

Exploring the Effect of Sleep Quality and Self-Efficacy on Academic Motivation in University Students of India

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ABSTRACT

The aim of this study was to examine the relationship between sleep quality, academic motivation and self-efficacy among Indian students. The sample consisted of 111 students including 34 males and 77 females in the age group of 18 to 26 years. Graduate and undergraduate students and some working people participated. Their family background is middle to upper class. The Pittsburgh Sleep Quality Index (PSQI) was used to assess sleep quality, the Academic Self-Efficacy Scale (ADSE) measured academic ability, and the Academic Motivation Scale College Version-28 (AMSC) assessed academic motivation. Data analysis focused on identifying relationships between these variables. The results show a weak inverse relationship between PSQI and AMSC, indicating that better sleep quality is associated with less academic motivation. In addition, the low correlation between PSQI and ADSE suggests that although sleep quality and self-efficacy are important to academic success, their direct relationship is not strong. However, the positive correlation between ADSE and AMSC emphasizes the close relationship between academic ability and motivation. These findings highlight the importance of addressing sleep quality and psychological factors such as self-efficacy and motivation in promoting academic success. Educational interventions should consider comprehensive strategies that include improving sleep hygiene, improving intrinsic motivation, and increasing the ability to support the well-being of students and the advancement of knowledge. Further research, especially longitudinal and experimental studies, is needed to elucidate the underlying mechanisms and causal pathways associated with these factors. A deeper understanding of these relationships will help develop targeted interventions to improve student outcomes.

Keywords: Quality Of Sleep, Academic Self-Efficacy, Academic Motivation.

Self-awareness, maintaining a high level of motivation and ensuring quality sleep are important to promote academic success and personal development. This self-awareness is summed up in self-efficacy, the belief in one's ability to successfully implement plans. Based on Albert Bandura's social psychology theory, self-efficacy influences behavior and choices, and the ability to take on life's challenges. In educational environments, self-efficacy is pivotal and shapes students' motivation, resilience, and achievement. On the other hand, low self-efficacy undermines motivation and persistence and negatively affects school performance. Motivation, another key indicator of academic success, includes cognitive, emotional, and behavioral dimensions. Maslow's hierarchy of needs emphasizes the role of motivation in goal-directed

activities and internal and external factors for motivating behavior. Academic motivation, according to Self-Determination Theory, ranges from intrinsic joy to extrinsic rewards and motivation. Both internal and external motivations play an important role in academic success, influencing learning strategies, motivation and participation. Good sleep is important for cognitive function and learning. Lack of sleep, which is common in the modern world characterized by communication and high stress, can have a negative impact on mental and learning activities. Factors such as irregular sleep patterns and digital stimuli can contribute to poor sleep. Addressing these factors and maintaining proper sleep hygiene are essential to optimal mental performance and academic success.

Quality Of Sleep

There are many aspects of research on the quality of sleep and its effects on various aspects of a person's life, especially school work. Ramrakhiyani and Deshmukh (2019) emphasized the role of the frontal lobe and conducted a study to assess the effect of prolonged sleep on brain function. They found that sleep deprivation had a greater effect on young people than on older people. Jalali et al. (2020) investigated the relationship between sleep quality and academic performance among medical students and found no significant difference in sleep quality among students with higher degrees. and less. Onder et al. (2013) examined the relationship between circadian preferences, sleep quality, personality traits, academic motivation and school performance among college students, and found significant higher grade point averages (CGPA). Datta et al. (2018) conducted a study among medical students and found that 57% of students suffered from sleep problems, which statistically has a significant impact on academic performance. In their study, Rose and Ramanan (2017) found that poor sleep among students was associated with lower GPA and poorer cognitive performance. Khullar et al. (2019) assessed sleep duration as a predictor of cognitive function in young Indian adults and found that sleep-deprived subjects showed better reaction times on cognitive functions compared to those who sleep a lot. Mao et al. (2021) investigated the relationship between the use of electronic devices before bed, sleep quality and academic performance among college students and found sleep disturbance moderated the relationship between electronic screen media use before sleep and performance. Charest et al. (2022) highlighted the importance of sleep health in sports and demonstrated its impact on physical performance, injury risk and cognitive performance among athletes. Finally, Maheshwari and Shaukat (2019) found that medical students with poor sleep quality had lower GPAs than those with good sleep. These studies demonstrate the important role of sleep quality in cognitive performance, academic achievement, and general well-being among diverse populations.

Self-Efficacy

Some studies have presented a multifaceted view of academic self-efficacy and its consequences for student performance in a variety of subjects. K.V. and Usharani (2023) examined the relationship between academic ability and difficulty among Indian students and suggested that interventions to increase difficulty may increase academic achievement. Singh and Sharma (2023) emphasize the role of social and emotional adjustment in predicting youth employment in Haryana. Ibragimov et al. (2023) shows the importance of science communication skills among undergraduate students, especially in STEM fields. Abdolrezapour et al. (2023) show a positive relationship between energy, academic motivation and self-efficacy in the midst of the COVID-19 disease. Yadav (2020) emphasizes the importance of academic ability for business management students and demonstrates its role in academic performance. Chow and

Wong (2020) emphasize the importance of self-efficacy in literacy for health students. Doménech-Betoret et al. (2017) show the mediating role of value-expectancy beliefs in the relationship between academic self-efficacy and student achievement. A study by Deora (2015) examines the complex interaction between gender, organizational environment and the influence of education on academic performance. Fosse et al. (2015) examines the mediating role of self-efficacy between conscientiousness and academic/military performance. Finally, Cerino (2014) examines the relationship between academic procrastination, motivation, and empowerment among college students and demonstrates the importance of motivation to fight against procrastination. Collectively, these studies contribute to our understanding of the multifaceted nature of academic self-efficacy and its effects on student achievement.

Academic Motivation

In a comprehensive exploration of academic motivation and performance, various studies offer insights into the dynamics at play across different educational settings. Dramanu and Mohammed (2017) investigated in Ghana, involving 756 male and 714 female Junior High School students from urban and rural schools, unveiled a positive correlation between academic performance and motivation. Their findings, supported by a Cronbach Alpha Reliability Coefficient of 0.75, suggest that students with heightened academic motivation exhibit a propensity towards activities and behaviours conducive to academic improvement, regardless of gender. Opare (1999) echoes these sentiments, highlighting intrinsic motivation as a pivotal predictor of academic success, emphasising the dedication required for optimal performance, even in the absence of external incentives. Similarly, Kusrkar et al. (2012) studied among medical students at VU University Medical Center Amsterdam reveals the significant impact of Relative Autonomous Motivation (RAM) on academic performance, mediated by robust study strategies and diligent effort. Further shedding light on motivational factors, Remali et al. (2013) focused on demographic characteristics and learning styles among first year accounting students, identifying a notable association between motivation and academic achievement. In the realm of secondary education, Rehman and Haider (2013) investigated underscores the role of effective educational techniques in enhancing student motivation, as evidenced by their survey results among students and instructors. Bailey and Phillips (2015) delve deeper into the intricate interplay between motivation, well-being, and academic indicators, emphasising the strong positive correlation between intrinsic motivation and subjective well-being, along with academic performance. Moreover, Goodboy and Kelsey (2015) explore the significance of instructional clarity, revealing its amplifying effect on learning behaviour and motivation, particularly when coupled with high levels of student motivation. Finally, the study by Isik et al. (2018) the mediating role of learning strategy in the relationship between motivational style and academic performance, especially among ethnically diverse students. Their findings indicate a positive relationship between self-motivation and grade point average, indicating the effectiveness of achievement-based strategies for academic success. Collectively, these studies highlight the multifaceted nature of academic motivation and its profound effects on student achievement in a variety of educational contexts.

Sleep Quality, Self-Efficacy And Academic Motivation

Sleep quality, academic self-efficacy and academic motivation are variables that affect students' academic success. Poor sleep impairs cognitive functions such as memory and attention, increases stress and reduces cognitive ability. This decline in self-efficacy weakens students' confidence in their abilities and negatively affects their mental health. In contrast, high-quality sleep increases mental performance and emotional

stability, increasing a person's energy levels. Increased academic ability, or belief in one's ability to succeed, can lead to motivation and persistence in academic pursuits. Self-motivated students set challenging goals and stay engaged, which increases academic motivation. In turn, motivation leads to participation and effort in learning activities. But poor sleep can lead to fatigue and mood problems and lower motivation. Therefore, good sleep supports cognitive function and emotional stability, increases self-efficacy and motivation, and ultimately improves academic results. Addressing the relationship between these variables through holistic strategies can improve student success and well-being by promoting healthy sleep habits, building self-efficacy, and increase internal and external motivation.

Research Gap

Despite extensive research on sleep quality, academic self-efficacy, and academic motivation, there is a notable gap in studies that integrate these three critical variables. Most existing research examines these factors separately: sleep quality is often studied in isolation regarding cognitive function and academic performance (e.g., Ramrakhiyani & Deshmukh, 2019; Rose & Ramanan, 2017); academic self-efficacy is explored without considering sleep quality or motivation (e.g., K.V. & Usharani, 2023; Cerino, 2014); and academic motivation is frequently studied without accounting for the impact of sleep quality (e.g., Kusrkar et al., 2012; Bailey & Phillips, 2015).

Furthermore, existing studies predominantly focus on Western contexts, leaving a significant gap in understanding these dynamics within Indian educational settings. Indian students face unique stressors, academic stressors and lifestyle patterns that may affect the relationship between sleep quality, academic performance and motivation differently than the general population. West Coast.

The lack of integrated research means that how sleep quality affects self-efficacy and academic motivation, and if not, is unknown. Addressing this gap is critical to developing a comprehensive understanding of how these variables influence achievement and quality of life. These studies can lead to more effective strategies that match the unique needs of Indian students and improve their academic success and overall well-being.

METHODS

Methodology

This study was conducted with the aim of investigating the complex relationship between personality, academic motivation and sleep quality among young adults, with a sample size of 111 participants, including 34 men and 77 women. Participants were recruited based on specific study inclusion criteria, including age between 18 and 26 years, bachelor's to master's degree or part-time employment, and family background of medium to upper-middle.

The study utilised three standardised questionnaires to assess the variables of interest.

Pittsburgh Sleep Quality Index (1989): Pittsburgh Sleep Quality Index (PSQI) was developed by Buysse, D.J., Reynolds, C.F., Monk, T.H., Berman, S.R., and Kupfer, D.J. from the University of Pittsburgh in 1989, with funding from the National Institute of Mental Health. This questionnaire consists of open and closed questions and seven categories: sleep quality, sleep duration, sleep duration, sleep quality, sleep disturbance sleep, use of sleep medications, and daily stress. The PSQI consists of 19 self-rated questions and 5 partner- or roommate-rated questions (if applicable), although the self-rated questions included in the marking process. Each of the 19 self-rated items is scored on one of seven scales, ranging from 0 to 3 points. A score of "0" indicates no difficulty, and a score of "3" indicates very difficult.

Unit scores are summed to calculate a global PSQI score, ranging from 0 to 21 points, with higher scores indicating greater problems in all areas of sleep quality. The Pittsburgh Sleep Quality Index (PSQI) demonstrates good internal reliability with a Cronbach's α coefficient of 0.83, indicating that its seven components measure distinct aspects of sleep quality. Sleep quality and subjective sleep quality showed strong correlations with the overall construct, while sleep problems showed the weakest correlations. Pearson product-moment correlations between the subscale scores and the global PSQI score support the validity of the scale, showing strong correlations with sleep quality and sleep quality. The individual items in the PSQI show a strong correlation, as shown in the reliability coefficient of 0.83. The correlation coefficient of all items ranged from 0.66 to 0.20, indicating a high correlation between subjective sleep quality and a very low correlation between coughing and snoring during sleep. These findings confirm the reliability and validity of the PSQI in assessing aspects of sleep quality among individuals and emphasize its usefulness as a sleep assessment tool.

Academic Self-Efficacy Scale (2006): Developed by Abdul Ghafoor K. and P. Muhammad Ashraf in 2006, it is a carefully designed instrument, its purpose is to assess the academic ability of high school students. This scale, based on Albert Bandura's theory of self-efficacy, measures various aspects of academic performance, including the learning process, reading, comprehension, memory, classroom, time management, teacher-student relationships, peer relationships, resource use, and goal setting, including compatibility, with a survey of respondents in a total of 40 statements with 20 positive statements and 20 negative statements, assessing their agreement on a 5-point Likert scale. For good information, respondents give 5 for "correct", 4 for "almost correct", 3 for "neutral", 2 for "almost incorrect" and 1 for "correct", but the bad news is highlighted. In addition, this scale shows strong psychological characteristics with a test-retest correlation coefficient of 0.85, split half reliability of 0.90 and concurrent validity with the general self-efficacy scale, showing at a correlation coefficient of 0.68, indicating its reliability and scientific validity in average.

Academic Motivation Scale College Version-28 (1992-1993): The Academic Motivation Scale College Version (AMSC-28) was developed by Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière, Caroline B. Senécal, and Évelyne F. Vallières in 1992-1993. This instrument consists of 28 questions and utilises a 7-point Likert scale, with a minimum score of 1 point and a maximum score of 7 points (1=Does not correspond at all to 7=Corresponds exactly). These questions are grouped into 7 dimensions: Intrinsic motivation-to know, Intrinsic motivation-toward accomplishment, Intrinsic motivation-to experience stimulation, Extrinsic Motivation-identified, Extrinsic Motivation-introjected, Extrinsic Motivation-external regulation, and Amotivation. Component scoring is applied to calculate the overall score, termed as the Self-Determination Index (SDI), which ranges from -18 to +18. A higher score on the SDI indicates a greater degree of intrinsic motivation. The AMSC-28 demonstrates satisfactory reliability, with a mean alpha value of .81 and a mean test-retest correlation of .79, reaffirming its effectiveness in assessing academic motivation among college students.

Data collection was facilitated through the distribution of standardised questionnaires via Google Form, ensuring consistency and ease of participation. Upon completion, responses were analysed individually according to the respective questionnaire manuals. Mean, standard deviation, and correlation calculations were conducted to explore relationships between self-efficacy, academic motivation, and sleep quality.

Hypothesis

There is no significant relationship between sleep quality and self-efficacy among the whole sample size.

There is no significant relationship between sleep quality and academic motivation among the whole sample size.

There is no significant relationship between self-efficacy and academic motivation among the whole sample size.

Research Objective

The objective of this study is to examine the relationships between sleep quality, self-efficacy, and academic motivation among young adults, while testing the hypothesis that there are no significant relationships between these variables within the whole sample size.

RESULTS AND DISCUSSION

This study has tried to investigate the relationship between sleep quality, academic self-efficacy and academic motivation among Indian undergraduate, postgraduate and part-time working individuals aged between 18-26 years.

VARIABLES	CATEGORIES	NUMBER WITHIN THE RANGE	PERCENTAGE
Age	18-22	92	82.88%
	23-26	19	17.12%
Gender	Male	34	30.63%
	Female	77	69.37%
Educational Qualification	Undergraduate	95	85.59%
	Postgraduate	12	10.81%
	Working	4	3.60%
Residential Type	Hosteller	14	15.54%
	PG / Alone	19	17.12%
	Parents	78	70.27%
Family Type	Nuclear	85	76.58%
	Joint	26	23.42%
Total Number of Participants = 111			

Table 1

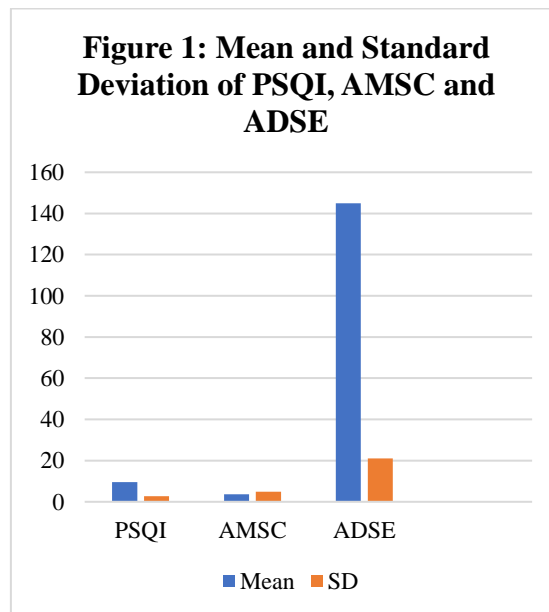
	MEAN	SD	PSQI	AMSC	ADSE
PSQI	9.63	2.67	1	-0.14566	-0.02786
ADSE	3.63	4.85	-0.14566	1	0.634521
AMSC	144.88	21.13	-0.02786	0.634521	1

Table 2

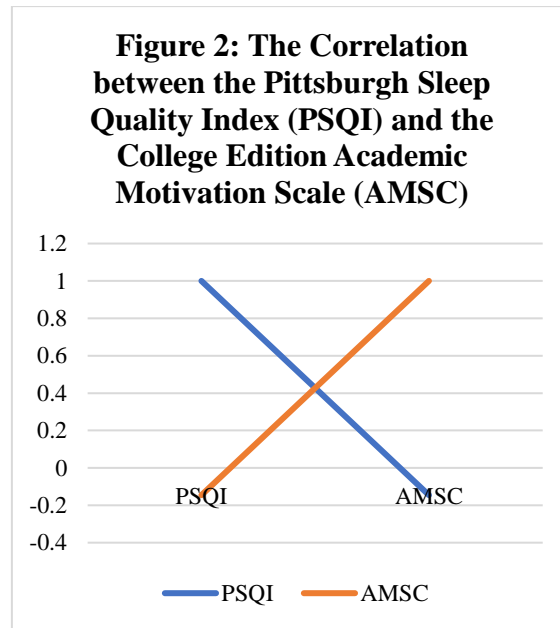
The mean of data collected from 111 participants by using the Pittsburgh Sleep Quality Index (PSQI) is 9.53 and the standard deviation of data collected from 111 participants by using the Pittsburgh Sleep Quality Index (PSQI) is 2.67.

The mean of data collected from 111 participants by using the Academic Self-Efficacy Scale (ADSE) is 3.63 and the standard deviation of data collected from 111 participants by using the Academic Self-Efficacy Scale (ADSE) is 4.85.

The mean of data collected from 111 participants by using the Academic Motivation Scale College Version (AMSC-28) is 144.88 and the standard deviation of data collected from 111 participants by using the Academic Motivation Scale College Version (AMSC-28) is 21.13.



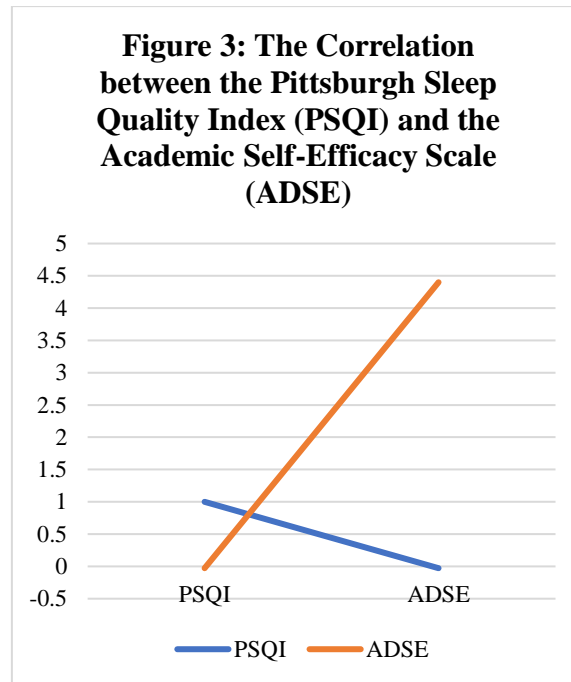
Based on the correlation of -0.14566 between the Pittsburgh Sleep Quality Index (PSQI) and the College Edition Academic Motivation Scale (AMSC), the inverse relationship between sleep quality and academic motivation is weak. found among the sample. This finding is consistent with previous research showing that people with lower quality sleep experience lower levels of academic motivation. For example, Datta et al. (2018) showed that sleep deprivation significantly affects the performance of medical students. Similarly, Rose and Ramanan (2017) found a negative relationship between sleep quality and grade point average among students. In addition, Mao et al. (2021) showed that the use of electronic media before bedtime, often associated with sleep problems, mediated the relationship between sleep quality and academic performance among college students.



However, it is important to note that the direction of this relationship and the underlying mechanisms need to be further explored through longitudinal studies and experimental designs. Dramanu and Mohammed (2017) found a positive relationship between school performance and motivation among high school students, indicating that increasing academic motivation strengthens behaviours that lead to learning. Similarly, Kusurkar et al. (2012) showed a significant effect of self-motivation on academic performance among medical students, emphasizing the role of active learning strategies and effort. These findings highlight the importance of cultivating intrinsic motivation and specific learning behaviour to increase school performance in a variety of academic settings.

Overall, the weak inverse relationship found between sleep quality and academic motivation suggests a complex relationship between these factors, both of which have significant effects. to academic work and life in general. Addressing sleep problems and promoting internal motivation are key ideas for promoting academic success and student flourishing in academic settings.

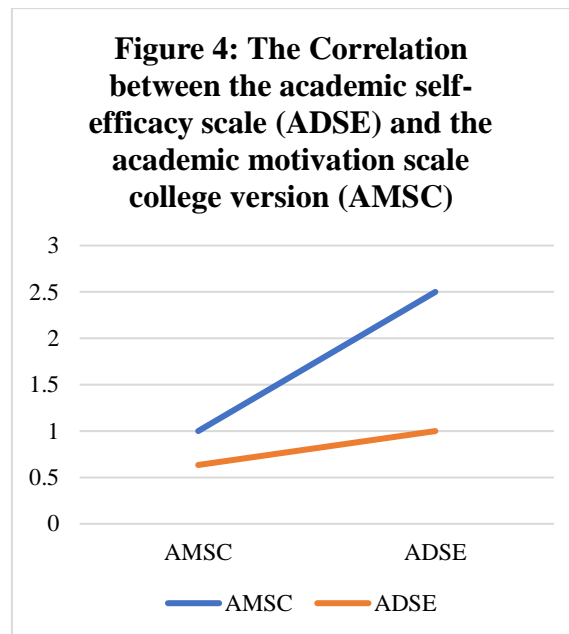
The correlation between the Pittsburgh Sleep Quality Index (PSQI) and the Academic Self-Efficacy Scale (ADSE) was -0.02786. Several studies have examined the effect of sleep quality on academic and cognitive performance. Ramrakhiyani and Deshmukh (2019) showed the negative effects of chronic sleep deprivation, especially for brain function in young people. Similarly, Maheshwari and Shaukat (2019) found that medical students with poor sleep quality had lower average scores than students with good sleep. These findings highlight the importance of adequate sleep for academic success.



At the same time, studies examining academic self-efficacy demonstrate its importance in predicting academic achievement and resilience. For example, K.V. and Usharani (2023) suggested that interventions to increase complexity, a construct related to self-efficacy, may improve academic performance among college students. Also, Abdolrezapour et al. (2023) showed a positive relationship between resilience, academic motivation and self-efficacy, especially in the challenges of the COVID-19 pandemic. These studies emphasize the important role of strong beliefs in academic success and adjustment to adverse situations.

However, the correlation between sleep quality and self-efficacy is weak (-0.02786), suggesting that although both are important for academic performance, they may not have a strong influence on them too. Further studies examining the inverse relationship between sleep quality, academic achievement, and academic performance may provide insight into effective interventions to improve outcomes. student results.

The correlation between the academic self-efficacy scale (ADSE) and the academic motivation scale for college exit (AMSC) is 0.634521, indicating a significant positive relationship between academic self-efficacy and the motivation of knowledge. Many studies have investigated the factors that influence academic ability and motivation among students in various areas of education. Research examining academic self-efficacy has shown a relationship with a variety of psychological factors and academic outcomes. For example, K.V. and Usharani (2023) suggested that interventions to increase difficulty can improve academic performance among college students, suggesting a reciprocal relationship between effort and strength. In addition, Yadav (2020) on the importance of academic strength for business management students, indicating his role in academic work.



On the other hand, studies that have examined academic motivation have shown a positive relationship with academic performance and persistence. For example, Opare (1999) identified intrinsic motivation as a key predictor of academic success, suggesting that students with academic motivation exhibit behaviours that lead to academic achievement. Similarly, Kusurkar et al. (2012) found that specific motivation (RAM) significantly influenced school performance, mediated by active learning strategies and effort.

The significant positive relationship between academic ability and motivation indicates that students who believe in their ability to succeed academically are more motivated to participate in academic activities and pursuing academic goals. Possible reasons for this relationship may include the effects of self-belief on goal setting, task persistence, and coping strategies, which may increase motivation and academic achievement. In addition, intrinsic motivation, which results from a person's interest and enjoyment of academic activities, makes students more confident in their academic abilities and participates in higher levels of the stronger. Overall, these findings highlight the importance of increasing academic ability and motivation to promote student success and well-being in academic settings.

CONCLUSION

The findings of this study highlight the complex relationships between sleep quality, academic ability and academic motivation. The weak correlation between the Pittsburgh Sleep Quality Index (PSQI) and the College Version Academic Motivation Scale (AMSC) indicates that better sleep quality is associated with lower levels of academic motivation. This is similar to previous studies, such as Datta et al. (2018) and Rose and Ramanan (2017) showed the negative effect of poor sleep on learning and cognitive performance.

Furthermore, the low correlation between the PSQI and the Academic Self-Efficacy Scale (ADSE) suggests that although sleep quality and energy are important for academic success, they are not their relationship. This is consistent with the findings of Ramrakhiyani and Deshmukh (2019) and Maheshwari and Shaukat (2019), which emphasize the independent but important role of sleep and self-efficacy in academic performance.

On the other hand, the positive correlation between ADSE and AMSC emphasizes the close relationship

between academic ability and academic motivation. A study by K.V. and Usharani (2023) and Kusurkar et al. (2012) support this and show that self-efficacy beliefs can increase motivation and academic performance by improving goal setting, persistence and attention strategy.

Overall, these findings highlight the importance of focusing on sleep quality and psychological factors such as self-efficacy and motivation to promote academic success. Educational interventions should consider comprehensive strategies that include improving sleep hygiene, improving intrinsic motivation, and increasing the ability to support the well-being of students and the advancement of knowledge. Further research, particularly longitudinal and experimental studies, is needed to clarify the underlying mechanisms and causal pathways involved in these factors.

LIMITATIONS

The cross-sectional design of the present study creates an important limitation, as it limits the ability to establish causal relationships between sleep quality, academic ability, and motivation. Although relationships can be identified, the order of these phenomena is not clear, and long-term studies are needed to clarify the causal pathways. Additionally, this study relied on self-report measures to assess sleep quality, energy and motivation. Self-report data can introduce bias, as participants underestimate or exaggerate their own behaviors and attitudes. This potential for bias highlights the need for objective measures in future studies to confirm and complement self-reported findings. Another limitation is the sample size and demographic homogeneity of the participants. Due to the small sample size, the findings may not be generalizable to general populations. Future studies should aim to include larger and more diverse samples to increase the external validity of the results. Additionally, this study did not control for potential confounding variables such as stress level, mental health status, and external academic pressure. These factors strongly influence the observed relationships and should be considered in future studies to gain a clearer understanding of the interaction between sleep quality, self-efficacy and motivation. Finally, although the Pittsburgh Sleep Quality Index (PSQI), Academic Self-Efficacy Scale (ADSE), and Academic Motivation Scale College Edition (AMSC) are valid instruments, they may not capture all aspects of the quality of sleep, self-efficacy, and motivation. Future studies may benefit from incorporating other or alternative methods to provide a more comprehensive assessment.

FUTURE SCOPE

Future research should prioritize longitudinal designs to better understand the causal relationships between sleep quality, academic self-efficacy, and academic motivation. Longitudinal studies would enable researchers to identify how changes in one variable influence the others over time, providing deeper insights into the dynamic interactions among these factors. Additionally, implementing and evaluating interventions aimed at improving sleep quality, enhancing self-efficacy, and boosting academic motivation can provide practical and actionable insights. Tailoring these interventions to specific student populations, such as those experiencing chronic sleep deprivation or low academic motivation, can help determine the most effective strategies for promoting academic success. Expanding the research to include more diverse populations, encompassing different age groups, cultural backgrounds, and educational settings, is also crucial. Such an expansion would offer a more comprehensive understanding of these relationships and enhance the generalizability of the findings. Investigating additional variables that may interact with sleep quality, self-efficacy, and motivation, such as stress, mental health, and social support, could provide a more holistic view of the factors influencing academic performance. Moreover, given the increasing

prevalence of technology in students' lives, exploring the impact of technology use, particularly pre-bedtime electronic screen media, on sleep quality and its subsequent effects on academic outcomes, can provide relevant and timely insights. Overall, these future research directions aim to deepen our understanding of the complex interplay between sleep quality, academic self-efficacy, and motivation, ultimately contributing to more effective strategies for enhancing student well-being and academic achievement.

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REFERENCES

1. Abdolrezapour, P., Jahanbakhsh Ganjeh, S., & Ghanbari, N. (2023). Self-efficacy and resilience as predictors of students' academic motivation in online education. *Plos one*, 18 (5), e0285984.
2. Bailey, T. H., & Phillips, L. J. (2016). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance. *Higher education research & development*, 35 (2), 201-216.
3. Bolkan, S., Goodboy, A. & Kelsey, D. (2015). Instructor Clarity and Student Motivation: Academic Performance as A Product of Students' Ability and Motivation to Process Instructional Material. *Communication Education*, 65 (2), 129-148.
4. Cerino, E. S. (2014). Relationships between academic motivation, self-efficacy, and academic procrastination. *Psi Chi Journal of Psychological Research*, 19 (4).
5. Charest, J., & Grandner, M. A. (2022). Sleep and athletic performance: impacts on physical performance, mental performance, injury risk and recovery, and mental health: an update. *Sleep medicine clinics*, 17 (2), 263-282.
6. Chow, S. K. Y., & Wong, J. L. K. (2020). Supporting academic self-efficacy, academic motivation, and information literacy for students in tertiary institutions. *Education Sciences*, 10 (12), 361.
7. Datta, A., Nag, K., Karmakar, N., & Chakrabarty, T. (2019). Sleep disturbance and its effect on academic performance among students of a medical college of Tripura. *Int J Community Med Public Health*, 6 (1), 293-298.
8. Deora, N. (2015). Impact of academic self-efficacy and locus of control on academic achievement of high school students. *Indian Journal of Mental Health*, 2(2), 197-202.
9. Dogan, U. (2017). Student Engagement, Academic Self-efficacy, and Academic Motivation as Predictors of Academic Performance. *The Anthropologist*, 20 (3), 553-561.

10. Doménech-Betoret, F., Abellán-Roselló, L., & Gómez-Artiga, A. (2017). Self-efficacy, satisfaction, and academic achievement: the mediator role of Students' expectancy-value beliefs. *Frontiers in psychology, 8*, 1193.
11. Dramanu, B. Y., & Mohammed, A. I. (2017). Academic motivation and performance of junior high school students in Ghana. *European Journal of Educational and Development Psychology, 5* (1), 1-11.
12. Fosse, T. H., Buch, R., Säfvenbom, R., & Martinussen, M. (2015). The impact of personality and self-efficacy on academic and military performance: The mediating role of self-efficacy. *Journal of Military Studies, 6* (1), 47-65.
13. Ibragimov, G. I., Zhdanov, S. P., Volosova, N. Y., Knyazeva, S. A., Efimushkina, S. V., & Kochneva, L. V. (2024). The competence, interest, and perceived self-efficacy of undergraduate students in science communication. *EURASIA Journal of Mathematics, Science and Technology Education, 20* (1), em2387.
14. Isik et al. (2018). The role of study strategy in motivation and academic performance of ethnic minority and majority students: a structural equation model. *Advances in Health Sciences Education, 23* (5), 921-935.
15. Jalali, R., Khazaei, H., Paveh, B. K., Hayrani, Z., & Menati, L. (2020). The effect of sleep quality on students' academic achievement. *Advances in medical education and practice, 497-502*.
16. Khullar, S., Sinha, P., Kumar, K., & Singh, M. (2020). Effect of sleep deprivation on cognition in young Indian adults: A Color-Word Stroop task study. *National Journal of Physiology, Pharmacy and Pharmacology, 10* (3), 194-200.
17. Kusrkar, R. A., Ten Cate, Th. J., Vos, C. M. P., Westers, P., & Croiset, G. (2013). How motivation affects academic performance: A structural equation modelling analysis. *Advances in Health Sciences Education, 18*, 57-69.
18. KV, A. D., & Usharani, S. (2023). Academic Self-Efficacy and Hardiness among College Students—An Exploratory Study. *Journal of the Indian Academy of Applied Psychology, 49* (2), 246-254.
19. Letchuman, S., Krishnamoorthy, V., Manga, H. S., Sujatha, B., & Kumar, S. (2022). Sleep Hygiene in Adolescents and Factors Influencing Sleep Pattern: A Cross-sectional Study from Southern India. *Journal of Clinical & Diagnostic Research, 16* (10).
20. Maheshwari, G., & Shaikat, F. (2019). Impact of poor sleep quality on the academic performance of medical students. *Cureus, 11* (4).
21. Mao, Y., Xie, B., Chen, B., Cai, Y., Wu, J., Zhang, J., & Li, Y. (2022). Mediating effect of sleep quality on the relationship between electronic screen media use and academic performance among college students. *Nature and science of sleep, 323-334*.
22. Önder, İ., Beşoluk, Ş., İskender, M., Masal, E., & Demirhan, E. (2014). Circadian preferences, sleep quality and sleep patterns, personality, academic motivation and academic achievement of university students. *Learning and Individual Differences, 32*, 184-192.
23. Ramrakhiyani, V. C., & Deshmukh, S. V. (2019). Study of the incidence and impact of chronic sleep deprivation in the Indian population with special emphasis on neuropsychology testing. *Sleep Med, 14* (2), 23-28.
24. Rehman, A. & Haider, K. (2013). The Impact of Motivation on Learning among Secondary School Students in Karachi: An Analytical Study. *Educational Research International, 2* (2), 139-147.

25. Remali, A. Z., Ghazali, M.A., Kamaruddin, M. K., & Kee, T. Y. (2013). Understanding Academic Performance Based on Factors, Motivation Factors, and Learning Styles. *International Journal of Asian Social Science*, 3 (9), 1938-1951.
26. Rose, S., & Ramanan, S. (2017). Effect of sleep deprivation on the academic performance and cognitive functions among the college students: A cross sectional study. *J Chalmeda Anand Rao Institute Med Sci*, 14 (1), 52.
27. Singh, D., & Sharma, M. (2023). Adjustment and Self-Efficacy as Predictor of Academic Achievement Among School Students. *International Journal of Indian Psychology*, 11 (1).
28. Yadav, A. (2020). Investigating the role of self-efficacy in shaping academic and career trajectories of management students. *International Journal of Management (IJM)*, 11 (10), 226-236.