

RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND SLEEP QUALITY AMONG UNIVERSITY STUDENTS

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Abstract

The study aimed to examine the relationship between emotional intelligence and sleep quality among university students. It was hypothesized that there would be a significant relationship between the Emotional intelligence of hostellers and non-hostellers among undergraduates, and there would be a significant relationship between the sleep quality of hostellers and non-hostellers among undergraduates. The participants included 100 students, with equal representation of both genders (Male $n=50$ and Female $n=50$). Data was collected through simple random sampling from the University of Sindh, Jamshoro. Two questionnaires, namely the Emotional Intelligence Scale and the Sleep Quality Scale, were administered to the participants. The results showed that emotional intelligence is positively related to sleep quality among university students. Emotional self-regulation and interpersonal skills are better in hostellers compared to non-hostellers, while emotional self-awareness is higher in non-hostellers. Additionally, significant gender differences in sleep quality were observed, with hostellers perceiving themselves as having better sleep quality and higher emotional intelligence than non-hostellers. The findings have implications for policymakers to guide educational authorities and are also useful for psychologists, teachers, and student counsellors.

Keywords: Emotional Intelligence, Sleep quality, University Students

1. Introduction

Youth is the time when students feel independent and energetic, indulging themselves in various tasks and setting goals to accomplish. Sleep and emotion are fundamental concepts that can affect a student's daily functioning, as they continuously invest effort and motivation to reach their objectives. They face different challenges and handle them efficiently; however, when they succeed, they feel accomplished. Sometimes, when they are unable to face difficult work, they become distressed and frustrated. While pursuing assigned tasks, they encourage themselves to be active participants and avoid unnecessary issues such as self-harm, frustration, and aggression, while controlling their reactions and emotional thoughts. According to Abdali (2019), a person who is emotionally competent is more capable of maintaining a sleep routine and experiences less fatigue.

While pursuing higher education, some might live in a hostel, entering any educational institution, they make sure to share their emotional thought, self-conscious of their own self as well as the other individuals with whom he/she has to spend time, and do things independently and maintain basic needs, sleep cycle, eating, etc. A hostel is the place of residence provided by an

organization where learner has to live securely until they get the degree for which they are enrolled. Non-hosteller is a place where youth live with their family in their own house.

Emotional intelligence is crucial for youngsters to maintain healthy and sustainable relationships with others. It provides them with awareness of themselves and regulates their behaviour pattern in any situation. It is not only about understanding one's emotions but also others, like as building healthy interpersonal relationships, self-awareness, acceptance skills, and social adaptability. This component is as important as intelligence quotient because it helps students to deal with a problem intelligently and competently (Killgore et al.2008).

Sleep is one of the basic needs of a human. It requires approximately 7 to 8 hours and is good for mental and physical well-being, such as strengthening memory, decision making, awareness of self as well as others, good relationships, maintaining proper weight, not overeating food or insufficient intake, and fewer chances of cardiac issues or any other health condition. When a child is born, their sleep duration, timing, and maintenance are monitored so that, in case they face any problems, concerned paediatricians can provide them with the necessary treatment. It is necessary to take care and get proper sleep regardless of age. According to Ferentinou et al. (2024), there is a significant relationship between emotional intelligence and sleep patterns to maintain proper BMI. Difficulty in sleep causes various behavioural and biological deficiencies. Early intervention has a satisfactory prognosis, and many people get rid of the disorder. According to the APA, American Psychiatric Association, Sleep disorders or sleep-wake disorders are mostly associated with depression, anxiety, changes in cognitive functioning, and emotional problems. In a sequence of three to five cycles per night, there are mostly two types of sleepovers, rapid eye movement, where dream occurs, and another non-rapid has three episodes where an individual is completely asleep. Some common symptoms linked with this disorder are insomnia, a person is unable to get sleep for 3 nights a week or months, and is distressed, can't manage their daily functioning, such as frustrated behaviour with others, and job difficulty. It occurs at any age but commonly initiates in late adolescence or early adulthood. Symptoms can be episodic, like signs that continue for one to two months, persistent insomnia symptoms lasting for more than three months, and recurrent symptoms lasting for more than two episodes within a year. Some other conditions are Sleep apnea, nightmare disorder, and hyper-somnolence.

Difficulties in getting rest cause individuals to experience issues such as concentration, memory retention, thinking, positive emotions, and academic performance (Pagnin & de Queiroz, 2015). A study conducted on a sample of medical learners reveals that around 1- third of them are using sleeping medication to get proper sleep (Henry, et al. 2016). Poor sleep leads to distress and emotional resilience (Licata et al.2024). Restorative sleep and emotional awareness do not non-significantly contribute to the academic performance of students. Some indicators, like motivation, family cooperation, and learning interest, are more interactive (Utomo et al. 2025).

1.1.Significance of the study

This research was designed to assess the relationship between emotional intelligence and sleep quality among hosteller and non-hosteller students. Emotional intelligence has a significant influence on the youth's success. Individual with strong emotionally intelligence can face various challenges by accepting them rather than avoid it and work hard to achieve the goal and get success and have better stress management skills enable themselves to know their emotions and deal with it and get enough sleep and avoid the things that cause sleep disturbance regardless that they live in their own home with their families or in a place where they are living in another city or country to get the education from their desired institutions until their target accomplished.

1.2.Objectives of the study:

The following were the objectives

1. To assess the relationship of emotional intelligence among hostellers and non-hostellers' undergraduates
2. To assess the relationship between the sleep quality of hostellers and non-hostellers among undergraduates

1.3.Hypotheses

1. There would be a significant relationship between the Emotional intelligence of hostellers and non-hostellers among undergraduates.
2. There would be a significant relationship between the sleep quality of hostellers and non-hostellers among undergraduates.

2. Literature Review

According to Zuo et al. (2025) suggested that emotional management skills and found they are negatively associated with poor sleep, with physical exercise and e-health literacy mediating part of the relationship — suggesting behavioural pathways through which EI impacts sleep. According to (Licata et al. (2024) assessed sleep habits and potential predictors including EI and reported that EI relates to sleep patterns and perceived health—suggesting EI as a protective factor for sleep disturbances in adults. A cross-sectional study from Bangladesh among university students found a significant negative correlation between EI and PSQI global score, indicating moderate effect sizes in student populations. A 2024 study from Bangladesh among university students found a significant negative correlation between EI and PSQI global score (i.e., higher EI → better sleep quality), indicating moderate effect sizes in student populations. Different cross-sectional studies (medical students, adolescents, athletes) repeatedly show significant correlations: better emotion regulation or higher trait EI is associated with lower insomnia symptoms and better global sleep quality. include university/athlete samples in 2023 and medical/hosteller samples.

2.1.Theoretical Perspective of Emotional Intelligence

The emotional intelligence model was first proposed by Mayer and Peter Salovey, termed as the ability model in 1997, with the goal of explaining emotional intelligence is a cognitive skill that is related to intelligence quotient. Though previous studies focus only on intellectual factor however as a result of different researches that found that affective component is also crucial to non-intellectual factor of emotional intelligence (Wechsler, 1940). It is ability model focus on how individual process, understand and use emotions to guide thought process. Its main components are: perceiving emotions, using emotions to facilitate thoughts, understanding emotions and managing emotions. This ability is scientific based and focus on abilities of individuals and its main idea is hard to measure emotions objectively. Early theories like Thorndike and Gardner (1937) have more interest in current researchers in new area of emotional intelligences such as ability and mixed model. It is ability model focus on cognitive skills that is basic type of intelligence. As with the contrast, mixed models of emotional intelligence presented by Daniel Goleman in 1995 suggested that emotional intelligence is a combination of affective skills, personality traits and social skills. Its main components of emotional intelligence are self awareness, self regulation, motivation, empathy and social skills. Another model of emotional intelligence that was presented by Petrides (2001) termed as trait emotional intelligence model that explained that emotional intelligence is a personality traits not a cognitive skill. It reflects an individual's self-perceived emotional abilities and its main elements are emotional perception, emotional regulation, assertiveness, impulse control, empathy and self-motivation. Overall, emotional intelligence defined as personality trait of an individual that is responsible for emotional

mature, stable, and healthy personality (Petrides, 2001).

2.2.Theoretical Perspective of Sleep Quality

Borbely (1982) was the first theorist who presents the first model of biological and physiological perspectives of sleep quality, which focuses on how Sleep quality is determined by brain structures, neurotransmitters, and the sleep–wake cycle. Concepts are Circadian Rhythm Theory (Biological Clock): Sleep quality depends on synchronization of the body’s 24-hour rhythm controlled by the supra-chiasmatic nucleus (SCN), Homeostatic Sleep Drive (Borbély’s Two-Process Model): Process S: Sleep pressure builds during the day, and Process C: Circadian rhythm regulates alertness. Good sleep occurs when both processes align. Neurotransmitters: Serotonin, melatonin, and GABA promote sleep; norepinephrine and dopamine promote wakefulness. Another important cognitive model of sleep in psychology is given by Harvey’s cognitive model of insomnia (2002), which emphasizes the role of negative thoughts and beliefs about sleep in its maintenance. Sleep quality is affected by thoughts, beliefs, and cognitive processes. Important concepts of the Cognitive Model of Insomnia are worry, rumination, and distorted thinking worsen sleep quality. Attention Bias explained that people with poor sleep pay more attention to sleep-related threats, and Expectancy Theory describes that believing you will sleep poorly increases the chances of poor sleep. (Harvey, 2002). The most important known behavioural model of sleep, particularly for insomnia, is the 3P Model developed by Art Spielman and associates in the 1980s. It explains how insomnia develops and becomes chronic through the interaction of predisposing, precipitating, and perpetuating factors. The humanistic model in psychology was primarily given by Abraham Maslow and Carl Rogers. In his model, physiological needs—including sleep, food, water, and shelter—are at the base of the pyramid and must be met before individuals can pursue higher-level needs such as safety, love and belonging, esteem, and eventually self-actualization (achieving one's full potential). The Social-Ecological Model of Sleep Health was developed by psychologist Michael A. Gardner and his colleagues, first proposed in 2010. This model provides a framework for understanding insufficient or poor quality sleep by considering how various factors at different levels influence an individual's sleep behaviors and outcomes. Sleep quality is affected by social context and environment, such as Living conditions (noise, light, roommates, and hostile environment).

3. Research methodology

It was a quantitative correlational research with a survey design. Emotional intelligence and sleep quality are the independent variables, and hostellers and non-hostellers are the dependent variables that were taken in this study.

Sample

It consisted of 100 participants, males and females. Hosteller and non-hosteller. It was simple random sampling techniques were used to collect the data from the respondents, undergraduates from different departments of Sindh University, such as psychology, philosophy, biochemistry, and English.

3.1.Procedure

First of all, permission was taken from the Directors/Chairpersons of different departments to collect the data, and the research purpose was explained to them. After receiving permission, students were approached in their respective classes. Participants' consent was taken before administering questionnaires, make sure that their privacy was confidential, although they took an interest in participating in this study.

3.2. Instruments

1. **Emotional intelligence scale:** It was developed by Khan and Kamal (2010). It is a standardized self-report measure to assess the level of emotional intelligence of participants. The alpha reliability coefficient of this scale is ($r=.95$). It consists of 60 items and three subscales, which are emotional self-awareness (items=21), emotional self-regulation (items=27), and interpersonal skill (items=12). All items are scored on a five-point Likert scale ranging from five response categories of (5 =Always, 4= Often, 3=Sometimes, 2= Rarely, and 1 =Never). High scores on SRMEI show better emotional control.
2. **Sleep quality scale:** It was originally developed by H. Yi, J. Shin, & Kim (2006). It was translated into an English version by Shahid et al. (2011). This study consists of 28 items that have six subscales such as daytime dysfunction, restoration after sleep, difficulty falling asleep, difficulty maintaining sleep, difficulty waking up, and sleep satisfaction. It is a Likert scale (0-3 or 1-5). Higher scores indicate worse sleep quality. The scale consisted of good reliability (Cronbach's $\alpha=0.90+$).

3.3. Demographic information form

It was based on the age, residence, gender, and socioeconomic status of the respondents.

Table no 1: An independent sample test was used to compare the sleep quality based on hostellers and non-hostellers (N=100)

Variables	Hosteller		Non-hosteller		t	p
	M	SD	M	SD		
SQ	196.68	19.50	191.03	13.57	1.49	.00

Note. $df=98$, * $p<.05$, ** $p>.01$

(SQ= Sleep quality scale)

Table no.2: An independent sample test was used to compare the emotional intelligence of hostellers and non-hostellers (N=100)

Variables	Hosteller		Female		t	p
	M	SD	M	SD		
EI	196.68	19.50	191.03	13.57	1.49	.00
ESAW	78.23	10.68	71.39	12.80	2.81	.01
ESAR	64.59	8.02	66.27	3.84	-1.06	.00
IPSK	40.02	4.91	39.57	3.71	.468	.05

Note. $df=98$, * $p<.05$, ** $p>.01$

(EI= Emotional intelligence, ESRS= emotional self-regulation skills, ESAWS= emotional Self-awareness skills, IPSK interpersonal skills)

4. Discussion

Current results revealed a positive relationship between emotional intelligence and sleep quality. These results are consistent with the findings of previous studies (Licata et al. 2024). Healthier emotional intelligence is positively significant in hostellers and non-hostellers. Current emotionally intelligent people have better sleep quality, where they can maintain resilience and interpersonal relationships positively and away from sleep deprivation (Soleiman et al., 2023). Significant relationships of stress, sleep problems, and mental well-being are significantly in

hosteller and non-hosteller students (Narang & Jahan, 2019).

Additionally, findings of the present study revealed that hostellers have better sleeping habits as compared to non-hostellers (Mean value=196.68). These results are also consistent with previous studies (Mohandas, 2024).

Many studies (Licata et al, 2024; & Hassan, 2023) suggested that there is a positive association between emotional intelligence and sleep quality. Many studies have found a significant relationship between sleep duration and emotional intelligence, suggesting that a longer amount of sleep results in enhanced emotional intelligence (Amjad & Langah, 2025). Individuals with more emotional intelligence have better management of their stress and healthier sleep quality. Poor sleep quality patterns are prone to influence their emotional regulation and decision making, and also lead to the expression of high levels of anxiety, depression, and difficulty in academics. According to Killgore et al (2022) suggested that in a large sample of 477 adults, habitual sleep quality and recent sleep duration each independently predicted higher trait EI. Interestingly, these sleep measures were not strongly related to the ability of emotional intelligence. Moreover, sleep quality is more tied to self-perceived emotional functioning than performance-based Emotional intelligence. Good sleep quality is linked to better dispositional (trait) emotional functioning — people who feel more emotionally competent also report better sleep. In a cross-sectional study of Iranian medical, nursing, and paramedical students, researchers found a positive correlation between emotional intelligence and sleep quality (Abdali, 2016). This suggests that, in high-stress student populations, better EI is linked to better sleep and less fatigue.

According to Li et al. (2022), A study found that emotional management ability (a facet of EI) was negatively correlated with PSQI score, which concluded that better emotional management leads to better sleep quality. This study also found that physical exercise and e-health literacy chain mediate this relationship and concluded that the positive effect of EI on sleep may work partly indirectly — people emotionally skilled manage to exercise more and seek health information, which helps their sleep.

In a sample of female high school students, a significant negative correlation was found between Emotional intelligence and poor sleep quality of students. This supports the idea that emotional intelligence (especially in adolescents) is linked to their subjective sleep quality. Moreover, in a study during COVID-19, Emotional intelligence was found to mediate the relationship between perceived sleep quality and depression: lower sleep quality has worse Emotional intelligence (low clarity/repair) and has more depressive symptoms. This is not a direct positive Emotional intelligence and sleeps quality, and concluded that emotional intelligence plays a beneficial role in the broader psychological outcomes of sleep.

5. Conclusion

This study concluded that healthier, emotionally intelligent individuals schedule their daily works on time, promotes self-care routine, takes care of their basic needs such as food, sleep, proper amount of time with nature and build a relationship, accept the difficult task, try to learn new skills, the ability to deal with challenges, be resilient, control their emotions and behaviour, decision-making strategies, scheduled work properly, never blame others for their failure, and find opportunities and ask for help to seek information.

6. Implications

1. This research will be fruitful for policymakers or organizations to make sure that students who are living in the hostels are not facing any discomfort or threat, emotional or physical. provide them a safe environment where they can openly about their things that harm them or

others in hostels so that their sleep or any other basic need is properly managed by the authorities.

2. Seminars, conferences, and training help students to learn and practice the information. So these should be encouraged so that they seek new techniques to manage their emotion and sleep, and other things properly.
3. Once every two or three months, sessions will be provided by the psychologist to parents, which can strengthen the communication between the learner and parents and teachers with each other, like in a school's parent-teacher meeting is organized.

7. Limitations

1. This study is quantitative research; other researchers can use a mixed method to get more insightful knowledge on these variables.
2. Data was collected from Undergraduates; others can use these variables in schools or any educational institutions, and measure differences or impacts.
3. In this study, sleep quality and emotional intelligence were taken as other can affect academic achievement, mental well-being, and parenting styles with these variables.

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