antidepressants:** Trazodone, mirtazapine, and amitriptyline are used for insomnia in low doses.
- **Atypical Antipsychotics:** Olanzapine and quetiapine for insomnia with psychosis.
- **Anticonvulsants:** Gabapentin and pregabalin are effective for improving sleep efficiency, especially in patients with anxiety disorders.¹⁴

FOMO and Insomnia

Relationship between FOMO and Sleep Disorders

The duration of social media usage in Indonesia is high, with internet users spending around 5 hours and 6 minutes per day on tablets or PCs, and 3 hours and 52 minutes on mobile phones. Among teenagers, social media offers various advantages, such as a source of useful information, a practical communication medium, a way to expand friendship networks, a place to share photos and information, and an effective promotional tool. However, in addition to its benefits, social media also brings negative impacts, such as addiction, interference with learning activities, insomnia, decreased ability to interact socially, and the emergence of hedonistic and consumptive attitudes, including access to pornographic content. Excessive use of social media causes adolescents to become dependent, resulting in decreased sleep quality, making it difficult for them to sleep, and reducing the amount of sleep they have.¹⁵

The relationship between Fear of Missing Out (FoMO) and sleep disorders is increasingly recognized in contemporary research. FoMO, which is characterized by anxiety about missing out on a fulfilling experience, has been linked to a variety of sleep health problems, including delayed bedtime and poor sleep quality.

A review found a positive correlation between FoMO and sleep delay, sleep hygiene, as well as sleep quality, indicating that individuals with higher levels of FoMO tend to delay

sleep and experience poorer sleep outcomes.¹⁶ Social media use in the evening, which is often triggered by FoMO, has been shown to worsen cognitive alertness before bedtime, leading to decreased sleep quality.¹⁷

Mechanisms by which FoMO Affects Sleep

Research shows that FoMO can lead to rumination, which will make one more likely to delay bedtime and poorer sleep quality.¹⁸ In addition, negative emotions were found to be a mediator in the relationship between FoMO and sleep disorders, especially among adolescents.¹⁹ Although this review highlights the detrimental impact of FoMO on sleep, it is important to consider that not all individuals with FoMO experience sleep disturbances, suggesting a complex interplay of multiple factors that influence sleep health.

Strategies for Overcoming FoMO and Insomnia

5.1 Time Management Techniques

To effectively address the interrelated issues of Fear of Missing Out (FoMO) and insomnia, the application of effective time management techniques is crucial. FoMO can lead to sleep procrastination and poor sleep hygiene, which negatively impacts sleep quality.²⁰ By implementing strategies such as goal setting, prioritization, and creation of structured plans, individuals can allocate specific time for social interaction and digital engagement, thereby reducing FoMO-related anxiety.²¹

5.2 Restrictions on Social Media Use

Reducing time spent on social media, especially before bedtime, can help reduce anxiety caused by FoMO and improve sleep quality. Implementing time limits for social media use as well as using disabled features on apps can help individuals feel more connected without sacrificing sleep.

5.3 Good Sleep Health Practices

Adopting healthy sleep habits, such as maintaining a consistent sleep schedule, creating a comfortable sleeping environment, and avoiding caffeine or alcohol before bed, is essential. In addition, relaxation techniques such as meditation or deep breathing can help calm the mind and prepare the body for deeper sleep.

Conclusion

There is a significant relationship between FoMO (Fear of Missing Out) and insomnia, where anxiety arising from FoMO can disrupt individuals' sleep patterns. High social media use, especially at night, contributes to sleep difficulties and decreased sleep

quality. Therefore, it is important to implement management strategies that effective practices, such as limiting social media use before bedtime and good sleep health practices, to reduce the negative impact of FOMO and improve sleep quality.

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