

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

Sanjana Singh^{1*}, Dr. Namita Srivastava²

ABSTRACT

Sleep is crucial for maintaining psychological well-being as well as cognitive functioning. Young adults are increasingly experiencing sleep deprivation, which may have an influence on psychological functions like perceived stress and attention. This study investigated the relationship between sleep deprivation, mindful attention, and perceived stress in young adults (both males and females). The study was conducted on a sample of 200 young adults (Males:100, Females:100) aged between 18–29 years from Lucknow, Uttar Pradesh. Data were studied using Pearson's product-moment correlation via SPSS, adopting the correlational research method. The results showed a significant negative relationship between sleep deprivation, mindful attention in male participants, but this correlation was not statistically significant in females. A significant positive relationship is observed in sleep deprivation, perceived stress among both male and female individuals. Overall, the data largely supported the cited hypothesis, suggesting that increased levels of sleep deprivation correlate with higher perceived stress and lower mindful attention in young individuals. The study underlines the significance of sufficient sleep and indicates that sleep patterns may affect stress levels and attentional awareness in young individuals.

Keywords: *Sleep Deprivation, Mindful Attention, Perceived Stress, Young Adults, Sleep Quality, Psychological Well-Being*

Sleep Deprivation

Young adulthood, a stage of development characterized by increased responsibilities, curricular activities, vocational obligations, and social interactions, which can affect daily routines and health behaviors (CDC, 2022). A significant number of young adults indicate that they do not obtain the necessary amount of sleep, with insufficient sleep acknowledged to be a prevalent concern among this age group (CDC, 2022). Sleep disturbances in young people are associated with challenges in sustaining attention and concentration throughout the day (Watson et al., 2015).

Sleep deprivation can be described as the state of not obtaining enough sleep. This can happen due to health issues, working different hours, or personal factors (e.g., caring for a

¹Student, Amity Institute of Behavioural and Allied Sciences, Amity University Uttar Pradesh, Lucknow Campus, India.

²Assistant Professor, Amity Institute of Behavioural and Allied Sciences, Amity University Uttar Pradesh, Lucknow Campus, India.

*Corresponding Author

Received: April 14, 2026; Revision Received: April 25, 2026; Accepted: April 30, 2026

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

newborn, studying late at night). It can also be prompted for research or questioning purposes (APA). Sleep deprivation (SD) is a widespread condition that disrupts the essential nightly cycle needed for adequate physiological functioning and has been found to affect several cognitive abilities, including memory, attention, alertness, judgment, and decision-making (Lim & Dinges, 2010). Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) recognizes disorders related to sleep, including insomnia and insufficient sleep, as clinically important when they disrupt daily functioning (American Psychiatric Association, 2022)

Sleep deprivation is a major health problem affecting numerous communities, particularly young adults, due to academic demands, technology usage, and lifestyle habits. From a neurobehavioral standpoint, sleep is crucial for cognitive restoration, attention modulation, and psychological balance. Inadequate or limited sleep has been demonstrated to impact alertness, executive function, and psychological processing (Lim & Dinges, 2010). Sleep deprivation may occur acutely (e.g., 24 hours without sleep) or chronically (lower sleep over several days), both of which can affect psychological and cognitive functioning. This study defines sleep deprivation as a decrease in sleep duration that may affect cognitive awareness and stress perception in young individuals.

Mindful Attention

Attention is a crucial cognitive ability allowing individuals to focus on particular stimuli while excluding irrelevant data. It is pivotal in perception, learning, memory, and decision-making. The American Psychological Association (APA, 2023) characterizes attention as the process of cognitive capacity to particular data while disregarding other overlapping stimuli. Cognitive research indicates that attention comprises multiple components, including sustained attention, selective attention, and executive control, predominantly governed by frontal brain areas (Posner & Petersen, 1990). Optimal attentional functioning is crucial for goal-oriented behavior, psychological control, and adaptive reactions in everyday life. Mindful attention, a specific quality of the broader construct of attention, is defined by present-moment awareness and unbiased assessment of situations. Brown and Ryan (2003) define mindful attention as the ability to consciously focus on and be observant of both internal and external activities in the current moment. In contrast to automatic or habitual attention, mindful attention entails deliberate awareness rather than operating on "autopilot." The American Psychological Association (2023) defines mindfulness as a state of active, open awareness of the present moment, which promotes psychological balance and well-being.

Mindful attention is observed as an essential part of self-regulation, since it allows individuals to recognize thoughts and emotions without automatic reaction or judgment. Elevated levels of mindful attention correlate with more effective stress management, enhanced psychological well-being, and increased cognitive clarity (Brown & Ryan, 2003). Attention regulation is linked to effective cognitive functioning; so factors like sleep habits may affect an individual's capacity to sustain present-centered awareness (Killgore, 2010). In this study, mindful attention implies the level of continuous and sustained awareness individuals maintain towards their current situation.

Perceived Stress

The World Health Organization (WHO, 2023) defines stress as occurring when an individual thinks that environmental pressures surpass their capacity to regulate or adjust

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

effectively. Although stress can occasionally encourage positive adaptation, extended or uncontrolled stress can harm mental and physical well-being.

Perceived stress specifically pertains to a person's personal assessment of the stressfulness of their life situations, rather than the actual existence of stressors. Cohen, Kamarck, and Mermelstein (1983), creators of the Perceived Stress Scale (PSS), defined perceived stress as the extent to which people evaluate circumstances in their lives as chaotic, unmanageable, and excessively burdensome. Consequently, perceived stress highlights cognitive evaluation, how an individual assesses and emotionally reacts to life situations.

From a psychological point of view, perceived stress is shaped by external pressures and internal strategies for coping. The International Classification of Diseases (ICD-11) acknowledges stress-related conditions and highlights the importance of personal perception and reaction to stressful situations (World Health Organization, 2019).

From a biological standpoint, the interpretation of stress activates neuroendocrine systems, specifically, hypothalamic-pituitary-adrenal axis (HPA), resulting in the release of cortisol and several other hormones related to stress (McEwen, 2007). Psychological studies suggest that elements like insufficient sleep can amplify emotional responses and elevate susceptibility to stress awareness (Meerlo, Sgoifo, & Suchecki, 2008). Thus, perceived stress reflects a person's subjective experience of stress severity and coping effectiveness, instead of just the existence of stressors.

In this study, perceived stress denotes the extent to which young adults judge their everyday situations as stressful, overwhelming, or hard to handle.

Sleep deprivation, mindful awareness, and perceived stress are interconnected concepts that collectively affect cognitive and psychological processes. Sufficient sleep is crucial for optimal neurobehavioral regulation, and lack of sleep has been demonstrated to hinder attention, executive functions, and emotional regulation (Lim & Dinges, 2010). When sleep is limited, the brain's ability to maintain focus and manage emotional responses is diminished (Killgore, 2010). Mindful awareness, characterized by being present and consciously focusing attention, is crucial for emotional regulation and mental health (Brown & Ryan, 2003). Nonetheless, sleep interruptions can impair attentional consistency and diminish the capacity to stay aware and focused on the present (Lim & Dinges, 2010). Furthermore, lack of sleep has been linked to heightened activation of stress-response systems, particularly the hypothalamic-pituitary-adrenal (HPA) axis, thereby influencing an individual's perception of stress (Meerlo, Sgoifo, & Suchecki, 2008). Given that perceived stress indicates how one views life's challenges as daunting or unmanageable (Cohen, Kamarck, & Mermelstein, 1983), insufficient sleep could lead to heightened stress awareness while also diminishing mindful consciousness. Therefore, these three factors create a connected system that can greatly influence psychological functioning in young adults.

Considering these connections, the current research seeks to investigate the association between sleep deprivation, mindful awareness, perceived stress in young adults (male and female). While prior studies have looked at these factors individually, few have explored how they correlate within the same group. The study seeks to determine whether greater sleep deprivation is associated with lower mindful attention and increased perceived stress

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

Through the analysis of these relationships, the study aims to enhance comprehension of how sleep habits affect cognitive awareness and psychological well-being in young adults, ultimately providing insights that may inform future strategies for fostering better sleep and lowering stress.

REVIEW OF LITERATURE

A study was conducted named “Consequences of Sleep Deprivation on Cognitive Performance” by Khan and Al-Jahdali (2023). This research is an evaluation of current experimental and observational studies analyzing total and partial sleep deprivation. The examination encompasses results from various samples, such as healthy individuals and animal subjects, and does not specify an individual empirical sample size. Authors indicate that total sleep deprivation hinders attention plus working memory, also impacting other functions like long-term memory. They also indicate, partial lack of sleep affects attention, particularly vigilance. The analysis finds, both type of sleep deprivation lead to negative effects on cognitive performance and emphasizes that studies on more complex cognitive tasks and recuperation mechanisms are still insufficient.

Pan et al. (2025) conducted a study titled “The Impact of 24-Hour Sleep Deprivation on Cognitive and Motor Abilities of Male College Students.” This study was an observational investigation conducted over the span of one year to assess the short-term effects of 24-hour sleep deprivation on the cognitive functions and motor skills of male college students in India. The study included a sample of 100 male university students and offered original empirical results. The study aimed to assess the short-term effects of sleep deprivation on cognitive and motor skills, indicating that a full day without sleep would impair performance. The results revealed, the experimental group demonstrated significantly slower choice reaction times and decreased working memory performance at N=1. Selective attention showed a significant improvement post-testing, with considerable differences observed in retention phases for both observational and cognitive tasks. The study discovered that being awake for 24 hours harmed cognitive skills in male college students, particularly in aspects such as choice reaction time, working memory, and divided attention. Selective attention improved following the test, but physical and combined control tasks showed no significant changes, indicating that sleep deprivation primarily impacted cognitive functions with minimal effects on physical performance

A research project titled “Effects of Sleep Deprivation on Cognition” was carried out by Killgore (2010). This article is a narrative review that compiles current research analyzing how the cognitive functioning is impacted by sleep deprivation. The study investigates if sleep deprivation impacts almost all cognitive abilities universally through diminished alertness and attention or if sleep loss particularly hinders specific facets of cognition. The assessment shows a broad consensus that insufficient sleep leads to an overall reduction in reaction time and increased variability in performance, particularly in simple evaluations of alertness, attention, and vigilance. Nevertheless, it observes considerably less consensus concerning the impacts of sleep deprivation on advanced cognitive abilities, such as perception, memory, and executive functions. The author asserts that lack of sleep can lead to overall reductions in basic alertness as well as specific deficits in advanced cognitive functions, with the degree of effect varying based on task requirements, engagement in emotional processing, and compensatory activation of cortical areas.

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

A study named “Sleep Deprivation: Effects on Cognitive Performance” was conducted by Alhola et al. (2007). The work examines extended periods of wakefulness as a common occurrence and highlights that numerous questions in the areas of sleep and wakefulness still lack answers. Extended alertness can result from either sudden complete sleep deprivation or continuous limited sleep. The authors investigate if both complete and partial sleep deprivation negatively affect cognitive performance. They assert that total sleep deprivation hinders attention and working memory, while partial sleep deprivation primarily disrupts attention. The study indicates that both total and partial lack of sleep negatively impact cognitive performance. It also highlights that research investigating the impacts of sleep deprivation on complex cognitive tasks is limited. The authors further note that managing sleep deprivation is influenced by factors like age and gender, and that there are significant individual variations in responses.

A study was conducted called “Sleep Deprivation and Stress: A Reciprocal Relationship” by Nollet et al. (2020). Assessment centers on HPA axis and its hormonal outputs, such as cortisol in humans and corticosterone in rodents, exploring the impact of sleep deprivation circulates stress hormone levels and influences of stress on sleep regulation. The authors suggest a reciprocal relationship where lack of sleep increases HPA axis function and stress hormones, and elevated stress reactions subsequently disturb sleep balance. The analysis shows that disturbances in sleep regulation are typically linked to heightened HPA axis function, resulting in increased levels of circulating stress hormones. It also highlights that the bidirectional connection between sleep and HPA activity poses difficulties when applying conventional sleep deprivation methods that can, in turn, trigger stress. The authors assert that it is crucial to eliminate stress as a confounding variable and suggest creating more sophisticated and non-stressful methodologies for sleep deprivation in upcoming studies.

A study was conducted named “Effect of Sleep Deprivation on Attention and Stress in Future Healthcare Professionals” by Bansal et al. (2025). This observational cross-sectional study took place at Dr. Kushwah Institute of Medical Sciences, Kanpur, from January to December 2024. Eighty-five participants were split into groups of sleep deprived and non-deprived according to their sleep duration. The research represents original empirical work involving a sample of 85 prospective healthcare professionals. The objective was to assess how sleep deprivation influences attention and stress level. The findings indicated that the sleep deprived participants exhibited notably lower attention and elevated levels of stress. Participants who were sleep deprived exhibited a higher prevalence of high stress. A distinct pattern was noted linking longer sleep duration to enhanced cognitive performance and lower stress levels. The research determined that lack of sleep notably hinders attention and increases stress in future healthcare workers, highlighting the necessity to encourage proper sleep practices among medical students to enhance cognitive performance and mental health.

METHODOLOGY

Objectives

- To explore the relationship between Sleep deprivation and Mindful Attention in young adults (both Male and Female).
- To explore the relationship between Sleep deprivation and Perceived Stress in young adults (both Male and Female).

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

Hypothesis

- There will be a significant negative correlation between Sleep Deprivation and Mindful Attention in young adults.
- There will be a significant positive correlation between Sleep Deprivation and Perceived Stress in young adults.

Methodology

The current research included 100 young adult males, 100 young adult females selected using a stratified random sampling method. The samples were chosen from individuals aged 18-29 years in the city of Lucknow, Uttar Pradesh. The current research focuses on how sleep deprivation influences mindful attention and the perception of stress in individuals.

Therefore, this study includes two categories of variables-

Independent Variable

1. Sleep Derivation

Dependent Variable

1. Mindful Attention
2. Perceived Stress

The Tools Used-

- **PSQI The Pittsburgh Sleep Quality Index:** This document includes 19 self-reflective inquiries that yield seven component scores: subjective sleep quality, sleep latency, sleep duration, sleep efficiency, sleep disturbances, use of sleep medications, and daytime dysfunction. Each element is assigned score between 0 and 3. The global PSQI score ranges from 0 to 21, where higher scores indicate poorer sleep quality. Cronbach's alpha values for PSQI subscales typically range from 0.70 to 0.83, based on the sample population.
- **MAAS The Mindful Attention Awareness Scale:** It was created to evaluate dispositional mindfulness, particularly the person's degree of attention and awareness of current experiences in daily life. This scale includes 15 self-report items aimed at assessing mindful attention. It is evaluated on a 6-point scale, 1 (almost always) to 6 (almost never), depending on frequency with which the participant feels the statement. Increased scores reflect greater degrees of mindful awareness and attention. Depending on the sample population, Cronbach's alpha values for MAAS subscales normally fall between 0.80 and 0.90.
- **PSS-10 The Perceived Stress Scale-10:** It was developed to measure how much life situations are perceived as stressful. Responses are recorded on a 5-point Likert Scale ranging from 0 (never) to 4 (very often). The total score ranges from 0 to 40, where scores of 0-13 reflect Low stress, 14-26 represent Moderate stress, and 27-40 denote High stress. Based on the sample group, Cronbach's alpha values for MAAS subscales typically range from 0.70 to 0.85.

The participants in this study were chosen from the designated population. Each individual was approached individually, and the objectives of the current study were clarified. All participants granted consent for data collection. The individuals were provided with guidance while offering answers. They were guaranteed that the answers were kept confidential.

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

The purpose of the study was to understand the connection between sleep deprivation, Mindful Attention, Perceived Stress. To achieve this, the product moment correlation (Pearson) was computed. We also performed regression analysis to comprehend the relationship.

RESULTS

Descriptive Statistics

Variables	Components	Male		Female	
		Mean	SD	Mean	SD
Sleep Deprivation	Subjective Sleep Quality	.9600	.82780	1.1600	.70668
	Sleep Latency	1.0200	.97421	1.4800	.98964
	Sleep Duration	1.2800	1.13778	.9200	1.07947
	Sleep Efficiency	.5000	.92660	.7400	1.20286
	Sleep Disturbances	1.0600	.37118	1.3800	.69311
	Use of Sleep Medication	.0600	.31205	.1400	.49278
	Daytime Dysfunction	1.2800	.92201	1.1800	.84543
	Sleep Deprivation Total	6.0800	3.06719	6.8800	3.01270
Mindful Attention		60.7200	13.77018	57.9000	13.84510
Perceived Stress		18.3600	6.12912	20.9400	6.07166

Table 4.1

1. Male Participants

The sample included 100 individuals (N = 100). The average score for Sleep Deprivation (PSQI Total) was 6.08 (SD = 3.07), reflecting a moderate degree of sleep-related challenges among the male participants. The average score for Mindful Attention (MAAS) was 60.72 (SD = 13.77), indicating moderate degrees of awareness in the present moment. The average score for Perceived Stress (PSS) was 18.36 (SD = 6.13), indicating a moderate level of perceived stress experienced by male participants. The descriptive statistics indicate that the sample displayed moderate levels of sleep deprivation, mindful attention, and perceived stress, with appropriate variation among participants.

2. Female Participants

The sample included 100 individuals (N = 100). The average score for Sleep Deprivation (PSQI Total) was 6.88 (SD = 3.01), suggesting a moderate degree of sleep disruption among female participants. The average score for Mindful Attention (MAAS) was 57.90 (SD = 13.85), indicating moderate mindfulness levels, while the average score for Perceived Stress (PSS) was 20.94 (SD = 6.07), demonstrating relatively elevated perceived stress levels. The descriptive statistics indicate that female participants encountered moderate sleep deprivation, alongside moderate mindful attention and comparatively high stress levels.

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

Correlation Analysis

1. Male Participants

Table 1: Pearson Correlation Matrix among Study Variables for Male Participants (N = 100)

Variables	Components	1	2	3
Sleep Deprivation	Subjective Sleep Quality	—	-0.247*	0.305**
	Sleep Latency	—	-0.301**	—
	Sleep Disturbance	—	-0.246*	0.319**
	Sleep Deprivation Total	—	-0.485***	0.413***
Mindful Attention		-0.485***	—	-0.511***
Perceived Stress		0.413***	-0.511***	—

Note. $p < .05$, $p < .01$, $p < .001$.

A Pearson product-moment correlation analysis was conducted to investigate associations between Sleep Deprivation, Mindful Attention, and Perceived Stress in male participants. The findings indicated a notable negative relation in Sleep Deprivation and Mindful Attention ($r = -0.485$, $p < .001$). This suggests that greater levels of sleep deprivation correlate with reduced mindful attention among male participants. Consequently, Hypothesis 1 is validated. Additionally, a notable positive correlation was identified between Sleep Deprivation and Perceived Stress ($r = 0.413$, $p < .001$). This indicates that increased sleep deprivation correlates with elevated perceived stress levels. Therefore, Hypothesis 2 finds support in males.

Subjective Sleep Quality exhibited a notable negative relation with Mindful Attention ($r = -0.247$, $p < .05$) and a significant positive relation with Perceived Stress ($r = 0.305$, $p < .01$), indicating that diminished perceived sleep quality relates to reduced mindfulness and increased stress. Sleep Latency showed a negative correlation with Mindful Attention ($r = -0.301$, $p < .01$), suggesting that a longer duration to fall asleep is associated with lower mindfulness in males. Sleep Disturbance showed a notable negative correlation with Mindful Attention ($r = -0.246$, $p < .05$) and a positive relation with Perceived Stress ($r = 0.319$, $p < .01$), indicating that frequent sleep disturbances are linked to reduced awareness and increased stress levels in males.

2. Female Participants

Table 4.3 Pearson Correlation Matrix among Study Variables for Female Participants (N = 100)

Variables	Components	1	2	3
Sleep Deprivation	Subjective Sleep Quality	—	—	0.304**
	Sleep Efficiency	—	0.321**	—
	Sleep Deprivation Total	—	-0.14	0.244*
Mindful Attention		-0.14	—	-0.502***
Perceived Stress		0.244*	-0.502***	—

Note. $p < .05$, $p < .01$, $p < .001$.

A Pearson product-moment correlation analysis was conducted to investigate the associations between Sleep Deprivation, Mindful Attention, and Perceived Stress in female participants. The results indicated a negative relationship between Sleep Deprivation and Mindful Attention ($r = -0.140$, $p = .165$); however, this relationship was not statistically

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

significant. This suggests that sleep deprivation had no significant correlation with mindful attention in female participants. Consequently, Hypothesis 1 is not accepted for females. Although, a notable positive relationship exists between Sleep Deprivation and Perceived Stress ($r = 0.244$, $p = .015$), signifying that greater sleep deprivation is associated to higher perceived stress levels. Therefore, Hypothesis 2 is affirmed for women. Subjective Sleep Quality demonstrated a notable positive correlation with Perceived Stress ($r = 0.304$, $p = .002$), signifying that lower sleep quality correlates with elevated stress levels. Sleep Efficiency showed a significant positive correlation with Mindful Attention ($r = 0.321$, $p = .001$), indicating that improved sleep efficiency relates to increased mindfulness level.

DISCUSSION

This study investigated the relationship between sleep deprivation, mindful attention, perceived stress in young adults, with separate analyses for male and female participants. The results suggested that sleep deprivation was linked to mindful attention and perceived stress, showing some differences in the strength of these connections between genders.

Aligned with the initial hypothesis, sleep deprivation showed a negative relationship with mindful attention. This shows that people with higher sleep deprivation often reported lower levels of mindful attention. However, the intensity of this correlation differed between genders. Although the negative relationship was noted in both groups, the correlation for female participants was not statistically significant. This suggests that the relationship between sleep deprivation and mindful attention was less pronounced and weaker in females than in males. The second hypothesis, suggesting a positive correlation between sleep deprivation and perceived stress, was affirmed by results. Increased sleep deprivation correlated with higher perceived stress in both male and female participants. The relationship was more significant in male than in female, suggesting that the link between sleep deprivation and perceived stress was greater in males. However, the positive correlation was statistically significant for both groups, backing the proposed hypothesis.

Alongside the main variables, the connections between particular components of sleep deprivation (assessed through chosen PSQI components) and the dependent variables were also analyzed. In male participants, Subjective Sleep Quality, Sleep Latency, and Sleep Disturbance showed strong correlations with the outcome variables. Lower levels of mindful attention and higher perceived stress were associated with poorer subjective sleep quality and increased sleep disturbances, suggesting that interruptions in perceived and actual sleep experiences could adversely affect attentional awareness and stress levels. Moreover, extended sleep latency was linked to diminished mindful attention, indicating that challenges in falling asleep could negatively affect attentional capabilities in males.

In contrast, among the female participants, Subjective Sleep Quality and Sleep Efficiency surfaced as significant factors. Low subjective sleep quality was strongly linked to increased perceived stress, suggesting that women who viewed their sleep as worse often reported higher stress levels. Furthermore, sleep efficiency demonstrated a notable positive correlation with mindful attention, indicating that improved sleep efficiency could foster greater levels of attentional awareness in women. These results suggest that although general sleep deprivation affects psychological functioning, particular aspects of sleep quality influence mindful attention and perceived stress differently for male and female participants.

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

Limitations

This study, however in depth, has its limitations. The following points are some of the limitations that could be pointed out:

The study focused on the correlation between the variables, on which we can't conclude the causes of it. Another limitation was that the participants were asked to fill the questionnaire, so self-report bias can get involved. Lastly, the number of participants were less, thus this study cannot be generalized as much as it aims to do. Our study focused on participants from a specific group. Therefore, our study may or may not be generalized with the Indian population. Other potential variable like history, trauma were not included. These might have affected the relationship achieved.

Future Implications

This study may contribute to increased public awareness regarding the psychological consequences of sleep deprivation, particularly its impact on mindful attention and perceived stress. The results could inform institutional and healthcare policies that encourage routine screening of sleep patterns and psychological well-being in academic and general healthcare settings. Emphasizing psychological dimensions such as mindful attention and perceived stress may support the development of more holistic and preventive mental health care models. The study may assist in the early identification and screening of individuals who are vulnerable to cognitive and stress-related difficulties due to inadequate sleep.

CONCLUSION

This research sought to investigate the connection between sleep deprivation, mindful attention, perceived stress in young adults (males and females). The research proposed that sleep deprivation would have a negative relationship with mindful attention and a positive relationship with perceived stress. The results confirmed the suggested hypotheses, as a substantial negative correlation was identified between lack of sleep and mindful attention, while a significant positive correlation was seen between lack of sleep and perceived stress. These findings underscore the mental effects of insufficient sleep and stress the necessity of encouraging good sleep practices to boost mindful awareness and alleviate stress for young adults population.

REFERENCES

- Centers for Disease Control and Prevention. (2022). *Short sleep duration among US adults*. https://www.cdc.gov/sleep/data_statistics.html
- Watson, N. F., Badr, M. S., Belenky, G., Bliwise, D. L., Buxton, O. M., Buysse, D., ... & Heald, J. L. (2015). *Recommended amount of sleep for a healthy adult: Consensus statement of the American Academy of Sleep Medicine and Sleep Research Society*. *Journal of Clinical Sleep Medicine*, 11(6), 591–592.
- Griggs, S., Harper, A., & Hickman, R. L. Jr. (2021). A systematic review of sleep deprivation and neurobehavioral function in young adults. *Applied Nursing Research*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8766996/>
- Centers for Disease Control and Prevention. (2022). *Psychosocial correlates of insomnia among college students*. https://www.cdc.gov/pcd/issues/2022/22_0060.htm
- Lim, J., & Dinges, D. F. (2010). *A meta-analysis of the impact of short-term sleep deprivation on cognitive variables*. *Psychological Bulletin*, 136(3), 375–389. <https://doi.org/10.1037/a0018883>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.; DSM-5-TR). Author.

Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female)

- American Psychological Association. (2023). *Attention*. <https://dictionary.apa.org/attention>
- American Psychological Association. (2023). *Mindfulness*. <https://www.apa.org/topics/mindfulness>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- Killgore, W. D. S. (2010). Effects of sleep deprivation on cognition. *Progress in Brain Research*, 185, 105–129. <https://doi.org/10.1016/B978-0-444-53702-7.00007-5>
- McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. *Physiological Reviews*, 87(3), 873–904. <https://doi.org/10.1152/physrev.00041.2006>
- Meerlo, P., Sgoifo, A., & Suchecki, D. (2008). Restricted and disrupted sleep: Effects on autonomic function, neuroendocrine stress systems and stress responsivity. *Sleep Medicine Reviews*, 12(3), 197–210. <https://doi.org/10.1016/j.smrv.2007.07.007>
- Posner, M. I., & Petersen, S. E. (1990). The attention system of the human brain. *Annual Review of Neuroscience*, 13, 25–42. <https://doi.org/10.1146/annurev.ne.13.030190.000325>
- World Health Organization. (2019). *International classification of diseases (11th ed.)*. <https://icd.who.int>
- World Health Organization. (2023). *Stress*. <https://www.who.int/news-room/questions-and-answers/item/stress>
- Alhola, P., & Polo-Kantola, P. (2007). Sleep deprivation: Impact on cognitive performance. *Neuropsychiatric Disease and Treatment*, 3(5), 553–567. <https://pubmed.ncbi.nlm.nih.gov/articles/PMC2656292/>
- Bansal, R., & Gupta, A. (2024). Effect of sleep deprivation on attention and stress in future healthcare professionals. *Journal of Clinical and Diagnostic Research*, 18(2), CC01–CC05.
- Ferreira, L. R., et al. (2023). Assessing the impact of sleep restriction on the attention and executive functions of medical students: A prospective cohort study. *Sleep and Biological Rhythms*. <https://doi.org/10.1007/s13760-023-02250-w>
- Harrison, Y., & Horne, J. A. (2000). The impact of sleep deprivation on decision making: A review. *Journal of Experimental Psychology: Applied*, 6(3), 236–249. <https://pubmed.ncbi.nlm.nih.gov/21075236/>
- Pan, P. G., Pan, A., & Jana, D. (2025). The effects of 24-hour sleep deprivation on cognitive and motor skills of male college students. *International Journal of Pharmaceutical Quality Assurance*, 16(5), 130–135.

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Singh, S. & Srivastava, N. (2026). Relationship between Sleep Deprivation, Mindful Attention and Perceived Stress among Young Adults (Male and Female). *International Journal of Indian Psychology*, 14(2), 156-166. DIP:18.01.S67.2026 1402, DOI:10.25215/1402.S67