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Research Paper

The Predictive Role of Sleep Quality on Positive and Negative Affect Among Educators: Exploring the Interaction of Gender and Sleep Quality on Emotions

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ABSTRACT

The study aims to understand the predictive role of sleep quality on positive and negative affect among educators: Exploring the interaction of gender and sleep quality on emotions. A total of 121 teachers, 61 men and 60 women, from both government and private schools in urban and rural areas of Bengaluru participated in the study. We used a quantitative, correlational method and gathered data using two tools: the Pittsburgh Sleep Quality Index (PSQI) and the Positive and Negative Affect Schedule (PANAS). The results were analyzed using correlation, regression, and two-way ANOVA. Findings showed that around 40% of the teachers had poor sleep quality. However, there was no a significant difference between male and female teachers in this regard. Teachers with poor sleep reported lower positive emotions like motivation and higher negative emotions such as stress. Sleep duration was the key factor influencing emotional well-being. Other contributors to positive emotions included daytime fatigue, sleep efficiency, and use of sleep aids, explaining over 85% of the variation. Negative emotions were mainly linked to short sleep, disturbances, and tiredness, accounting for nearly 79% of the variation. While gender did not have a major effect, women showed slightly more emotional benefits from good sleep, supporting the need for gender-sensitive wellness programs. The study highlights the importance of including sleep health in teacher support systems. Suggestions include adding sleep education, reducing work pressure, offering mental health support, and encouraging activities like mindfulness or exercise. Though insightful, the study has some limits, such as relying on self-reports, a single location, and not considering other lifestyle factors. Future studies should track sleep objectively, include more locations, and look at diet and physical activity as well.

Keywords: *Sleep Quality, Emotional Well-being, Secondary School Teachers, Gender Differences, Positive and Negative Affect*

Sleep is a foundational element of human functioning, important not only for physical restoration but also crucial in sustaining emotional resilience and cognitive performance (Goldstein & Walker, 2014). Any disruption in sleep, whether in its

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duration or quality, can have an impact on various cognitive domains such as attention, memory, and decision-making (Mehta, 2021). These cognitive decrements, in turn, disturb physiological homeostasis and elevate vulnerability to daily stressors (Mehta, 2021; Meisel et al., 2017). For educators, whose daily roles demand for constant attentiveness, adaptability, and emotional engagement, compromised sleep poses a direct risk to the well-being of teacher and effectiveness of their teaching.

Poor sleep quality has been linked with increased emotional reactivity and weakened capacity to regulate emotions (Palagini et al., 2021). Functional brain studies have shown that individuals experiencing inadequate sleep show altered prefrontal control and heightened limbic responsiveness, particularly within the amygdala, leading to a stronger and more negative emotional responses to stress or challenge (Yoo et al., 2007). Sleep disturbances have also been highly associated with a general increase in negative affect and a decrease in positive emotional states, such as enthusiasm and satisfaction (Mehta, 2021; Reddy et al., 2023).

In a meta-analysis, Reddy and colleagues (2023) confirmed this bidirectional interaction between sleep and emotion: insufficient or disturbed sleep impairs affective flexibility and reduces emotional homeostasis, while elevated negative affect can further disrupt sleep patterns. Similarly, a large-scale review by Bower et al. (2023) reported that even mild reductions in sleep are correlated with a marked decline in positive emotion, sometimes overshadowing increases in negative affect (Bower et al., 2023). This "emotional numbing" effect highlights how even moderate sleep insufficiency erodes psychological resources essential for effective teaching.

Educators operate in uniquely demanding environments, balancing cognitive tasks, emotional labor, and interpersonal dynamics. They must maintain clear decision-making, plan lessons, monitor student engagement, and often manage classroom conflicts, all while regulating their own emotional expressions. Sleep disturbances in educators have been associated with increased job stress, burnout, and reduced emotional stability (Travers & Cooper, 1996; Klassen et al., 2017). Feeling overwhelmed or irritable as a result of poor rest can impair classroom management, hinder empathic responsiveness, and dampen students' learning climate.

Empirical evidence corroborates these concerns. Mehta (2021) demonstrated that sleep restriction leads to measurable declines in vigilance and attention, which inevitably hamper ability of educators to respond rapidly and effectively in classroom settings. Likewise, Palagini et al. (2021) observed that individuals with insomnia show decreased emotional resilience and a diminished capacity to rebound from daily frustrations, characteristics that align closely with critical educator competencies. Many research findings show that how well persons sleep, has a strong effect on their emotions, shaping both positive and negative feelings. Poor sleep is often linked to more frequent feelings of irritability, worry, and sadness, which are signs of increased negative affect (Reddy et al., 2023). At the same time, not getting enough quality rest can make it harder to feel joy, excitement, or satisfaction which are key elements of positive affect (Goldstein & Walker, 2014). This shows how important sleep is for managing emotions. When sleep is regularly disturbed, people tend to feel more negative overall, which can lower their emotional strength and well-being, especially in high-stress jobs like teaching (Mehta, 2021).

Sleep Quality and Emotional Functioning

Sleep and emotions have a close, two-way relationship where each affects the other. Sleep is not just important for physical rest but also plays a major role in how people manage their emotions and handle stress. When someone gets good quality sleep, their emotional responses tend to be more balanced, and they are better able to cope with daily challenges. However, poor or insufficient sleep can disrupt this balance, making it harder to control emotions and stay calm during stressful situations (Palagini et al., 2021).

Lack of sleep often leads to strong negative feelings like anger, frustration, and sadness (Goldstein & Walker, 2014). This happens because sleep deprivation affects brain regions such as the prefrontal cortex, which is responsible for regulating emotions. Meanwhile, the amygdala, a part of the brain involved in emotional reactions, becomes more active, causing emotions to feel more intense and harder to manage (Yoo et al., 2007). This can result in mood swings and heightened sensitivity to stress, making everyday pressures feel more overwhelming. Besides increasing negative emotions, poor sleep also reduces the ability to experience positive feelings like joy, excitement, and satisfaction (Reddy et al., 2023). This can make it difficult for people to enjoy life or stay motivated. For educators, who need to maintain a calm and positive attitude to support their students and manage classrooms, this can be especially harmful.

Poor sleep and emotional difficulties can create a harmful cycle, where stress affects sleep, and poor sleep worsens emotions (Palagini et al., 2021). Over time, this cycle can damage mental health of teachers and reduce their job performance, increasing the risk of burnout.

In short, getting enough quality sleep is vital for emotional well-being. For educators, healthy sleep habits are key to managing their emotional workload and maintaining both personal health and professional success.

Context of Educators

Teachers encounter distinct challenges in their work that can greatly impact both their sleep and emotional health. The teaching profession is demanding, with responsibilities such as preparing lessons, grading assignments, and managing the classroom. Beyond these tasks, educators also perform emotional labor, which means they must regulate their own feelings while responding to the emotional needs of their students and coworkers. These continuous social and job-related pressures create a stressful environment that can interfere with sleep and put a strain on emotional well-being (Klassen et al., 2017).

One significant challenge is the need to present a calm and positive front even during stressful moments. This emotional dissonance where teachers hide their true feelings to meet professional expectations can be draining. Studies have found that this kind of emotional effort is linked to poorer sleep quality, as it raises stress and psychological tension (Zapf et al., 2001). In addition, feelings of social isolation or lack of support at work can worsen sleep problems. When teachers feel disconnected or excluded from their colleagues, it becomes harder to recover emotionally, which makes them more prone to negative feelings (Montgomery et al., 2014).

Teachers also often deal with frustration or disappointment from difficulties in engaging students, managing administrative tasks, or not meeting their own goals. These experiences can disrupt sleep patterns and reduce emotional strength (Travers & Cooper, 1996). When

poor sleep combines with emotional stress, it becomes harder for educators to manage classrooms effectively and maintain positive relationships, creating a cycle that negatively affects both their health and job performance.

In short, the unique pressures teachers face including heavy workloads, emotional labor, and social challenges can harm their sleep and emotional well-being. Understanding these issues is vital for creating support systems that improve health and job success of teachers.

Gender Differences in Sleep and Affect

Research indicates that gender plays an important role in how sleep quality affects emotional well-being. Men and women experience the effects of poor sleep on their emotions differently. One key reason for this is that social support and stress impact their sleep in distinct ways. Research shows that women are generally more sensitive to interpersonal stress, such as conflicts, lack of support, or social pressures, which can disrupt their sleep more than it does for men (Hall et al., 2015).

For instance, sleep of women tends to be more negatively influenced by emotional and relationship issues. This greater sensitivity means that when women face social stress, their sleep quality often worsens, which can then lead to increased emotional problems like anxiety, depression, and mood swings (Knutson, 2013). Men also experience sleep disruption from social stress, but the connection between interpersonal difficulties and poor sleep appears to be weaker compared to women, likely due to a combination of biological and social factors (Mezick et al., 2008).

This difference is especially important in demanding jobs like teaching, where stress levels are high. Female teachers might suffer more emotionally from poor sleep because of their increased vulnerability to social and emotional stress. Therefore, considering gender is vital when studying how sleep quality influences both positive and negative emotions in educators. Overlooking these gender differences could mean missing important insights that could help tailor better support and interventions.

Additionally, recognizing gender as a factor that changes how sleep affects emotions helps researchers and practitioners create more personalized approaches to improve mental health and job performance for both male and female educators.

In short, gender plays a key role in how sleep interacts with emotional health. Women are generally more affected by social stress, which can harm their sleep and lead to stronger negative emotional effects. Taking gender differences into account is essential for providing effective support for emotional and sleep health of educators.

Gap in the Literature

While the connection between sleep, emotional health, and work-related stress is increasingly understood, there is still limited research that focuses on educators. Most studies are on these factors separately or consider the general population, but few have examined how sleep quality directly affects both positive and negative emotions among teachers. This is an important gap because educators have unique job demands that may influence how sleep impacts their feelings and emotional well-being.

The present research shows that poor quality of sleep often leads to more negative emotions like anxiety and irritability, while also reducing positive feelings such as happiness and motivation (Mehta, 2021; Reddy et al., 2023). However, these studies rarely focus on teachers or take into account the particular pressures they face, like managing classrooms and the emotional work involved in teaching. These specific factors likely interact with sleep quality in ways that affect teachers' emotional health of teachers differently, but there are very few researches exploring these relationships.

Additionally, gender differences in how sleep affects emotions have been found in the general population (Hall et al., 2015; Knutson, 2013), yet few studies have looked at whether gender changes how sleep quality relates to emotional experiences specifically among educators. Understanding if and how gender plays a role is important for creating better support systems for both male and female teachers.

Overall, the limited focus on how sleep predicts both positive and negative emotions in educators, along with a lack of attention to gender differences, leaves an important research gap. Addressing this gap would provide useful knowledge about how sleep influences emotions of teachers and help develop strategies to improve their sleep and emotional health.

In short, although the relationship between sleep, emotions, and work stress is recognized in general, more research is needed that focuses specifically on educators. This should include how sleep affects both positive and negative emotions and how these effects might differ between men and women in the teaching profession.

Purpose

The current study aims to investigate how the quality of sleep influences both positive and negative emotions among teachers, with a special focus on the role gender plays in this relationship. Because teaching is a demanding profession, understanding how sleep and gender together affect emotional health is important for addressing the challenges teachers face in their daily work. By looking at how sleep quality and gender interacts, this research intends to provide deeper insight into the emotional well-being of educators.

The results of this study could help develop targeted strategies to improve teachers' sleep and emotional health, which are essential for their mental well-being and job performance. Better sleep may reduce negative feelings like stress and exhaustion, while increasing positive emotions such as motivation and satisfaction both critical for effective teaching (Mehta, 2021). Furthermore, recognizing how sleep impacts men and women differently can lead to more personalized support for educators. Improving sleep and emotional wellness in teachers not only benefits their personal lives but also enhances their ability to create positive learning environments and improve student success (Reddy et al., 2023).

METHOD

Objectives

The present study was planned with the following objectives:

1. To examine the relationship between sleep quality and positive affect among educators.
2. To investigate the relationship between sleep quality and negative affect among educators.

3. To explore whether gender moderates the relationship between sleep quality and positive and negative affect.

Hypothesis

The following null hypotheses were proposed to be verified:

- **H1:** There is no significant relationship between sleep quality and positive affect among educators.
- **H2:** There is no significant relationship between sleep quality and negative affect among educators.
- **H3:** Gender does not significantly moderate the relationship between sleep quality and positive and negative affect among educators.

Participants

A total of 121 teachers took part in the study, including 61 men and 60 women. They were selected from secondary schools in both government and private sectors, spread across rural and urban areas of Bengaluru. This group was chosen to ensure a wide and balanced mix of educators, representing different types of schools and social backgrounds.

Scientific Tools

- **Pittsburgh Sleep Quality Index (PSQI):** The Pittsburgh Sleep Quality Index (PSQI) is constructed by David J. Buysse, Charles F. Reynolds III, Timothy H. Monk, Susan R. Berman, and David J. Kupfer, all affiliated with the University of Pittsburgh (Buysse et al., 1989). The PSQI comprises 19 items that individuals complete about their own sleep. It consists of seven distinct "component" scores, each carrying an equal weight on a scale from 0 to 3. These components include: Subjective Sleep Quality, Sleep Latency, Sleep Duration, Habitual Sleep Efficiency, Sleep Disturbances, Use of Sleeping Medication, and Daytime Dysfunction. A higher score consistently points to poorer sleep quality. The PSQI generally exhibits good internal consistency, with Cronbach's alpha coefficients frequently falling between 0.70 and 0.85 in various studies with strong test- retest reliability, and with correlation coefficients for the global scale typically around 0.85 (Buysse et al., 1989).
- **Positive and Negative Affect scale (PANAS):** The PANAS was developed in 1988 by psychologists David Watson, Lee Anna Clark, and Auke Tellegen. (Mulder, 2018). The Positive and Negative Affect Schedule (PANAS) is designed to measure two core emotional dimensions: Positive Affect (PA) and Negative Affect (NA). Participants rate 20 emotional descriptors using a 5-point Likert scale based on how much they've experienced each emotion during a defined period (e.g., “right now,” “past week,” or “in general”) The utility of this measure is enhanced by the provision of large-scale normative data. For PA subscale, the Cronbach alpha is reported to be 0.86 to 0.90; for NA subscale, it is 0.84 to 0.87. Over an 8-week time period, the test-retest correlations were 0.47- 0.68 for PA and 0.39-0.71 for NA respectively.

Data collection

This study used purposive sampling technique was used to select 121 secondary school educators working in private and government schools across rural and urban areas of Bengaluru. Participants were chosen based on clear inclusion criteria to ensure they were

actively involved in teaching, which helped us explore the relationship between sleep quality, emotional affect, and gender more accurately.

A quantitative, correlational research design was adopted to examine how sleep quality predicts both positive and negative affect, and to assess whether gender influences this relationship. This design allowed us to identify natural patterns among variables without altering the environments of participants.

To collect data, Pittsburgh Sleep Quality Index (PSQI) and Positive and Negative Affect scale (PANAS) were administered that measured sleep quality and emotional states. Participants filled out the surveys during the school hours, after we received permission from the school authorities. Their responses remained voluntary and anonymous, which helped ensure comfort and honest participation. The collected data was analysed using Correlation Analysis, Regression Analysis and Two-way ANOVA.

Ethical clearance was obtained from the Institutional Ethics Committee prior to data collection. Research followed all ethical guidelines, including getting informed consent, ensuring confidentiality, allowing voluntary participation, and giving participants the right to withdraw at any time. These steps helped us conduct the research responsibly while protecting the rights and well-being of the participants.

Variables

- **Quality of sleep:** Quality of sleep refers to an individual's subjective perception of his/her sleep experience, including duration, latency, efficiency, and disturbances, as measured by tools such as the Pittsburgh Sleep Quality Index (PSQI) (Buysse et al., 1989).
- **Positive Affect:** It refers to the extent to which educators feel active, alert, enthusiastic, and engaged in their daily activities. It reflects the presence of positive emotions and a sense of pleasurable involvement with the environment (Watson et al., 1988).
- **Negative Affect:** Negative Affect is defined as the degree to which educators experience distressing emotions such as anger, guilt, fear, and nervousness. It reflects a general dimension of subjective distress and unpleasurable engagement (Watson et al., 1988).

RESULTS

Level of sleep quality among educators by gender along with Pearson chi-square test results

Table 1

Level of Sleep quality		Gender		
		Men	**Women**	**Total**
Good	F	61	60	121
	%	61.0%	60.0%	60.5%
Poor	F	39	40	79
	%	39.0%	40.0%	39.5%
Pearson chi-square		$\chi^2 = 0.021; p = 1.00^{FET}$		

Table 1 shows the level of sleep quality among educators by gender along with Pearson chi-square test results. We find 39.5% of the educators with Poor sleep quality while the rest had good quality. Men and women educators have similar sleep quality. There is no significant association between genders ($p = 1.00^{FET}$) indicating the sample is homogenous.

Pearson product moment correlation between Sleep quality and Affect

Table 2

Components of PSQI	Positive affect	Negative affect
Sleep quality (*SQ*)	r = -.774; p= .001	r = .833; p= .001
Sleep latency (*SL*)	r = -.817; p= .001	r =.839; p= .001
Sleep duration (*SDu*)	r = -.862; p= .001	r =.896; p= .001
Habitual sleep efficiency (*HSE*)	r = -.832; p= .001	r = .863; p= .001
Sleep disturbance (*SDi*)	r = -.857; p= .001	r = .872; p= .001
Use of sleep medicine (*USM*)	r = -.519; p= .001	r = .496; p= .001
Daytime dysfunction (*DD*)	r = -.827; p= .001	r = .875; p= .001
Global PSQI score	r = -.878; p= .001	r = .911; p= .001

Note: Higher the score on PSQI, lower the sleep quality

Table 2 shows Pearson product moment correlation between Sleep quality and Affect. All aspects of poor sleep are strongly linked to lower positive emotions in educators. As sleep quality worsens, positive affect decreases significantly (all correlations are strong and negative, *p-value*< *.001*). While, all components of sleep quality are strongly linked to higher negative emotions. As sleep quality worsens, negative affect increases significantly (all correlations are strong and positive, *p-value*< *.001*).

Linear regression of components of sleep quality on Positive affect along with regression ANOVA results

Table 3

Model	R	R Square	Adjusted R Square	F-value	p-value
SDu	.896	.802	.801	804.149	.001
SDu+DD	.915	.838	.836	509.908	.001
SDu + DD + HSE	.921	.848	.846	364.272	.001
SDu+DD+HSE+SL	.923	.851	.848	278.800	.001
SDu+DD+HSE+SL+USM	.926	.858	.854	233.957	.001

SDu*-Sleep duration;* ***DD*** *– Daytime dysfunction;* ***HSE*** *– Habitual sleep efficiency;* ***SL*** *– Sleep latency;* ***USM*** *– Use of sleep medicine*

Table 3 shows the step-wise linear regression of components of sleep quality on Positive affect along with regression ANOVA results. The results show that sleep duration alone explains 80.1% of the variation in positive affect among educators. Adding daytime dysfunction, habitual sleep efficiency, sleep efficiency, and use of sleep medicine increases the explained variance to 85.4%. All models are statistically significant (*p-value*< *.001*). This indicates sleep duration, daytime dysfunction, habitual sleep efficiency, sleep efficiency, and use of sleep medicine are strongly linked (significant predictors) to higher positive emotions.

Linear regression of components of sleep quality on Negative affect along with regression ANOVA results

Table 4

Model	R	R Square	Adjusted R Square	F-value	p-value
SDu	.862	.743	.742	572.577	.001
SDu+SDi	.882	.778	.776	345.534	.001
SDu+SDi + DD	.886	.786	.782	239.640	.001

***SDu**-Sleep duration; **SDi** – Sleep disturbance; **DD** – Daytime dysfunction*

Table no.4 shows the step-wise linear regression of components of sleep quality on Negative affect along with regression ANOVA results. Sleep duration alone explains 74.2% of the variation in negative affect among educators. Adding sleep disturbance and daytime dysfunction increases the explained variance to 78.6%. All models are highly significant (*p-value <.001*). This indicates that shorter sleep, more disturbances, and more daytime problems are strongly linked (significant predictors) to higher negative emotions.

Two-way ANOVA analysis of affects by sleep quality and gender

Table 5

Level of Sleep quality	Gender	Positive Affect		Negative Affect	
		Mean	SD	Mean	SD
Good	*Men*	39.08	4.97	14.59	2.55
	Women	40.37	3.89	14.47	2.17
	Total	39.72	4.50	14.53	2.36
Poor	*Men*	21.38	3.79	31.59	3.18
	Women	20.13	2.02	31.80	2.83
	Total	20.75	3.07	31.70	2.99
Total	*Men*	32.18	9.79	21.22	8.79
	Women	32.27	10.49	21.40	8.88
	Total	32.23	10.12	21.31	8.81
F-value (Level of sleep Quality)		**F = 1093.569; p= .001**		**F = 2024.340; p= .001**	
F-value (Gender)		**F = .001; p= .983**		**F = .013; p= .910**	
F-value (interaction)		**F = 4.918; p= .028**		**F = .191; p= .662**	

Positive Affect: Educators with good sleep have much higher positive affect than those with poor sleep (*p-value< .001*). Gender does not significantly affect positive affect (p = .983), but there is a small interaction between sleep quality and gender (p = .028) indicating women may experience a slightly greater boost in positive emotions from good sleep compared to men.

Negative Affect: Educators with poor sleep have much higher negative affect than those with good sleep (*p-value< .001*). Gender and the interaction between sleep quality and gender are not significant (p = .910 and p = .662).

DISCUSSIONS

About 40% of educators reported poor sleep quality, with no significant difference between men and women.

Results indicate that approximately 40% of the educators experience poor sleep quality, with no noticeable differences between the two genders. These findings suggest that, within the teaching profession, both genders may be affected similarly by factors that disrupt sleep. While past studies often show that women report more poor sleep than men, usually due to added burden of family or caregiving responsibilities, this trend does not appear in our sample of educators.

A possible explanation comes from a study by Alves et al. (2018), which found that gender differences in sleep quality among teachers disappeared when work-related factors like school type and teaching shifts were considered. This in turn supports the idea that the shared demands of teaching such as long hours, emotional strain, and challenges in classroom may impact sleep in similar ways for both male and female educators (Sánchez-Narváez et al., 2023).

Many other reasons may also account for this similarity. Job stress and burnout, which are common in teaching profession are strongly linked to poor sleep in both genders (Yin et al., 2018). Educators often face similar challenges like making lesson plans, managing classrooms, and meeting academic goals holds true regardless of gender. Secondly, many educators struggle to "switch off" mentally after school, leading to work-related thoughts that continue into the night, making it difficult to draw boundaries and restful sleep harder to achieve (Kant et al., 2018). Thirdly, emotional strain such as the constant need to appear calm and supportive even during stressful moments, can lead to emotional exhaustion and sleep disruption for all teachers (Takahashi, 2018).

Moreover, shared experiences like teaching during the COVID-19 pandemic added new stressors, including remote instruction and increased workload, unclear time boundaries that directly affected sleep among both men and women (Smith et al., 2022). This may have further reduced the typical gender gap often seen in sleep research.

While biological factors like hormonal changes can affect sleep, especially in women, our findings suggest that the nature of teaching work that is marked by emotional demands and high pressure may be a stronger predictor of poor sleep. This idea is consistent with studies showing that job-related stress and lack of coping resources can have a greater influence on sleep than gender alone (Montgomery et al., 2014).

That being said, personal responsibilities and life stages can still influence individual sleep experiences. While average sleep quality may be similar across genders in our study, it's important for support programs to remain flexible and consider the specific needs of different individuals. Ultimately, reducing stress at workplace, supporting emotional well-being, and promoting healthy sleep habits may help improve sleep quality for all educators.

Better sleep quality is strongly linked to higher positive emotions. Sleep duration is the strongest predictor, followed by daytime dysfunction, habitual sleep efficiency, sleep efficiency, and use of sleep medicine. Together, these explain 86% of the variation in positive affect.

Many studies consistently show that better sleep quality is closely associated with higher levels of positive emotion. In particular, characteristics of sleep such as longer duration, fewer disturbances, and improved daytime functioning significantly contributes to an individual's ability to feel energetic, satisfied, and emotionally balanced. Peabody et al. (2010) highlighted that people's perception of how well they sleep and how they function during the day plays a major role in predicting positive emotions, even beyond the influence of mental health conditions. This shows how important sleep is in shaping one's emotional well-being.

One of the major factors is sleep duration. Longer sleep helps restore both the brain and body, allowing individuals to better manage emotions and respond to daily challenges with optimism. Research involving over 360,000 adolescents revealed that shorter durations of sleep was linked to a dip in positive emotions and a rise in irritability and anxiety (Lo et al., 2016). Similarly, daily diary studies with adults found that nights with longer sleep were followed by more joyful and resilient emotional experiences during the day (Hamilton et al., 2007). This supports the idea that adequate sleep serves as a foundation for emotional strength.

Daytime dysfunction, which includes difficulty in staying focused or staying physically and mentally alert, also plays a key role. When educators feel fatigued during the day, they are less likely to enjoy or engage with positive experiences. Daytime dysfunction was a significant predictor of low positive affect, meaning that how one feels and functions throughout the day directly impacts emotional outlook (Peabody et al., 2010).

Another important factor is sleep efficiency. It is the proportion of time actually spent asleep while in bed. Low sleep efficiency can result from frequent awakenings or trouble falling asleep, which can prevent the brain from entering into stage 4 of deep and restorative sleep. Higher sleep efficiency is associated with traits such as positive emotions and better psychological functioning (Gellis & Spaeth. 2016). These patterns of sleep, help in preserving emotional energy and promote resilience. This allows an individual to respond more effectively to life's demands.

The use of sleep medication is also linked with emotional outcomes. While these medications may help with the onset of sleep, they often interfere with natural sleep cycles such as REM and deep sleep which are essential for emotional regulation. People who regularly used sleep aids reported comparatively lower levels of positive emotion, likely because medication-induced sleep does not offer the same restorative benefits as natural sleep (Peabody et al., 2010).

Furthermore, good sleep enhances the way people react to positive experiences in everyday life. Sin et al. (2020) found that participants who slept longer had stronger emotional responses to pleasant events the following day. This suggests that sleep supports a person's ability to feel joy and satisfaction in daily interactions. From a psychological point of view, the Conservation of Resources (COR) theory explains this phenomenon pointing that sleep replenishes essential psychological resources like energy, motivation, and attention (reference required here). When well-rested, people tend to face their day with more confidence, positivity, and resilience.

Altogether, quality sleep influences positive affect in many meaningful ways. From restoring emotional and mental energy to improving cognitive clarity and enhancing response to life's pleasures, sleep plays an important role. Improving key aspects of sleep such as duration, efficiency, and daytime alertness can significantly enhance emotional well-being. These findings strongly support the importance of sleep-focused interventions for improving mental health and resilience among educators and other working populations.

Poorer sleep quality is strongly linked to higher negative emotions. Sleep duration is the main predictor, with sleep disturbance and daytime dysfunction also important. These factors explain 79% of the variation in negative affect.

Poor quality of sleep is often linked with higher levels of negative emotions such as anger, sadness, anxiety, and frustration. Many studies have shown that not getting enough amount of sleep or having poor quality of sleep can make it harder for people to manage their emotions and cope with stress. Among the different segments of sleep, short sleep duration, frequent interruptions, and poor functioning during the day are the main factors connected to higher levels of negative mood. Together, they account for 79% of the variation in negative affect.

Getting enough sleep is required for emotional stability. When people sleep for lesser hours than needed, the ability of one's brain to control emotions becomes weaker. This is especially true for the amygdala and prefrontal cortex, which are instrumental in handling emotions. Less sleep reduces how well these brain areas work together (Motomura et al., 2013). People who were sleep-deprived felt more anxious, angry, and confused. Even losing just a single night of sleep was enough to trigger more negative feelings. This shows that poor sleep can make emotional regulation more difficult Killgore (2013).

Sleep problems like waking up in the middle of the night or struggling to fall asleep can also lead to mood issues. A study by Baglioni et al. (2010) reviewed several older studies and found that poor quality of sleep was a strong sign that someone might later develop depression or emotional problems. People with broken or restless sleep often reported feeling down or emotionally unstable, even if they were not diagnosed with any mental health condition. These sleep problems can make it harder to stay calm and handle everyday stress.

Another key issue is daytime dysfunction is when someone feels tired, mentally foggy, or has trouble focusing during the day. This kind of fatigue adds on to the mood problems. People who feel sleepy during the day often report mood variations and irritation (Killgore, 2013). For example, Montgomery et al. (2014) examined teachers and found that those who did not sleep well had more trouble staying emotionally balanced and handling job stress.

There is also a two-way link between poor sleep and bad moods. Being in a negative mood or feeling worried or sad can make it harder to fall asleep. People who worry a lot often overthink at night, which can keep them wake up in the middle and lead to worse sleep (Palmer and Alfano. 2017). This creates a cycle where sleep problems and emotional issues keep leading to each other.

While things like personal coping styles or existing mental health issues can affect how sleep and mood are connected, poor quality of sleep seems to raise negative emotions in

almost everybody. For instance, Sánchez-Narváez et al. (2023) show that this pattern holds true across different groups, including different ages and genders. This means sleep quality plays a key role in everyone's emotional health.

Not getting enough sleep, having interrupted sleep, and feeling tired during the day are all strongly linked to worse moods and more negative emotions. These patterns are seen in many different groups of people. Helping people sleep better through good sleep habits and stress management could make a big difference in reducing emotional problems and improving overall well-being.

The effect of sleep quality on positive affect differs slightly between men and women, with women showing a slightly greater increase in positive emotions from good sleep. There is no significant interaction for negative affect.

Research results suggest that while good sleep benefits everyone, women tend to gain slightly more benefit in terms of positive emotional effects from high-quality sleep than men. Interestingly, when it comes to reducing negative emotions like stress or frustration, both men and women seem to benefit equally. This highlights how sleep impacts different emotional dimensions depending on gender.

One explanation for this difference lies in biological factors. Studies show that women often have shorter and earlier circadian rhythms than men. These natural body clocks affect sleep timing and responsiveness to changes in sleep quality. This biological functioning makes women's sleep patterns more sensitive to disturbances (Oginni et al., 2019). Additionally, fluctuations in hormone levels related to estrogen and progesterone can impact both sleep quality and emotional regulation. When women get better sleep, these factors may align to improve mood and emotional stability more than in men (Chellappa et al., 2022). In short, better sleep could harmonize with hormonal cycles of women, amplifying their emotional benefits.

Another factor is emotional expression. Research by Kring and Gordon (1998) and Woll et al. (2016) found that women in general are more emotionally expressive and experience positive emotions more intensely than men. So, when women are well-rested, they may be more likely to feel and express positive emotions such as happiness, optimism, or gratitude. This might lead to higher self-reported positive affect simply because women are more attuned to their emotions and more open about expressing them.

Sleep also plays a role in daily functioning and motivation where women seem to show greater gains. Better sleep has been found to be linked to stronger positive emotions and increased motivation to pursue career goals but this holds true only for women (Chang et al., 2022). This suggests that quality sleep gives women an emotional and mental push that helps them engage fully with their daily tasks and goals, especially in work environments.

When looking at negative emotions, however, no major gender differences are noted. Feelings such as anger, sadness, or stress are often triggered by external pressures like workload, burnout, or lack of support. These stressors affect both genders equally, especially in demanding fields like teaching. Studies by Montgomery et al. (2014) and Sánchez-Narváez et al. (2023) show that teachers of all genders experience similar challenges that

contribute to poor sleep and emotional exhaustion. This may explain why improved sleep helps reduce negative emotions equally for men and women.

In summary, while good sleep enhances positive feelings in both genders, women tend to benefit a little more likely due to biological, emotional, and motivational reasons. However, when it comes to reducing negative emotions, the effect of sleep appears to be equally shared. These findings highlight the need for tailored sleep and wellness strategies, especially in professions like teaching, where emotional well-being is closely tied to performance and stress levels.

Implications of the study and suggestions to stakeholders

The results from current study highlight the crucial role that quality sleep plays in shaping the emotional well-being of educators. Around 40% of teachers reports of poor sleep, and this is closely linked to negative emotions such as stress, irritability, and burnout. On the other hand, good sleep supports positive emotions like motivation, resilience, and engagement, which are essential for effective teaching and a healthy classroom environment. These results suggest that improvement in sleep among educators is not just a health concern, rather it directly influences teaching quality and student success.

Implications from this study suggest to the government bodies overseeing school management that there is an urgent need to recognize sleep health as part of teacher welfare programs. Regular screening of sleep quality during health check-ups can support in identifying educators at risk in an early stage. Schools should be equipped with resources and training programs focused on sleep hygiene and stress management. Adjusting workloads and schedules to reduce overtime and after-hours tasks will also be of great help to the teachers to get the rest they need. When the teachers are burdened with excessive work, they are more prone to experience better sleep and improved emotional health.

At individual school level, practical interventions can make a big difference. Workshops educating teachers about good sleep habits and how to handle stress should be made readily available. Providing access to confidential mental health counseling is also essential since many teachers struggle with sleep-related emotional difficulties like anxiety and burnout. Creating a space for wellness within schools like providing quiet rooms or relaxation zones can allow teachers to take short breaks, helping reduce daytime fatigue and improve overall mood. Incorporating activities like mindfulness sessions, gentle yoga, or light exercise into the school routine on daily basis can also boost sleep quality and reduce emotional strain.

This study also points out a slight difference in how sleep affects educators of both genders. Women seem to gain a bit more emotional benefit from better sleep, suggesting that wellness programs should also include gender-sensitive components. Offering support tailored to women's specific needs, such as balancing work and family life, could further enhance their well-being and job performance holistically.

In a nut shell, prioritising sleep health within educational policies and school cultures can create a supportive environment for teachers. When educators sleep better and feel emotionally balanced, they are more energized and engaged in their work. This in turn leads to effective use of a teacher's resources and a better learning experience for students.

Governments and schools must be urged to work together to develop and implement policies that promotes healthy sleep habits, manage workload, and provide mental health support. Investigation in these areas will not only improve teacher well-being but also contribute to a stronger, more sustainable education system where both teachers and students thrive. Just reputation of what said earlier)

LIMITATIONS AND FURTHER RECOMMENDATION

Limitations of the Study

- The study relied on self-reported measures of sleep quality and emotions, which may be influenced by personal bias or inaccurate recall.
- The cross-sectional design does not allow to confirm the cause-and-effect relationships between sleep quality and emotional affect.
- The sample included educators from a specific region, which limits the generalizability of the results to all educators.
- The study did not explore other factors that might affect sleep and emotions, such as physical health conditions, lifestyle habits, or environmental stressors.

Recommendations for Future Research and Practice

- Future studies can focus on conducting longitudinal studies in order to better understand how changes in sleep quality with time have an impact on educators' emotional well-being.
- Studies can also include objective sleep measures like actigraphy or sleep trackers to complement self-reports and improve accuracy.
- Focus towards exploring factors like diet, physical activity, and work environment to understand how they interact with sleep and emotional health.
- Intervention based studies can add weightage by determining the effectiveness of relaxation therapies like Benson's Relaxation Therapy (BRT) as a non-invasive, evidence- based intervention that can improve sleep quality among educators.
- Encourage collaborative efforts of schools, mental health professionals, and government bodies to help design comprehensive wellness programs focused on sleep and emotional health.

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Conflict of Interest

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