

Influence of Sleep Quality on Difficulties in Emotional Regulation among Undergraduate Students

Dr. Jayaraju R¹ and Dr. Krishnamurthy V S²

¹Associate Professor, Department of Psychology, Government College for Women (Autonomous), Mandya

²Assistant Professor, Department of Psychology, Government Home Science College for Women, Holenarsipura

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ABSTRACT

The present study examined the influence of sleep quality on difficulties in emotional regulation among undergraduate students. In addition, the study investigated the influence of sleep habits, specifically early sleep (before 10 PM) and late sleep (after 10 PM), on emotional regulation difficulties. A descriptive survey research design was employed. The sample consisted of 40 female undergraduate students aged between 18 and 21 years, selected through a convenience sampling method from Holenarsipura taluk. Data were collected using the Sleep Quality Scale (SQS) and the Difficulties in Emotion Regulation Scale (DERS). The data were analyzed using descriptive statistics and independent samples t-tests. The findings revealed that there was no statistically significant influence of sleep quality on emotional regulation difficulties ($t = 0.35$, $p = .72$). Similarly, no significant influence of sleep habits on emotional regulation difficulties was observed ($t = 0.34$, $p = .73$). The results suggest that sleep-related variables alone may not significantly predict emotional regulation difficulties among undergraduate students.

Keywords: sleep quality, emotional regulation, undergraduate students, sleep habits

INTRODUCTION

Sleep is a fundamental biological process that plays a crucial role in maintaining psychological and emotional well-being. Adequate and restorative sleep is essential for optimal cognitive functioning, emotional stability, and overall health. Emotional regulation refers to the processes through which individuals monitor, evaluate, and modify their emotional responses in order to achieve adaptive functioning. Difficulties in emotional regulation are associated with various psychological problems, including anxiety, depression, and stress-related disorders.

Undergraduate students are particularly vulnerable to irregular sleep patterns due to academic demands, social engagements, and lifestyle factors. Such irregularities may affect their emotional functioning and coping mechanisms. While previous research has emphasized the role of sleep in emotional well-being, the relationship between sleep quality and emotional regulation remains complex and not fully understood. The present study attempts to explore this relationship among undergraduate students.

REVIEW OF LITERATURE

The relationship between sleep quality and emotional regulation has been widely explored in psychological research. Gratz and Roemer (2004), in their development of the Difficulties in Emotion Regulation Scale, conceptualized emotional regulation as a multidimensional construct involving awareness, understanding, and

acceptance of emotions, as well as the ability to control impulsive behaviors. Their work suggests that physiological factors, including sleep, may influence emotional processes.

Yi, Shin, and Shin (2006) developed the Sleep Quality Scale and reported that poor sleep quality is associated with reduced psychological functioning and impaired daily performance. Similarly, Walker (2017) emphasized that sleep plays a critical role in regulating emotional brain activity, particularly in reducing amygdala reactivity and enhancing emotional stability. Van Cauter and Knutson (2018) further reported that sleep disturbances can lead to heightened emotional reactivity and decreased ability to cope with stress.

However, not all studies support a strong direct relationship between sleep quality and emotional regulation. Some researchers argue that emotional regulation is influenced by multiple interacting factors, including personality traits, coping strategies, and environmental stressors. In college populations, academic pressure and social dynamics may exert a stronger influence on emotional functioning than sleep patterns alone. Furthermore, subjective perceptions of sleep quality may not always correspond with objective sleep measures, leading to inconsistencies in research findings.

Overall, the literature suggests that while sleep quality is an important factor in emotional functioning, its influence on emotional regulation difficulties may be indirect and mediated by other psychological and environmental variables.

METHODOLOGY

Research Design

The study employed a descriptive survey research design to examine the influence of sleep quality and sleep habits on difficulties in emotional regulation among undergraduate students.

Variables

Sleep quality was treated as the independent variable, while difficulties in emotional regulation served as the dependent variable. In addition, sleep habit, categorized as early sleep (before 10 PM) and late sleep (after 10 PM), was considered as an additional independent variable.

Sample

The sample consisted of 40 female undergraduate students aged between 18 and 21 years. Participants were selected using a convenience sampling technique from colleges located in Mandya District. Only those students who were able to read and write Kannada and English and who were willing to participate were included in the study.

Tools

Data were collected using a socio-demographic information sheet developed by the researcher, the Difficulties in Emotion Regulation Scale (DERS) developed by Gratz and Roemer (2004), and the Sleep Quality Scale (SQS) developed by Yi et al. (2006). The DERS assesses multiple dimensions of emotional regulation difficulties, including non-acceptance, impulse control, and lack of emotional clarity, with higher scores indicating greater difficulties. The SQS evaluates various aspects of sleep quality, with higher scores indicating poorer sleep quality.

Statistical Analysis

The collected data were analyzed using descriptive statistics, including mean and standard deviation, to summarize the data. Independent samples t-tests were used to examine differences between groups.

RESULTS

Influence of Sleep Quality on Emotional Regulation

Table 1 presents the mean scores, standard deviations, and t-test results comparing emotional regulation difficulties between students with low and high sleep quality.

Group	N	M	SD	t	p
Low Sleep Quality	30	99.2	8.19		
High Sleep Quality	10	98.2	6.75	0.35	.72

Note. $p > .05$, not significant.

The results indicate that students with low sleep quality obtained a slightly higher mean score on emotional regulation difficulties compared to those with high sleep quality. However, the difference between the groups was not statistically significant, as the obtained t-value was 0.35 with a p-value greater than .05. Therefore, the first hypothesis stating that sleep quality significantly influences emotional regulation difficulties is not supported.

Influence of Sleep Habits on Emotional Regulation

Table 2 presents the comparison between students who sleep before 10 PM and those who sleep after 10 PM.

Group	N	M	SD	t	p
Sleep before 10 PM	18	98.5	8.05		
Sleep after 10 PM	22	99.4	7.73	0.34	.73

Note. $p > .05$, not significant.

The findings reveal that students who sleep after 10 PM showed slightly higher emotional regulation difficulties than those who sleep earlier. However, the difference was not statistically significant, as indicated by the t-value of 0.34 and p-value greater than .05. Thus, the second hypothesis is also not supported.

DISCUSSION

The findings of the present study indicate that neither sleep quality nor sleep habits significantly influence difficulties in emotional regulation among undergraduate students. Although students with poorer sleep quality and later sleep habits exhibited marginally higher difficulties in emotional regulation, these differences were not statistically significant.

These findings are partially consistent with research suggesting that emotional regulation is influenced by multiple factors beyond sleep, such as stress, personality traits, and environmental conditions. However, the results contradict findings reported by Walker (2017), who emphasized the significant role of sleep in emotional brain functioning.

The lack of significant findings in the present study may be attributed to several factors. The relatively small sample size may have limited the statistical power of the study. Additionally, the homogeneity of the sample, consisting only of female students from a specific geographical area, may have reduced variability. It is also possible that other unmeasured variables, such as academic stress and social support, played a more prominent role in influencing emotional regulation.

FINDINGS

The study revealed that there is no significant influence of sleep quality on difficulties in emotional regulation among undergraduate students. It was also found that sleep habits, whether early or late, do not significantly affect emotional regulation difficulties.

CONCLUSION

The study concludes that sleep quality and sleep habits do not have a significant influence on difficulties in emotional regulation among undergraduate students in the present sample. These findings highlight the complexity of emotional regulation and suggest that it is influenced by multiple interacting factors rather than sleep alone.

Limitations

The study is limited by its small sample size and the inclusion of only female participants. The use of self-report measures may have introduced response bias. Furthermore, the study was confined to a specific geographical region, which limits the generalizability of the findings.

Suggestions for Future Research

Future research should include larger and more diverse samples, including both male and female participants. It is also recommended that additional variables such as stress, anxiety, and lifestyle factors be considered. Longitudinal studies may provide a deeper understanding of the causal relationship between sleep and emotional regulation.

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