



Spirituality, Sleep Quality and Psychological Distress of Youths in Hong Kong

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Abstract. This study aims to raise public awareness concerning youth mental health and underscore the importance of spirituality and sleep quality in fostering well-being by examining the relationship between spirituality, sleep quality, and psychological distress. A total of 191 youth samples in Hong Kong, aged 15 to 24 years, were collected, consisting of 40.8% males and 59.2% females. The mean age was 19.32 years, with a standard deviation of 2.42. The Pittsburgh Sleep Quality Index, the Depression Anxiety and Stress Scale 21, and the Attitudes Related to Spirituality Scale were utilised in this study. The PROCESS Macro for SPSS v4.2 Model 4 was employed to assess the relationship between spirituality, sleep quality, and psychological distress. Sleep quality is considered a mediator in the relationship between spirituality and psychological distress. In the first model, the results indicated that spirituality is positively related to quality sleep ($\beta = .21, p = .01$) but not related to stress ($\beta = .04, p = .64$). Moreover, quality sleep is negatively related to stress ($\beta = -.73, p < .001$). Spirituality is indirectly associated with stress through quality sleep ($\beta = -.11$). In the second model, the results indicated that spirituality is positively related to both quality sleep ($\beta = .21, p = .01$) and anxiety ($\beta = .10, p = .04$), while quality sleep is negatively related to anxiety ($\beta = -.74, p < .001$). The total effect of spirituality on anxiety is insignificant ($\beta = -.05, p = .50$). The positive direct effect of spirituality on anxiety ($\beta = .10$) suppresses the negative indirect effect on anxiety through quality sleep ($\beta = -.15$). In the third model, the results indicated that spirituality is positively related to quality sleep ($\beta = .21, p = .01$) but not related to depression ($\beta = .02, p = .73$). Moreover, quality sleep is negatively related to stress ($\beta = -.71, p < .001$). Spirituality is indirectly associated with depression through quality sleep ($\beta = -.15$). The results of the study indicate that spirituality has the potential to enhance sleep quality while concurrently alleviating stress and depression. Interventions that incorporate spiritual practices may be used to enhance mental health among young people. A notable finding from this study indicates that spirituality may exacerbate anxiety. Future studies may investigate the intricate relationship between spirituality and anxiety to ascertain whether the deleterious effects of spirituality fluctuate across different contexts.

Keywords. Spirituality, Sleep quality, Psychological distress

1. Introduction

The alarming rise in student suicides in Hong Kong has heightened community concern regarding the mental health of youths. In 2023, a local study revealed that 10% of the

interviewed youths experienced sleep disorders, and inadequate sleep influences mental well-being (Lo, 2023). Individuals facing mental health challenges often experience sleep disturbances, and poor sleep in turn exacerbates mental health issues (Sun, 2024). A survey conducted by the Hong Kong Playground Association (2023) also noted a significant crisis in mental health and sleep quality among Hong Kong's youths, with 52.5% reporting anxiety, 46.2% experiencing depression, and 30.5% suffering from stress, particularly among students in Secondary 4 to 6. Additionally, 26.8% of children and adolescents reported unsatisfactory sleep quality, indicating a risk of insomnia. Local research consistently demonstrates that lower sleep quality correlates with increased levels of depression, anxiety, and stress, suggesting that improved sleep can effectively alleviate mood disorders in youths.

However, there is a lack of research exploring the relationship between spirituality, sleep quality, and mental health. Previous study indicates that spirituality and mental health are positively related. Mental disturbances can lead to existential confusion, diminishing individuals' understanding of their beliefs, values, and behaviours, thereby complicating their quest for life's meaning (Krok, 2015). Good spiritual health can help individuals find meaning and value in their lives, enabling them to better cope with life's adversities (Krok, 2015). The objectives of this research include assessing the sleep quality and mental health status of Hong Kong youths and examining the impact of spirituality and sleep quality on their mental health. Conducting this research will provide a deeper understanding of the needs and challenges faced by young people. Youth is a crucial stage for physical and mental development, and health during this period has a profound influence on future life trajectories. Understanding the sleep quality and mental health of youths can help identify potential issues and facilitate timely interventions.

Spirituality is one of the internal resources that enhances resilience, enabling youths to adapt more flexibly to change and uncertainty (Delgado, 2007). In a rapidly evolving social environment, spiritually healthy youths are often better equipped to face life's challenges. Research into spiritual development can shed light on the needs of young people as they explore their identities, grapple with the meaning of life, and form their values. Given the increasing pressures from academic demands and social media, which may adversely affect sleep quality and mental health, a study contextualised within Hong Kong's unique social landscape that explores the relationship between spirituality, sleep quality, and mental health can yield pertinent data and analysis. The findings will provide critical support for governmental and organisational policies aimed at improving adolescent health and raising community awareness regarding these issues. Ultimately, this research seeks to enhance public understanding of youths' spirituality, sleep quality, and mental health, and promote comprehensive support for their development from families, schools, and the wider community.

2. Spirituality and Mental Health

Spirituality refers to the belief in a higher power, which underscores a commitment to exploring the transcendent dimensions of existence while pursuing meaning, truth, and purpose in life (Bradley, 2009). This study takes a wider perspective, defining spirituality as a person's worldview, way of life, choices, and behaviours, which are not

exclusively tied to religious activities (Braghetta et al., 2021). Despite the growing secularisation, there is an increase in engagement in individual spiritual practices such as yoga and mindfulness meditation (King et al., 2024). Research has demonstrated a direct correlation between psychological well-being, spirituality, and health-related behaviours (Božek et al., 2020). The significance of spirituality on individual well-being has been widely discussed in recent studies (Hadzic, 2011). It is considered one of the protective factors and coping resources (Koenig, 2009). Spirituality has a positive impact on mental health, which is negatively related to anxiety, depression and burnout, while positively related to quality of life (Brown et al., 2013; Delgado, 2007; Ho et al., 2016). People engaging in spiritual activities have low levels of depression and anxiety because they tend to find meaning in life, have high life satisfaction and can handle life challenges (Brown et al., 2013). The feelings of blessedness, connectedness and transcendence enable spiritual people to avoid mental health-related problems (Ho et al., 2016). Spirituality is also an important component of self-identity, which leads to positive feelings of self-worth (Hayman et al., 2007). A study examining the relationships among spiritual health and anxiety in cancer patients revealed a negative correlation between anxiety and spiritual health, indicating that individuals with poorer spiritual health often experience higher anxiety levels (Khalili et al., 2024). Based on the findings of previous studies, it is anticipated that individuals with higher levels of spirituality tend to have better mental health.

3. Spirituality and Sleep Quality

Quality sleep is characterised by undisturbed and restorative rest, emphasising that the quality of sleep is more critical than the quantity of hours slept. Indicators of poor sleep quality include difficulty falling asleep, frequent awakenings during the night, and persistent feelings of exhaustion despite adequate rest (Centers of Disease Control and Prevention, 2024). Spirituality is significantly correlated with the quality of sleep (Brewer-Smyth et al., 2020). Interventions incorporating spiritual components are effective in improving sleep quality and alleviating insomnia (Moradi et al., 2022). High sleep quality contributes to emotional stability, allowing individuals to maintain inner peace during spiritual exploration (Khalili et al., 2024). Adequate sleep enables individuals to engage more fully in spiritual practices such as meditation and reflection, which facilitate deeper self-exploration. Sleep quality has a direct impact on cognitive functions, including thinking, memory, and creativity. Quality sleep supports brain repair and reorganisation, thereby enhancing individuals' capacity for spiritual thought and understanding complex philosophical issues. While previous studies may not confirm the effect of spirituality on sleep quality, particularly among young people, this study aimed to clarify how spirituality affects sleep quality and, subsequently, the well-being of young people in Hong Kong.

4. Sleep Quality and Mental Health

Quality sleep is crucial for maintaining overall well-being and has a significant impact on cognitive functions, including attention, memory, and decision-making. Insufficient

sleep impairs concentration, learning, and work performance while also heightening stress levels. Chronic poor sleep quality elevates the risk of various mental health disorders, including anxiety disorders and depression. Insufficient sleep exacerbates emotional responses and diminishes resilience to stress (Alotaibi et al., 2020). A study conducted by the Hong Kong Playground Association (2023) revealed that 32.3% of the interviewed children and adolescents exhibited poor sleep quality and were likely to suffer from insomnia. Inadequate or poor-quality sleep disrupts neurochemical balances, such as serotonin and dopamine, which are closely linked to mood and behaviour (Alotaibi et al., 2020). Individuals with poor sleep quality often struggle with emotional regulation and are more susceptible to issues such as anxiety, depression, and irritability. Conversely, individuals who experience good sleep quality tend to exhibit better psychological health, characterised by higher life satisfaction, self-worth, and overall well-being, along with fewer symptoms of depression (Lai & Ma, 2020). Improved sleep quality is a viable strategy for alleviating mood disorders in young individuals. Enhancing sleep quality can lead to better mental health outcomes, promoting emotional and psychological stability. It is anticipated that poor sleep quality correlates with increased levels of depression, anxiety, and stress. This study aims to raise public awareness about youth mental health and highlight the importance of spirituality and sleep quality in promoting well-being by investigating the relationship between spirituality, sleep quality, and psychological distress. It is hypothesised that spirituality can mitigate psychological distress by enhancing sleep quality.

5. Methods

Youths in Hong Kong were invited to participate in the study via the researcher's network. A total of 191 youth samples, aged 15 to 24 years, were collected, consisting of 40.8% males and 59.2% females. The mean age was 19.32 years, with a standard deviation of 2.42. The sample consisted of individuals with diverse educational backgrounds, with the majority (56.0%, $n = 107$) holding a bachelor's degree. Secondary school graduates (Forms 4-6) comprised 31.4% ($n = 60$), while those with higher diploma/associate degree accounted for 6.8% ($n = 13$). A small proportion of the sample had completed Secondary three or below (3.1%, $n = 6$) or held postgraduate qualifications (2.6%, $n = 5$). The questionnaire was administered from February to March 2025, and respondents provided informed consent before completing the survey.

6. Measures

6.1. Pittsburgh Sleep Quality Index (PSQI)

The Pittsburgh Sleep Quality Index (PSQI) was utilized in this study for assessing sleep disorders and comprises seven components: subjective sleep quality, sleep latency, total sleep duration, sleep efficiency, sleep disturbances, use of sleep medications, and daytime dysfunction (Buysse et al., 1989). Scores on the PSQI range from 0 to 21, with lower scores indicating better sleep quality. Specifically, a score of 0-5 reflects very good sleep quality, 6-10 indicates fair sleep quality, 11-15 suggests poor sleep quality,

and 16-21 signifies very poor sleep quality. A total score exceeding five warrants increased attention to sleep and rest, while a score above 10 suggests a likelihood of requiring professional intervention. The total scores were reversed in this study; higher scores imply better sleep quality. In this study, the Pittsburgh Sleep Quality Index (PSQI) demonstrated a Cronbach's α of .856. This result indicates a high level of internal consistency, implying that the PSQI items accurately assess the construct of sleep quality.

6.2. Depression, Anxiety, and Stress Scale (DASS-21)

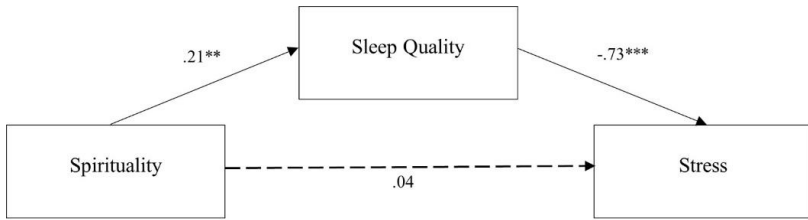
The DASS-21 (Lovibond & Lovibond, 1995) was used to assess mental health issues among youths, specifically evaluating the severity of three negative emotional states: depression, anxiety, and stress. This scale consists of 21 items and employs a five-point Likert scale, ranging from 'normal' to 'very severe'. In terms of scoring, depression is categorised as follows: 0-4 (normal), 5-6 (mild), 7-10 (moderate), 11-13 (severe), and 14 or above (extremely severe). For anxiety, the categories are: 0-3 (normal), 4-5 (mild), 6-7 (moderate), 8-9 (severe), and 10 or more (very severe). Stress is similarly assessed, with scores ranging from 0 to 7 classified as usual, 8 to 9 as mild, 10 to 12 as moderate, 13 to 16 as severe, and 17 or more as extremely severe. The DASS-21 demonstrated exceptional reliability with a Cronbach's α of .967, indicating outstanding internal consistency. This high reliability signifies that the items measuring depression, anxiety, and stress are closely related and collectively provide a reliable assessment of mental health issues.

6.3. Spirituality Scale (ARES)

The Assessment of Religious and Spiritual Experiences (ARES) was employed to evaluate spirituality. This self-report instrument consists of 11 items, with higher scores indicating greater levels of spiritual development (Braghetta et al., 2021). The first three items primarily address respondents' religious beliefs, while the remaining items focus on their spiritual beliefs and overall spiritual growth. The Attitudes Related to Spirituality Scale (ARES) also exhibited strong reliability, with a Cronbach's α of .966. The ARES effectively captured the complexity of spiritual beliefs and practices, thereby providing a reliable measure of spiritual development.

7. Results

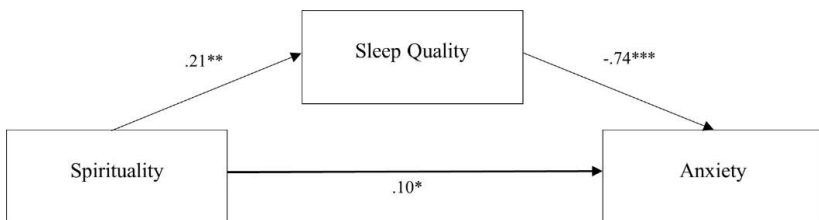
The PROCESS Macro for SPSS v4.2 Model 4 was employed to assess the relationship between spirituality, sleep quality, and psychological distress. Sleep quality is considered a mediator in the relationship between spirituality and psychological distress. The effects of spirituality and sleep quality were analysed separately on depression, anxiety, and stress. In the first model, the results indicated that spirituality is positively related to quality sleep ($\beta = .21$, $p = .01$) but not related to stress ($\beta = .04$, $p = .64$). Moreover, quality sleep is negatively related to stress ($\beta = -.73$, $p < .001$). Spirituality is indirectly associated with stress through quality sleep ($\beta = -.11$).



Note: ** $p < .01$ *** $p < .001$

Figure 1: Results of the Relationships between Spirituality, Sleep Quality and Stress

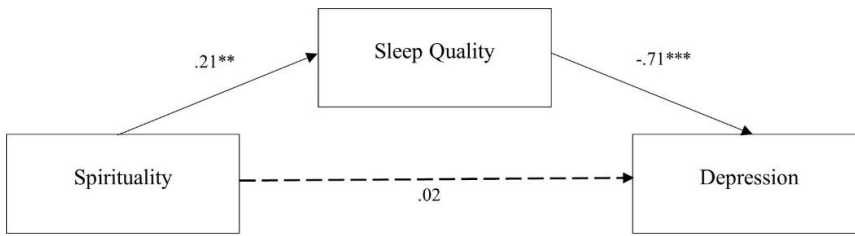
In the second model, the results indicated that spirituality is positively related to both quality sleep ($\beta = .21$, $p = .01$) and anxiety ($\beta = .10$, $p = .04$), while quality sleep is negatively related to anxiety ($\beta = -.74$, $p < .001$). However, the total effect of spirituality on anxiety is insignificant ($\beta = -.05$, $p = .50$). The positive direct effect of spirituality on anxiety ($\beta = .10$) suppresses the negative indirect effect on anxiety through quality sleep ($\beta = -.15$).



Note: * $p < .05$ ** $p < .01$ *** $p < .001$

Figure 2: Results of the Relationships between Spirituality, Sleep Quality and Anxiety

In the third model, the results indicated that spirituality is positively related to quality sleep ($\beta = .21$, $p = .01$) but not related to depression ($\beta = .02$, $p = .73$). Moreover, quality sleep is negatively related to stress ($\beta = -.71$, $p < .001$). Spirituality is indirectly associated with depression through quality sleep ($\beta = -.15$).



Note: ** $p < .01$ *** $p < .001$

Figure 3: Results of the Relationships between Spirituality, Sleep Quality and Depression

8. Discussion

Contrary to expectations derived from Western literature, the study found that spirituality is not directly related to mental health. This unexpected finding may reflect unique cultural dynamics in Hong Kong, where pragmatic concerns and academic pressures potentially overshadow spiritual exploration. The absence of a significant direct relationship between spirituality and mental health further challenges conventional assumptions about their interconnectedness, suggesting that Hong Kong youths may not typically employ spiritual practices as psychological coping mechanisms. These results highlight the importance of cultural context in understanding the dynamics of well-being and call into question the universal applicability of Western-developed theoretical models. The relationship between spirituality and mental health is not direct for several reasons. First, spirituality typically involves deeper concepts such as beliefs, values, and existential meaning, which may not have a direct connection to mental health. Additionally, the measurement tools for spirituality may not adequately capture the relationship with mental health. Furthermore, different cultures have varying interpretations and levels of emphasis on spirituality, which may contribute to a weaker correlation between spirituality and mental health. Lastly, spirituality is influenced by numerous factors, including life experiences, educational background, and social support, which may not be closely tied to mental health. All these factors contribute to the relatively low direct relationship between spirituality and mental health.

This study provides compelling evidence that sleep quality is a significant predictor of mental health among Hong Kong youths, while also revealing nuanced relationships with spirituality. The strong positive association between sleep quality and stress ($\beta = -.73$, $p < .001$), anxiety ($\beta = -.74$, $p < .001$), and depression ($\beta = -.71$, $p < .001$) aligns with global research demonstrating the detrimental effects of poor sleep on psychological well-being. These findings are particularly salient in Hong Kong's high-pressure academic environment, where competitive examination systems like the HKDSE create substantial stressors that likely exacerbate sleep disturbances and

subsequent mental health challenges. Notably, the study's identification of senior secondary students as particularly vulnerable to mental health concerns underscores the urgent need for targeted interventions during this critical educational transition period.

Kohyama (2021) indicated that sleep comprises both quantity and quality dimensions. While sleep duration varies significantly between individuals and should be assessed relative to personal needs, sleep quality is a multifaceted construct lacking standardized measurement due to its complexity. Researchers typically select quality metrics based on study objectives. Current evidence suggests sleep quality predicts health and functioning outcomes than duration alone, as it captures more nuanced aspects of sleep's restorative effects (Kohyama, 2021). This reflects a paradigm shift toward prioritising qualitative over quantitative sleep assessment in health research, recognising that sleep's physiological and psychological benefits are more accurately reflected through quality indicators than temporal measures alone (Kohyama, 2021). The importance of sleep quality has been shown, which sleep quality exerts a profound influence on mental health through interconnected biological, psychological, and social mechanisms (Ramar et al., 2021). Neurobiological research demonstrates that sleep deprivation disrupts critical neurotransmitter systems, particularly serotonin and dopamine, which regulate mood and motivation (Boonstra et al., 2007). Chronic sleep loss reduces serotonin availability, predisposing individuals to depression and anxiety disorders, while impaired dopamine function contributes to anhedonia - a core symptom of major depressive disorder (Boonstra et al., 2007). Neuroimaging studies reveal that inadequate sleep heightens amygdala reactivity to negative stimuli while simultaneously weakening prefrontal cortex regulation, creating emotional dysregulation. This neural imbalance explains why sleep-deprived individuals often exhibit increased irritability and emotional volatility. The hypothalamic-pituitary-adrenal axis becomes dysregulated under sleep deprivation, leading to elevated cortisol levels that exacerbate stress-related psychiatric conditions.

Concurrently, research indicates that sleep quality has a substantial impact on mental health. Poor sleep quality is linked to various negative psychological outcomes, such as anxiety and depression, aggression, impaired cognitive functioning, and attention-deficit/hyperactivity disorder, among others (Clement-Carbonell et al., 2021). Social consequences emerge as sleep-impaired individuals withdraw from social interactions due to fatigue and irritability, increasing loneliness, a well-established risk factor for depression. Family dynamics suffer when sleep-deprived parents exhibit reduced patience and increased negative parenting behaviours, potentially affecting children's emotional development. Epidemiological studies consistently show strong associations between insomnia and mental health disorders, with insomnia sufferers facing 2-3 times greater risk of developing depression, anxiety, and suicidal ideation. Importantly, interventions targeting sleep improvement, particularly cognitive behavioural therapy for insomnia, demonstrate significant mental health benefits, including substantial reductions in depressive symptoms (Clement-Carbonell et al., 2021). These findings underscore the critical role of sleep as both a predictor and modulator of mental health outcomes. A comprehensive approach to mental health treatment must incorporate sleep assessment and intervention, recognising that sleep disturbances often precede and exacerbate psychiatric symptoms. Future research directions should explore individual differences in sleep-neurological vulnerability and develop targeted interventions that address both sleep and mental health concurrently.

within biopsychosocial frameworks. The evidence clearly positions sleep quality as a fundamental pillar of mental health maintenance and psychiatric disorder prevention.

A notable finding from the current study indicates that spirituality may exacerbate anxiety. Prior research has also demonstrated that the intersection of religion and spirituality can evoke overwhelming feelings of guilt and shame, thereby adversely affecting mental health (Martínez de Pisón, 2023). Furthermore, individuals exhibiting narcissistic tendencies in their spiritual beliefs often prioritize their immediate personal needs, leading to a disconnection from the concerns of others and a deterioration of their social well-being. Future studies may investigate the intricate relationship between spirituality and anxiety to ascertain whether the deleterious effects of spirituality fluctuate across different contexts. The negative relationship between spirituality and anxiety suppresses the indirect positive influence of spirituality on anxiety via improving sleep quality. As a result, the total effects of spirituality on anxiety become insignificant.

Findings of this study carry important implications for both theory and practice. Theoretically, they challenge universalist assumptions about the nexus of sleep, mental health, and spirituality, and underscore the need for culturally grounded models of youth well-being. Huang et al. (2024) indicated that Hong Kong's education system subjects youth to various pressures, resulting in decreased sleep duration and quality. This decline in sleep can adversely affect mental health, which is also a contributing factor to youth suicide. The results suggest that in highly competitive, academically driven societies like Hong Kong, traditional spiritual resources may be less salient as coping mechanisms compared to more pragmatic stress management strategies (Huang et al., 2024). Practically, the study highlights the critical need for institutional reforms in educational settings, including later school start times to accommodate adolescent sleep patterns and the integration of sleep hygiene education into school curricula (Huang et al., 2024). The strong association between sleep quality and mental health suggests that sleep-focused interventions could serve as effective primary prevention strategies for mental health disorders in this population.

9. Implications

The results of the study indicate that spirituality has the potential to enhance sleep quality while concurrently alleviating stress and depression. Consequently, interventions that incorporate spiritual practices may be employed to bolster mental health among youth. Quality sleep is essential for psychological well-being and diminishes the risk of stress and depression. Educational resources on sleep hygiene should be made accessible to young individuals to improve their sleep quality.

This research has significant implications for social work practice in Hong Kong, highlighting the critical role of sleep quality in youth mental health and overall well-being. The findings demonstrate that poor sleep quality strongly correlates with increased anxiety, depression, and stress among Hong Kong youths, suggesting that social workers should prioritize sleep hygiene interventions as a foundational component of mental health support. Given the intense academic pressures faced by students, particularly during high-stakes examination periods like the HKDSE, social workers can implement targeted programs in schools and youth centres that educate

young people about healthy sleep habits while advocating for systemic changes such as later school start times and reduced late-night academic demands. The study also reveals the need for culturally sensitive approaches to spiritual wellness, as traditional Western models of spirituality may not fully resonate with Hong Kong's youth. Social workers could adapt interventions by incorporating secular mindfulness practices or traditional Chinese philosophies about balance and harmony, which may be more relevant to local youth. By integrating these findings into practice, social workers can develop more comprehensive support systems that address the interconnected nature of sleep, mental health, and spiritual well-being. The study also recommends increased collaboration among social workers, educators, and policymakers to foster environments that promote healthy sleep patterns, thereby enhancing better mental health outcomes. Future social work interventions should consider incorporating objective sleep assessments and longitudinal evaluations to better understand the long-term impact of sleep-focused approaches. Ultimately, this research provides an evidence-based foundation for social workers to enhance their practice by recognising sleep quality as a key determinant of youth well-being in Hong Kong's high-pressure context, while also highlighting the need for continued innovation in developing culturally appropriate interventions.

10. Limitations

Several limitations might be considered when interpreting these findings. First, the sample size of approximately 200 participants, predominantly bachelor's students (56%) and females (59.2%), limits the generalizability of the findings to all Hong Kong youth, particularly those in vocational education or early employment. Second, the cross-sectional design precludes causal inferences, while reliance on self-report measures introduces potential response biases. Third, while the study identified significant relationships between sleep quality and mental health, unmeasured confounding variables, such as socioeconomic status, family environment, and physical health, may influence both sleep patterns and psychological outcomes. Additionally, the study did not account for potential seasonal variations in sleep patterns and mental health, such as differences between exam periods and vacation times, which could influence the observed relationships. Data collection during high-stress academic periods may exaggerate the prevalence of sleep issues compared to other times of the year. Moreover, the assessment primarily concentrated on traditional spiritual and religious dimensions, potentially neglecting secular forms of meaning-making, such as academic purpose and family responsibilities, which may fulfil similar roles for youth in Hong Kong. The Western-developed spirituality measures may not fully capture local manifestations of spiritual wellness, potentially underestimating its relationship with sleep quality. Future studies would benefit from longitudinal designs to confirm causal links between spiritual wellness, mental health, and sleep quality, building on the current findings. High-risk groups, such as HKDSE candidates, should receive special attention during crucial academic transitions. To go beyond Western-centric measures, studies should use mixed-methods approaches that combine qualitative interviews and quantitative surveys, as well as culturally appropriate measurement instruments that capture regional manifestations of spiritual wellbeing and sleep

disturbances. To find patterns of differential vulnerability, more research may appear at subgroup differences across socioeconomic strata, gender identities, and educational tracks (academic vs. vocational). To investigate alternative coping mechanisms in Hong Kong's achievement-oriented setting, such as family support networks and culturally appropriate mindfulness exercises, comprehensive frameworks must be developed. By applying implementation science techniques to translate evidence into scalable wellbeing initiatives, policy-engaged research partnerships can assess structural interventions, such as rescheduling exams or delaying the start of schools. Ultimately, these concerted research efforts would advance scientific knowledge and useful interventions for youth wellbeing by improving theoretical models of youth development in high-pressure settings and offering workable, culturally appropriate solutions for Hong Kong's distinct educational landscape.

11. Conclusion

In conclusion, this study makes significant contributions to our understanding of youth wellbeing in Hong Kong's unique sociocultural context. The robust association between sleep quality and mental health underscores the importance of addressing sleep disturbances as a priority, particularly among educationally stressed populations. The unexpected findings regarding spiritual wellness challenge assumptions derived from Western literature and highlight the need for culturally sensitive approaches to understanding and promoting youth wellbeing. These results have immediate relevance for educators, mental health professionals, and policymakers seeking to support Hong Kong's youth through evidence-based interventions. By prioritising sleep health and developing culturally appropriate support systems, Hong Kong can foster more resilient youth populations better equipped to navigate the challenges of modern academic and social environments. Future research should build on these findings to develop more comprehensive models of youth wellbeing that account for Hong Kong's distinctive educational pressures and cultural values.

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