PRE-BEDTIME SOCIAL MEDIA USE, SLEEP QUALITY, AND *SUBH* PRAYER ADHERENCE AMONG MUSLIM UNDERGRADUATES

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Abstract: This study investigates the impact of pre-bedtime social media use on sleep quality and spiritual well-being of Muslim undergraduates in Malaysia, specifically focusing on its interaction with early morning religious obligations. While social media has become deeply embedded in students' nightly routines, there is a lack of research exploring how late-night digital habits intersect with faith-based practices such as the *Subh* (dawn) prayer. Adopting a qualitative phenomenological design, the study utilized semi-structured interviews to capture the lived experiences of five purposively selected Muslim undergraduates from a public university located in the Klang Valley. Data were analyzed using Braun and Clarke's six-phase thematic analysis framework. Findings reveal that pre-bedtime social media use frequently leads to sleep disruptions, including delayed sleep onset and reduced restfulness. These disruptions significantly impact spiritual well-being, as participants reported difficulties waking for *Subh* prayer, leading to inconsistency or missed religious obligations. To mitigate these effects, students employ diverse sleep hygiene practices, ranging from practical strategies like app timers and alarms to culturally grounded *Sunnah* routines such as performing ablution (*wudhu*), reciting *zikr*, and Quranic verses. The study concludes that late-night digital engagement is a "double-edged sword" that can both hinder and support spiritual life. Implications suggest that universities and religious leaders should develop faith-informed digital well-being interventions that integrate behavioural discipline with Islamic values to foster healthier nightly habits.

Keywords: Muslim undergraduates, Phenomenological study, Sleep quality, Spiritual well-being, *Subh* prayer

1. Introduction

The rapid expansion of digital technologies has fundamentally reshaped the daily routines of young adults, particularly university students. In Malaysia, social media engagement has reached unprecedented levels, with students frequently integrating platforms such as TikTok, Instagram, and YouTube into their academic, social, and leisure activities (Howe, 2024; Husain, Husin, & Moktar, 2023; Kolhar et al., 2021). However, this heightened connectivity increasingly extends into late-night hours, encroaching upon time traditionally reserved for rest. Research indicates that pre-bedtime social media use stimulates both cognitive and emotional arousal, delaying sleep onset, shortening overall sleep duration, and disrupting natural circadian rhythms (Alonzo et al., 2021; Tandon et al., 2020). Because sleep is critical for neurophysiological restoration and emotional regulation (Gündoğmuş et al., 2020), compromised sleep quality has been closely linked to heightened levels of psychological distress, anxiety, depression, and reduced life satisfaction (Ahmed et al., 2024; Gautam et al., 2024; Su et al., 2024; Zainudin et al., 2023). Ultimately, night-time social media engagement creates a detrimental cycle of cognitive overstimulation, sleep disturbance, and psychological vulnerability (Alonzo et al., 2021).

Among Muslim undergraduate students, these challenges uniquely intersect with religious and spiritual routines. The early morning *Subh* prayer (*Ṣalāh al-Fajr*) is a fundamental daily obligation in Islam. Regular engagement in *Salah* is strongly associated with improved psychological health, emotional calmness, and overall well-being (Ijaz et al., 2017). Yet, disrupted sleep patterns resulting from late-night digital use often hinder students' ability to wake for *Subh*, thereby interfering with their spiritual discipline and religious fulfillment. Despite growing awareness of these adverse effects, nocturnal digital engagement remains deeply embedded in students' nightly routines (*Malay Mail*, 2017). Reports indicate that high pre-bedtime social media engagement is significantly associated with poor sleep

hygiene practices, such as irregular sleep schedules and pre-sleep screen exposure, which can impair academic performance and increase long-term vulnerability to psychological disorders (Ali et al., 2023).

While the general associations between social media use and mental health have been widely documented, significantly less attention has been directed toward the specific timing of use, particularly before sleep when physiological wind-down processes are most sensitive to disruption (Levenson et al., 2017). Furthermore, existing literature has predominantly focused on overall screen time within Western contexts (Dissing et al., 2022; Kuhn et al., 2024; Levenson et al., 2017). Although emerging studies in Asian settings have begun to explore similar themes, they rely heavily on cross-sectional quantitative surveys that provide limited culturally nuanced insights (Islam et al., 2025; Samat et al., 2020). In a context like Malaysia, where faith-based practices profoundly structure daily life, there remains a notable scarcity of qualitative research examining how pre-bedtime social media habits simultaneously intersect with sleep hygiene, mental health, emotional well-being, and spiritual obligations. The specific ways in which Muslim undergraduates conceptualize and practice sleep hygiene within their religious and cultural frameworks, and how this interacts with early morning prayer routines, represent a critical, underexplored dimension in the current literature.

Addressing this gap is essential for developing culturally sensitive interventions that promote holistic student well-being. Therefore, the present study aims to (1) explore how pre-bedtime social media use affects the sleep quality and overall well-being of Muslim undergraduate students, considering the influence of religious practices such as the early morning *Subh* prayer, and (2) examine the common sleep hygiene practices among Muslim undergraduate students and how these practices relate to their mental, emotional, and spiritual well-being. By situating digital behavior within a culturally and religiously relevant framework, this study seeks to contribute to a more holistic understanding of student well-being in Malaysia's digitally connected society, ultimately informing educators, counselors, and university administrators in developing practical, faith-sensitive support strategies.

2. Literature Review

2.1 *Pre-bedtime Social Media Use*

Malaysia's digital landscape reflects a society deeply embedded in online engagement, with roughly 26.8 million Malaysians spending nearly three hours daily on social media (Husain, Husin, & Moktar, 2023). These platforms are central to the daily routines of young adults, and university students represent one of the most active user demographics (Kaye, 2021; Kolhar et al., 2021).

Engaging with social media immediately before attempting to sleep triggers heightened cognitive and emotional arousal (Alonzo et al., 2021; Levenson et al., 2017). The stimulating nature of online interactions, combined with blue light exposure from screens, disrupts the body's natural wind-down process, delays sleep onset, and reduces overall sleep duration quality (Alam et al., 2024; Yau, Sun, & Moreno, 2020). Within the Malaysian context, pre-sleep gadget engagement is significantly linked to insomnia and poor sleep quality among university students (Abdalqader et al., 2018; Mohd Kamaruzihan & Soe, 2023).

Despite growing awareness of these issues, updated research focusing specifically on pre-bedtime social media use among Malaysian undergraduates remains limited. Most literature continues to examine overall screen time rather than the exact timing of usage. Given that the pre-sleep period is physiologically sensitive, further investigation is warranted to understand how these contemporary digital habits influence students' sleep and psychological well-being.

2.2 *Sleep Quality and Its Impact on Students' Well-being*

Sleep is fundamental for neurophysiological restoration, emotional regulation, and cognitive functioning, with its quality defined by subjective satisfaction, duration, and feelings of refreshment

upon waking (Gündoğmuş et al., 2020; Kline, 2020). For university students, adequate sleep is essential to sustain academic performance and emotional resilience. However, poor sleep quality is increasingly prevalent in higher education. In Malaysia, sleep disturbances among university students are significantly associated with symptoms of anxiety and depression (Ong, Azman, & Ho, 2023). A study at the International Islamic University Malaysia similarly found that over half of undergraduate participants experienced mild sleep difficulties alongside moderate to severe mental health symptoms, underscoring the strong interrelationship between sleep and psychological well-being (Daud, Hasmat, & Othman, 2023).

Digital habits, particularly pre-bedtime social media use, exacerbate this issue. Increased social media engagement before sleep is negatively correlated with sleep quality and positively associated with adverse psychological outcomes (Su et al., 2024). Disrupted sleep often acts as a mediating pathway through which excessive digital engagement worsens anxiety, stress, and depressive symptoms. Ultimately, understanding how pre-sleep social media use shapes sleep quality is crucial, as sleep is a primary determinant of students' mental health and overall quality of life.

2.3 *Digital Habits and Religious Well-Being in The Muslim Context*

For Muslim students, digital engagement frequently intersects with religious learning, community building, and *daʿwah* (Mashudi & Hilman, 2024; Nasaruddin et al., 2023). Accessing Qur'anic reflections and faith-based discussions online can enhance spiritual development when used purposefully (Ihwanah et al., 2024; Zaid et al., 2022). High social media use does not inherently diminish religiosity; Malaysian Muslim students often maintain strong religious commitments despite significant online activity (Aliman et al., 2021; Anwar et al., 2024). The critical factor is intention: students with strong intrinsic religiosity are less likely to engage in problematic digital habits compared to those with extrinsically motivated orientations (Buzdar et al., 2019; Younas et al., 2020).

However, Islamic principles emphasize moderation (*wasatiyyah*) and self-discipline (Hanapi, 2014). Unregulated late-night screen use conflicts with these values, particularly when it interferes with obligatory worship like the *Subh* prayer. Each additional hour of screen exposure in bed significantly increases the likelihood of insomnia and reduces overall sleep duration (Hjetland et al., 2025). Disrupted sleep compromises not only physical health but also spiritual routines requiring early rising and mental clarity. Ultimately, digital behavior must be navigated within an ethical framework to prevent unregulated usage from undermining both well-being and religious discipline.

2.4 *Common Sleep Hygiene Practices among Muslim University Students*

Sleep hygiene encompasses behavioural and environmental practices essential for promoting consistent and restorative sleep, with seven to nine hours widely recommended for young adults (Baranwal et al., 2023). Core components include maintaining a regular schedule, managing light exposure, limiting caffeine, and avoiding pre-sleep stimulation (Patel, 2021; Urbanová et al., 2023). Definitions often vary, encompassing both habits and environmental factors (De Pasquale et al., 2022). For university students, effectively implementing these practices heavily depends on attitudes and self-regulation capacities (Hamilton et al., 2020).

Within the Malaysian Muslim context, culturally grounded *Sunnah* bedtime routines function as unique forms of sleep hygiene. Integrating spiritual practices, such as early sleep, performing ablution, reciting *duʿa'*, and intending *Qiyamullail*, has been shown to enhance cognitive performance and restfulness (Khalid et al., 2022). Despite this awareness, poor sleep quality remains a prevalent issue, as consistent implementation of healthy habits proves challenging for many students (Humphries et al., 2021; Lakshme et al., 2025). Because sleep hygiene significantly predicts mental health outcomes, fostering these practices is crucial for maintaining students' emotional stability and daily functioning (Malik et al., 2024).

2.5 *Islamic Perspectives on Sleep and Well-Being*

Islam frames well-being as a holistic integration of physical, mental, and spiritual dimensions. According to the *Maqasid al-Shariah*, preserving faith, life, intellect, lineage, and wealth are foundational objectives (Rasool et al., 2020). Within this framework, sleep is viewed not only as a biological necessity but also as a divine blessing and a source of rest (Qur'an 25:47; 30:23).

Furthermore, the principle of *Tawhid* encourages purposeful living that balances worldly responsibilities with spiritual aspirations (Kurniawan, 2023). Consequently, moderation (*wasatiyyah*) and self-discipline are central ethical values guiding Muslim conduct (Hanapi, 2014). Managing digital habits thus becomes crucial for safeguarding *hifz al-nafs* (preservation of the self), encompassing both physical health and spiritual integrity (Mubarak et al., 2022).

Additionally, the principle that "Actions are judged by intentions" (Sahih al-Bukhari, Hadith 6689; Sahih Muslim, Hadith 1907) emphasizes the role of *niyyah*. While pre-sleep social media use guided by beneficial intentions can support spiritual growth (Abokhodair et al., 2020), excessive scrolling that disrupts rest and worship contradicts self-purification (*tazkiyah*). Ultimately, regulating late-night digital habits aligns with both psychological well-being and the higher ethical objectives of Islam.

2.6 *Theoretical Framework*

This study is grounded in an Islamic Framework of Holistic Well-Being, which integrates the physical, mental, and spiritual dimensions of human life. At its core, the principle of *Tawhid* (the Islamic worldview) encourages purposeful living by aligning worldly responsibilities with higher spiritual aspirations (Kurniawan, 2023; Lakshme et al., 2025). Thus, digital habits are not spiritually neutral; they must be managed carefully to ensure they contribute to a balanced life oriented toward both well-being and religious fulfilment.

A central component of this framework is the *Maqasid al-Shariah* (Objectives of Islamic Law), which emphasizes *hifz al-nafs* (preservation of the self) (Rasool et al., 2020). From this perspective, managing late-night social media use to secure restorative sleep is not merely a biological necessity, but a fundamental ethical duty to safeguard physical health, mental stability, and spiritual vitality (Mubarak et al., 2022). Excessive digital engagement that disrupts rest and prevents obligatory worship, such as the *Subh* prayer, directly undermines this objective.

Furthermore, the framework incorporates the Islamic ethical values of *wasatiyyah* (moderation) and *tazkiyah* (self-purification), guided by *niyyah* (intention). While beneficial intentions, like listening to Qur'anic recitations, can support pre-sleep relaxation and spiritual growth, unmoderated scrolling contradicts mindful living.

To bridge these spiritual concepts with behavioural mechanics, the framework integrates the psychological construct of Self-Regulation. Effective sleep hygiene depends heavily on self-monitoring and behavioural control (Hamilton et al., 2020; Urbanová et al., 2023). Students must employ self-regulation strategies to establish boundaries and prevent problematic digital use (Sagran & Shariffadeen, 2023; Sahranç & Urhun, 2021). Together, these dimensions frame late-night digital habits as a behaviour demanding both faith-based intentionality and psychological discipline.

3. METHOD

3.1 *Research Design*

This study adopts a qualitative research paradigm, specifically a phenomenological design. Phenomenology seeks to explore and describe individuals' lived experiences and the meanings they attach to those experiences (Alase, 2017; Tavakol & Sandars, 2025). It is appropriate for this study as

the aim is to understand how Muslim undergraduate students experience pre-bedtime social media use and how they perceive its influence on their sleep quality, and spiritual routines, including the *Subh* prayer. By focusing on participants' subjective perspectives, this design enables a deeper and culturally grounded understanding of their digital habits and well-being.

3.2 *Selection of Participants*

Participants were selected using purposive sampling, a commonly employed strategy in qualitative research that involves intentionally recruiting individuals who possess relevant, in-depth experiences related to the phenomenon under study (Dahal et al., 2024; Subedi, 2021). Rather than seeking statistical representativeness, purposive sampling prioritises the depth, richness, and relevance of data. In this phenomenological research, participant selection was guided by the need to engage individuals who have directly experienced the phenomenon and could articulate their reflections meaningfully. The final sample size was determined by data saturation, the point at which subsequent interviews yielded no substantially new themes, codes, or insights regarding the intersection of digital habits and spiritual routines (Subedi, 2021). During the data collection process, the researchers noted that by the fourth and fifth interviews, the narratives regarding sleep disruptions, self-regulation, and morning prayer struggles began to echo the established codes, indicating that thematic saturation had been successfully reached.

Based on these considerations, five Muslim undergraduate students from one public university in the Klang Valley were recruited. As a phenomenological study, the emphasis was placed on obtaining in-depth accounts rather than a large sample. Participants were required to meet the following inclusion criteria: (a) currently enrolled as Muslim undergraduate students at the public university (b) regularly using social media for at least two hours before bedtime; (c) willing to reflect on how this habit influences their sleep quality, mental health, emotional well-being, and spiritual practices, particularly the *Subh* prayer; (d) having access to a stable internet connection and private space for online interviews; and (e) providing informed consent voluntarily. Table 1 summarises their demographic backgrounds, including age, gender, academic programme, year of study, place of origin, and duration of social media use, providing context for interpreting their perspectives.

Table 1: Demographical Background of the Participants

Participant	Age	Gender	Programme & Year of Study	Place of Origin	Duration of Social Media Use
P1	22	Female	Bachelor of English Language and Literature, Year 2	Selangor	Since age 13
P2	21	Female	Bachelor of Human Sciences in Psychology, Year 2	Johor	Since age 12
P3	24	Female	Bachelor of Information and Communication Technology, Year 3	Selangor	Since age 20
P4	25	Male	Bachelor of Education (Islamic Education), Year 4	Kelantan	Since age 18
P5	24	Male	Bachelor of Education (Islamic Education), Year 4	Kuala Lumpur	Since age 15

3.3 *Data Collection Procedures and Ethical Considerations*

Data were collected via in-depth, semi-structured interviews, an approach well-aligned with phenomenological research to capture participants' lived experiences. The interview protocol focused on two primary areas: (a) the impact of pre-bedtime social media use on sleep quality and spiritual routines, particularly the *Subh* prayer, and (b) students' sleep hygiene practices. This flexible format ensured consistency while allowing deep exploration of personal reflections. Interviews were conducted online via Zoom, lasted 45–60 minutes, and were transcribed verbatim for thematic analysis.

Strict ethical standards were maintained to protect participants' well-being. Prior to data collection, all participants received a detailed consent form outlining the study's purpose, voluntary nature, and confidentiality measures. Written and verbal consent were secured before the audio-recorded sessions, and participants were informed of their right to withdraw at any time without penalty. To guarantee anonymity, identifying details were replaced with participant codes (P1–P5), and all data were securely stored exclusively for academic use. Finally, the study's credibility and trustworthiness were reinforced through careful documentation, reflexive practice, and peer review of the coding and themes.

3.4 *Data Analysis Procedures*

The data were analysed manually using thematic analysis (TA), a method well suited to phenomenological research as it enables the identification of patterns and meanings within participants' lived experiences (Majumdar, 2019). Thematic analysis provides a systematic yet flexible approach to interpreting qualitative data while enhancing rigour and transparency (Mackieson, Shlonsky, & Connolly, 2018).

This study followed Braun and Clarke's (2006) six-phase framework. First, interviews were transcribed verbatim and read repeatedly to ensure deep familiarisation with the data. Second, the coding procedure began by systematically generating initial codes across the entire dataset; researchers highlighted recurring statements, emotions, and meaningful phrases relevant to the participants' night-time habits and religious obligations. Third, these related codes were collated into broader categories to develop potential overarching themes. Fourth, theme development involved reviewing and refining these potential themes by checking them against the coded extracts and the entire dataset to ensure coherence and accurate representation of the participants' narratives. Fifth, themes were clearly defined, named, and presented with supporting verbatim extracts to capture the essence of the experiences. Finally, to verify the themes and ensure the trustworthiness of the findings, the researchers employed peer review of the coding process, cross-checking the developed themes against the raw transcripts, and engaged in reflexive practice to minimize researcher bias. This structured verification process ensured a credible and meaningful interpretation of participants' experiences.

4. Findings and Discussion

4.1 *First Research Question*

The first research question examined how pre-bedtime social media use influences Muslim undergraduates' sleep quality and overall well-being, including their ability to perform the *Subh* prayer. Three themes emerged: (1) sleep disruptions, (2) self-regulation efforts, and (3) spiritual well-being.

4.1.1 Theme 1: Sleep Disruptions

The findings reveal that pre-bedtime social media use exerts a complex, often contradictory influence on Muslim undergraduates' sleep quality. While a minority perceived it as relaxing, the majority experienced delayed sleep onset, reduced restfulness, and morning fatigue. For instance, P1 used ASMR content to induce sleep but admitted the trade-off: *"when i listen to asmr... i get relaxed. but if it's not that, then i would usually just scroll until i'm tired and then i'll fall asleep"*. Similarly, P2 noted that prolonged use disrupted her rest: *"when i use social media for too long, sometimes it can make me feel more awake... in the morning, let's say i did actually spend a lot of time on social media before sleeping i think usually morning i wake up pretty tired"*.

More severe disruptions were reported by P3, who frequently delayed sleep: *"because of social media, I end up sleeping late... around 2 a.m. or sometimes even until 3 a.m. And because I sleep late, of course I wake up late... our brains just feel like, 'Ugh, I'm too lazy to get up'"*. P4 explicitly highlighted the physiological impact of screen time: *"...the screen emits light… and that light actually refreshes our*

eyes, so it becomes hard to fall asleep. Even when I close my eyes, I can't sleep. So, I end up looking at the phone again". P5 further described cognitive spillover into his rest: *"when I'm scrolling, I've ended up dreaming about it. And then when I wake up... I feel tired, a kind of tiredness that I don't even know the reason for"*.

The participants' experiences of delayed sleep are directly linked to screen-emitted blue light exposure may suppress melatonin and disrupt circadian rhythms, impairing sleep quality (Alam et al., 2024; Yau, Sun, & Moreno, 2020). Evening smartphone use increases short-wavelength light exposure, compromising morning alertness (Höhn et al., 2021), as explicitly described by P4's refreshed eyes and P2's grogginess. Furthermore, the timing and intensity of digital engagement significantly shape young adults' sleep patterns (Charmaraman et al., 2020). Habitual late-night scrolling reduces sleep duration (Kolhar et al., 2021) and elevates stress, compounding the negative effects of sleep deprivation (Kaur & Singh, 2025). Excessive pre-sleep screen time ultimately impairs mood and memory (Alam et al., 2024), clearly explaining the daytime fatigue and lack of motivation reported by P3 and P5.

4.1.2 Theme 2: Self-Regulation Efforts

In response to the severe sleep disruptions caused by late-night digital habits, several participants described deliberate attempts to regulate their pre-bedtime social media use. Rather than remaining passive consumers, these Muslim undergraduates demonstrated significant agency in negotiating healthier routines, reflecting a growing awareness of how unmoderated scrolling compromises their physical rest and overall well-being.

For example, P1 attempted to enforce digital boundaries using an application timer, highlighting the friction it created when she relied on media to induce sleep: *"i guess i actually i went through a phase where i actually put like a time lock on my tiktok... i'm, uh, locked out of my tiktok... and so i would just, um, would not have like a outlet or a way to like exhaust myself to fall asleep"*. Similarly, P2 described briefly reducing her night-time usage and immediately noticing the cognitive benefits: *"it was actually kind of relaxing. not having the urge to actually look at social media... i feel like maybe i'm more relaxed especially when i sleep and when I wake up"*. For P3, the physical toll of digital fatigue prompted a reflective desire for change: *"I have thought about it before, like, 'Oh no, my sleep schedule is all messed up,' and my face always looks tired and sleepy. So yes, I've thought about changing it."*

Other participants successfully replaced screen time with alternative routines. P4 integrated spiritual discipline by purposefully putting his device away after evening worship: *"after praying 'Isha and reciting the Qur'an, I would just take a quick look at things and not use my phone again. I went to sleep around 11 p.m. and managed to wake up early... and feel mentally refreshed"*. P5 substituted digital consumption with physical activity to avoid cognitive overload: *"what I used to do before sleeping was to work out a bit... I would wake up in the morning feeling fresh, and my mind felt clear because the night before, I didn't feed my brain with too much information, or anything too emotionally heavy"*.

Effective management of social media heavily relies on self-monitoring and behavioural control to prevent problematic engagement (Sahranç & Urhun, 2021). The participants' conscious efforts to limit screen time, whether through app timers or behavioral substitution, corroborate findings that self-control and adherence to positive norms are fundamental in fostering healthier digital habits among university students (Shahzalal, Adnan, & Abdullah, 2023). As P1's initial frustration with her app timer demonstrates, breaking habitual scrolling requires significant conscious effort, yet the long-term cognitive and emotional relief reported by P2 and P5 underscores the immense value of this psychological resilience.

4.1.3 Theme 3: Spiritual Well-Being

The study reveals a profound intersection between pre-bedtime digital habits and the spiritual lives of Muslim undergraduates. For these students, late-night social media engagement is not merely a matter of physical fatigue but a significant determinant of their ability to fulfil religious obligations,

particularly the *Subh* prayer. Participants frequently reported that prolonged scrolling delayed sleep onset, making it physically difficult to wake up. P1 admitted, *"Oh yes, there's been times where I missed subuh because I slept late… i feel like i only do what's necessary"*. P2 shared a similar struggle: *"occasionally I will fall asleep pretty late without setting any alarms, and I might sleep right past Subuh. Because... social media can keep me up pretty late"*. The compounding nature of this habit was articulated by P4: *"In the early stages... I was still able to fight against the habit and wake up for Subh prayer... However, over time, the negative effects became more apparent... sleeping late caused me to wake up late or miss Subh prayer altogether, which then had to be performed as qadha"*.

The participants' experiences of missing obligatory prayers align with Nasution et al. (2021), who caution that excessive digital reliance can weaken religiosity by causing the neglect of fundamental practices. This failure to disconnect represents a breach of *wasatiyyah* (moderation) and a disruption of the *Tawhidic* paradigm, which calls for balancing worldly distractions with spiritual responsibilities (Hanapi, 2014; Kurniawan, 2023). When social media use physically prevents a student from waking for *Subh*, it directly undermines *hifz al-nafs* (preservation of the self), compromising both biological rest and spiritual vitality (Mubarak et al., 2022).

Despite these disruptions, the findings also highlight a complex "digital duality." Social media is not solely a source of distraction; it simultaneously serves as a vital tool for spiritual enrichment. Several participants actively curated their feeds to consume faith-based content before sleep. P5 explained, *"when I really can't sleep, I'll open TikTok, especially Islamic pages where people share talks from Ustadh Nouman Ali Khan... just to help me feel calm and relaxed before sleeping"*. P4 similarly utilized digital platforms for religious education: *"I also usually use social media to watch Islamic lectures and Q&A sessions… For Qur'an recitation, I also use apps like Al-Qur'an apps"*. P5 further emphasized the spiritual benefit of this content over secular entertainment: *"Instead of listening to music, I would rather listen to a podcast with Islamic content… I believe that before sleeping, when we engage in good things, inshaAllah, our sleep will be more peaceful... listening to zikir... help us feel safer and make it easier to fall asleep"*.

This intentional digital engagement aligns with recent scholarship suggesting that integrating social media into one's spiritual routine can enhance motivation and deepen the internalization of Islamic values (Marlina & Nadirah, 2024). When students deliberately choose Qur'anic recitations or Islamic lectures over mindless scrolling, they actively engage in *tazkiyah* (self-purification). Rather than allowing technology to detract from their faith, they reorient their digital habits to support a purposeful, wholesome life (Rasool et al., 2020). Ultimately, pre-bedtime social media use functions as a "double-edged sword," possessing the capacity to either hinder spiritual discipline through sleep deprivation or foster profound emotional regulation and faith-based connection, entirely dependent on the user's conscious intention and self-control.

4.2 *Second Research Question*

To answer the second research questions, this research identifies three primary themes regarding sleep hygiene among Muslim undergraduates: (1) nightly routines and pre-bedtime habits, (2) strategies to maintain sleep hygiene, and (3) recommendations and advices for good sleep hygiene.

4.2.1 Theme 1: Nightly Routines and Pre-Bedtime Habits

Participants described a diverse range of nightly routines that shape their sleep hygiene, blending practical tasks, intense digital engagement, and foundational spiritual practices. While some students relied on social media as their primary wind-down ritual, others actively incorporated personal care or religious obligations to physically and mentally prepare for rest. For instance, P1 emphasized environmental control combined with digital sleep aids: *"Before i go to sleep, what i like to do is kind of like get myself comfortable... i usually, when i sleep, i like to wear extra layers because i like my room very cold… and usually i wear earphones and i will find like a sort of sleep aid asmr"*. Conversely, P2 illustrated the pervasive and unregulated nature of night-time digital consumption, admitting: *"Right*

before bed, usually i tend to just lie down on bed and… scroll on the phone. at least maybe two or three hours i'll be on the phone… if i go on tiktok, sometimes i can spend up to maybe four hours on it without noticing… it can like go up to maybe 1 or 2 or maybe even 3 a.m.".

Similarly, P4 detailed a routine heavily dominated by digital communication and scheduling: *"Usually, I go to sleep because I'm busy on my phone. constantly using my phone before bed... I usually check my schedule for the next day… finish going through WhatsApp… move to Telegram… Sometimes I just fall asleep like that"*. In contrast, P3 and P5 integrated specific practical and spiritual tasks to punctuate their screen time. P3 noted the sequence of her habits: *"Going to the bathroom, brushing my teeth, washing my face, and if I haven't performed the Isha' prayer yet, I'll do that first. then, once everything is settled, I'll go to bed and start using social media"*. P5 highlighted physical personal care as a necessary emotional reset after consuming stressful online content: *"when we scroll through social media, the content can be really stressful… my coping mechanism… is to shower. It helps me feel refreshed again"*.

The heavy reliance on electronic devices before bedtime, particularly for extended periods as reported by P2 and P4, is a well-documented catalyst for disrupted sleep quality in university populations (Pham, Chuang, Kuo, Yeh, & Liao, 2021). Furthermore, research among Malaysian students confirms that specific pre-sleep behaviours, whether positive, like physical hygiene, or negative, like digital overstimulation, directly influence sleep quality outcomes (Tamsin, Tuah, Sarahintu, & Marcus, 2019). Despite an awareness of proper sleep hygiene practices, many Malaysian undergraduates continue to experience poor sleep quality due to the pervasive influence of their digitally saturated daily routines and environments (Lakshme, Sharranesh, Khang, & Arvinder-Singh, 2025).

When students allow unmoderated scrolling to dominate their pre-sleep routines, they risk neglecting *hifz al-nafs* (preservation of the self), thereby compromising the restorative sleep that Islam explicitly views as a divine blessing and a source of rest (Mubarak et al., 2022; Qur'an 25:47). However, the intentional integration of the *Isha* prayer (as seen with P3) or utilizing a shower for emotional cleansing (as seen with P5) demonstrates essential attempts at *tazkiyah* (self-purification). These practical and spiritual tasks act as vital buffers against the cognitive overload of the digital world. Ultimately, these findings reveal that true sleep hygiene for Muslim undergraduates requires more than just behavioral adjustments; it demands a holistic balance of behavioral discipline, emotional regulation, and faith-based intentionality to effectively navigate the digital era.

4.2.2 Theme 2: Strategies to Maintain Sleep Hygiene

Beyond their standard nightly routines, participants shared specific, deliberate strategies they employed to preserve and enhance their sleep hygiene. These methods reflect a conscious effort to balance physical, psychological, and spiritual well-being before rest. The strategies ranged from practical digital management to deeply ingrained cultural and religious practices.

On a practical level, participants actively mitigated digital and environmental disruptions. P1 focused on sensory control through auditory limits: *"When i try to sleep, i'll always make sure that i double check my alarms and make sure that they are at a volume where i can hear them enough… instead of like putting them on silent is actually just like put it on the lowest volume as possible."*. P2 recognized the need to break the scrolling habit by imposing structural barriers and finding alternatives: *"Maybe… use those screen timer things… to limit social media use. or maybe getting other hobbies instead of scrolling, like reading or drawing."*. Meanwhile, P3 emphasized the consistency of basic hygiene, noting: *"I just do the usual, like going to the toilet, washing my face, brushing my teeth… nothing extra or out of the ordinary."*.

However, the most prominent and elaborate strategies involved the robust integration of spiritual practices. P4 detailed an extensive *Sunnah* sleep routine that combined physical cleanliness with intense spiritual remembrance: *"Before sleeping, I brush my teeth and take wudhu (ablution). Then, when I'm about to sleep, I dust off my bed with the blanket… While dusting, we recite zikr… Usually, while*

dusting, I recite Subhanallah, Alhamdulillah, Allahu Akbar. … I usually recite Surah Al-Mulk after the Isyak prayer, or sometimes right before sleeping. Then I'll read… the 3 Quls, Ayat al-Kursi, and selawat. … while lying down and waiting for my eyes to slowly fall asleep, I will recite selawat as much as I can.".
Similarly, P5 employed a strategy of cognitive and spiritual substitution, consciously replacing secular entertainment with faith-based auditory calming methods to prevent cognitive overload: *"At night, instead of listening to songs… I would rather listen to a podcast, especially podcasts with Islamic content… listening to the Quran is also good… or listening to zikir. … Make sure that the podcast is not about something too heavy or intense… because if it's too heavy, we might end up overthinking it."*.

The participants' conscious integration of *Sunnah* bedtime practices, such as performing *wudhu* (ablution), reciting *zikr*, and intentionally seeking calm, directly supports empirical evidence demonstrating that integrating spiritual routines into bedtime habits enhances restfulness and supports cognitive functions, including memorisation and problem-solving among university students (Khalid et al., 2022). By actively substituting mindless scrolling with Qur'anic recitation and ritual ablution, students like P4 and P5 engage in *tazkiyah* (self-purification), physically and spiritually cleansing themselves from the day's worldly distractions. This intentional curation of their pre-sleep environment reflects a profound commitment to *hifz al-nafs* (preservation of the self), proactively protecting their mental clarity and emotional stability from digital overstimulation. Ultimately, for these Muslim undergraduates, maintaining healthy sleep hygiene is not merely a psychological coping mechanism; it is an act of spiritual discipline that successfully harmonizes behavioural self-control with foundational Islamic values.

4.2.3 Theme 3: Recommendations and Advice for Good Sleep Hygiene

Drawing from their lived experiences and personal struggles with late-night digital habits, participants offered practical and faith-informed recommendations to help their peers improve sleep hygiene. These suggestions emphasized controlling screen time, managing environmental factors, and intentionally curating digital content to foster a healthier pre-sleep mindset.

Practical and environmental adjustments were highly emphasized. P1 highlighted the importance of regulating sensory inputs, advising: *"Control the content that you consume before bed… the type of content you consume will affect your mental state and that will affect your sleep… control brightness… tone it down… if you listen to asmr, make sure the volume is not damaging for your ears in the long run"*. P4 similarly stressed the necessity of environmental lighting and setting strict time boundaries, particularly after evening worship: *"Reduce phone usage... from two hours to one hour. That means, after the Isyak prayer... just look at important things that we need to take note of for the next day… Use it in sufficient light... don't use it in the dark, because that damages our eyes and also affects our sleep quality. And when you're ready to sleep, then you can switch off the lights and also turn off the phone"*.

Beyond environmental controls, participants advocated for behavioral substitution and cognitive reframing. P2 suggested replacing digital consumption with analog activities: *"Getting other hobbies other than, you know, scrolling on social media, like maybe reading or like, i don't know, drawing or stuff like that, because it might help because you'll be more distracted with other things instead of social media"*. Furthermore, P5 underscored the psychological importance of emotional regulation when interacting with online media, recommending a conscious filtering process: *"Everything written or shown on social media should ideally be something good… And our minds and our thoughts play a big role in filtering and interpreting any content from social media... let's say we're scrolling and come across something negative, train your mind and your emotions to interpret and reframe it into something positive for ourselves … this will help us feel safer and make it easier to fall asleep"*.

The participants' advice to limit screen brightness, control volume, and establish a dark, sleep-conducive environment aligns with established clinical recommendations that proper sleep hygiene, including structured routines and environmental management, significantly enhances sleep quality and overall mental health (Patel, 2021; Varadharasu & Das, 2024). Furthermore, P5's emphasis on cognitive

reframing demonstrates an advanced coping mechanism to mitigate the stress induced by emotionally heavy content, confirming that psychological relaxation is just as critical as physical environment preparation.

By advising others to limit phone usage after the *Isha* prayer and physically turn off devices, participants are advocating for the active protection of *hifz al-nafs* (preservation of the self), ensuring that technology does not compromise the biological rest required for daily and spiritual functioning (Mubarak et al., 2022). Moreover, P5's advice to intentionally filter and reframe digital content into something positive reflects a profound application of *tazkiyah* (self-purification) and *niyyah* (intention). Rather than passively absorbing harmful media, this proactive cognitive filtering aligns daily digital interactions with the *Tawhidic* paradigm, ensuring that even mundane pre-bedtime habits contribute to a purposeful, wholesome life (Kurniawan, 2023; Rasool et al., 2020). Ultimately, this peer-led guidance demonstrates that achieving optimal sleep hygiene requires integrating psychological resilience with enduring Islamic ethical values.

4.3 *Discussion on Islamic Perspectives and Theoretical Framework*

These findings can be meaningfully interpreted through an Islamic Framework of Holistic Well-Being. Under the *Tawhidic* paradigm, students' digital habits are not spiritually neutral; they must align worldly practices with spiritual aspirations (Kurniawan, 2023). The ambivalent role of pre-bedtime social media, providing emotional relief yet causing sleep disturbance, highlights the modern struggle to maintain *wasatiyyah* (moderation) (Hanapi, 2014).

When unmoderated screen use disrupts restorative sleep and prevents students from waking for the *Subh* prayer, it directly undermines the *Maqasid al-Shariah* objective of *hifz al-nafs* (preservation of the self) (Mubarak et al., 2022). This unchecked consumption transforms sleep, described in the Qur'an as a divine blessing and necessary rest (Qur'an 25:47; 30:23), into a period of cognitive exhaustion.

Conversely, healthy sleep hygiene functions as a deeply embedded religious discipline. When students substitute mindless scrolling with *Sunnah* bedtime routines, such as performing *wudhu*, reciting *zikr*, or consuming Islamic lecture, their actions reflect the transformative power of *niyyah* (intention). This intentional curation aligns digital engagement with *tazkiyah* (self-purification) (Rasool et al., 2020). Ultimately, optimal sleep hygiene requires harmonizing behavioral self-control with foundational Islamic values to ensure a purposeful, wholesome life.

5. Conclusion

This study highlights the complex impact of pre-bedtime social media use on the sleep hygiene and spiritual practices of Muslim undergraduates. Social media acts as a double-edged sword, offering emotional regulation and spiritual enrichment while simultaneously causing cognitive strain, sleep disruption, and hindered adherence to the *Subh* prayer. To navigate these challenges, students actively employ self-regulation and culturally grounded faith-based routines. Ultimately, this research underscores the necessity of mindful digital engagement and holistic mental health interventions that integrate behavioural discipline with Islamic ethical values, fostering healthier, balanced lifestyles for Muslim students in a digital age.

5.1 *Implications of the Study*

This study offers vital implications across academic, institutional, and individual levels. For educators and counsellors, recognizing social media's dual role is crucial. Universities should implement targeted digital well-being and sleep hygiene programmes that integrate faith-informed strategies, such as Qur'anic recitation and mindful intention-setting, alongside general health advice. At the policy level, student support services must bridge mental health promotion with Islamic cultural frameworks to ensure relevance. Finally, these findings empower students to cultivate self-regulation and moderation,

aligning their nightly digital habits with both psychological well-being and spiritual obligations to foster a balanced, holistic lifestyle.

5.2 *Limitations of the Study*

This study has several limitations. First, a short timeframe and recruitment challenges resulted in a small sample of five Muslim undergraduates from a single university. While purposive sampling suits a phenomenological design, it restricts the transferability of findings to broader populations. Additionally, relying on self-reported interview data introduces potential recall and social desirability biases. Consequently, these qualitative findings are not intended for broad generalization. Instead, they offer deep, contextualised insights into how late-night digital habits shape the mental health, sleep hygiene, and spiritual routines of Muslim students.

5.3 *Recommendations for Future Research*

Future research should expand to diverse populations across various university and cultural contexts. Comparative studies between Muslim and non-Muslim students could illuminate how religious practices mediate digital habits and well-being. Additionally, future studies could adopt comparative designs to evaluate the effectiveness of specific self-regulation strategies, such as comparing the sleep quality and spiritual discipline of students who actively use digital boundaries (e.g., app timers) against those who do not. Researchers might also broaden the scope to investigate the impact of other late-night activities, such as midnight sports, late-night studying, or socializing, on students' ability to maintain sleep hygiene and consistently perform their *Subh* prayers. Finally, employing longitudinal designs and exploring specific digital platforms or faith-based interventions will provide deeper insights into long-term behavioural patterns, refining practical recommendations for educators and policymakers.

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