

A Comprehensive Review of Emotion Regulation Strategies and Their Efficiency Across the Life Span

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ABSTRACT

Particularly for teenagers, the COVID-19 pandemic and the lockdowns that followed have presented serious obstacles to mental health. This study examines the connection between adolescents' poor sleep during the early phases of the COVID-19 lockdown and their inability to regulate their emotions. 2563 teenagers from Innova Schools in urban low and middle environments, ages 11 to 17, made up the sample. The Pittsburgh Sleep Quality Index and the Difficulties in Emotion control Scale Short Form were self-report questionnaires that participants completed to gauge their level of emotion control and sleep quality. To ensure split-half reliability, the sample was split into subsets for exploratory and confirmatory purposes. Prior to confirmatory studies, hypotheses were preregistered based on the results of exploratory analyses. The results showed a strong correlation between less restful sleep and more challenges with emotion regulation, particularly in the capacity practice goal-oriented behavior, emotional self-awareness, and distress-reduction techniques. Girls and older teenagers reported having more difficulty controlling their emotions and having poorer quality sleep. The study highlights the need for therapies focusing on both dimensions in teenage populations and advances our understanding of how Regulating emotions and sleep interact during worldwide crisis.

Keywords: *Adolescence, Emotion regulation, Sleep, COVID-19, Lockdown, Peru*

Adolescence is a critical period marked by significant physical, cognitive, and emotional changes. People go through changes in a number of areas throughout this phase, such as mood control and sleep habits. Prior to the COVID-19 epidemic, teenagers were thought to be a group that was particularly susceptible to problems with emotion control and sleep disturbances. These difficulties have been made worse by the outbreak and the lockdown that followed, with research pointing to a rise in emotional control difficulties and sleep problems among adolescents.

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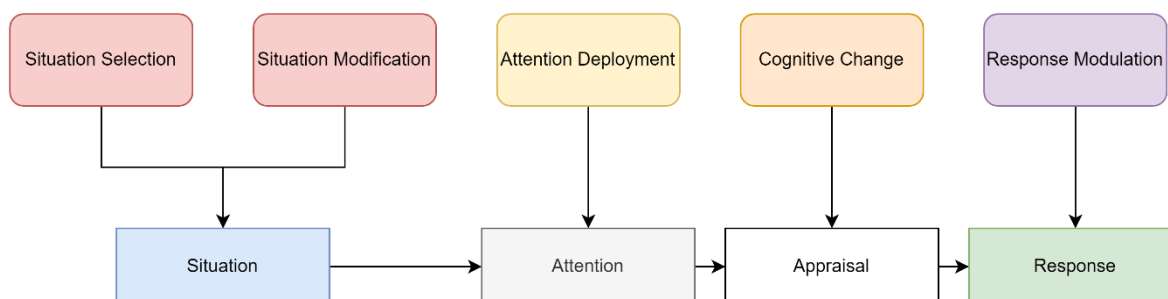
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The capacity to manage related behaviors and adjust the valence and intensity of emotions is referred to as emotion regulation. Emotion dysregulation, or problems controlling one's emotions, can prevent goal-directed activity and result in maladaptive reactions. Contrarily, sleep is essential for preserving both physical and mental well-being, and irregularities in sleep patterns can negatively impact a number of facets of daily life.



The relationship between sleep and emotion control has been extensively documented in the literature. Emotion control issues have been connected to poor sleep quality, and sleep issues might be caused by difficulties managing emotions.

However, the majority of existing research has focused on adult populations, with limited understanding of these associations in adolescents, particularly in the context of global crises like the COVID-19 pandemic.

The purpose of this research is to examine the connection between adolescents' inability to regulate their emotions and their quality of sleep in Peru during the first phases regarding the COVID-19 lockdown. It also looks into any gender and age differences in these areas. This study advances our knowledge of the pandemic's effects on teenage well-being by analyzing these variables in a sizable sample of urban low- and middle-income communities. It also emphasizes the necessity of focused interventions.

RELATED WORK

Sleep and emotion control are two interdependent mechanisms that change dramatically during adolescence. Adolescence has been shown to be a vulnerable time for problems with emotion control and sleep disturbance. Adolescents develop the ability to manage their emotions in ways that are adaptive, but there are age-specific distinctions within this stage. For example, compared to early and late adolescence, mid-adolescence (about ages 13–15) is linked to a smaller spectrum of emotion control techniques.

Adolescence brings about additional changes to sleep habits, including later bedtimes, shorter sleep durations, and a rise in the frequency of sleep issues. A "perfect storm" of biological, psychological, and societal variables is blamed for these changes. Teenagers with mental issues and trouble regulating their emotions have been related to sleep deprivation.

The COVID-19 outbreak and the lockdown that followed have made already-existing problems with emotion control and sleep much worse. Anxiety, altered sleep schedules, and less daylight exposure have all been linked to insomnia and sleep problems. Furthermore, because their coping mechanisms are still developing and the epidemic has presented hurdles, teenagers may have had more difficulty regulating their emotions.

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Although the relationship between sleep and emotion regulation has been studied in adult populations, further study focusing on these aspects in teenage populations is necessary, particularly in light of international emergencies like as the COVID-19 pandemic. Furthermore, the majority of previous research has concentrated on high-income nations, which has left a vacuum in our knowledge of these occurrences in low- and middle-income contexts.

PROPOSED METHODOLOGY

In order to look at the relationship between adolescents' sleep quality and their inability to regulate their emotions in the early phases regarding the COVID-19 lockdown in Peru, this study used a cross-sectional methodology.

Participants:

The sample comprised 2563 adolescents (53.5% females) enrolled in grades 6–11 at Innova Schools, a network of affordable private schools for Peru's expanding middle-class urban households ($M_{\text{age}} = 13.48$, $SD = 1.63$). The participants came from urban areas across the nation with poor and moderate incomes.

Data Collection:

The week of May 11, 2020, which coincided with the ninth week of Peru's COVID-19 lockdown, was when the data were gathered. During the advisory time, Qualtrics was used to distribute Spanish-language questionnaires as part of the regular remote school curriculum. Implicit consent in adolescents and passive parental consent were acquired. The university's human subjects committee approved the investigation.

Measures:

- 1. Sleep Quality:** The Pittsburgh Sleep Quality Index (PSQI) was employed to evaluate the months' worth of subjective sleep quality. A condensed version was given, with four domains: subjective sleep quality, daytime dysfunction, sleep latency, and length of sleep. Poorer sleep quality is indicated by higher scores.
- 2. Emotion Regulation Difficulties:** The Challenges in Emotion Regulation Scale Short Form (DERS-SF) was applied to gauge the difficulty of regulating emotions. Six subscales were filled out by participants: awareness, goals, strategies, impulse, nonacceptance, and clarity. Higher scores suggest greater difficulty controlling emotions.

Split-Half Reliability Approach:

Utilizing a split-half reliability technique improved the findings' robustness. First sample ($n = 1282$, 53% female) and second sample ($n = 1281$, 53.6% female) were the two randomly selected halves of the sample. On Sample 1, exploratory analyses were carried out, and preregistered hypotheses were developed based on these findings. Confirmatory analyses were then performed on Sample 2 to test the preregistered hypotheses.

Data Analysis:

In order to eliminate participants with missing replies or possible response biases, the data were cleaned and analyzed. For the variables of interest, descriptive statistics such as means, standard deviations, and correlations were computed. We compared groups according to age and gender in order to evaluate variations in the quality of sleep and problems with emotion control.

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The relationships between emotion regulation issues (DERS-SF subscales) and sleep quality (PSQI total score) were examined using linear regression models. As variables, age and gender were taken into account to account for possible group differences. To investigate non-linear age trajectories, separate models were conducted for each DERS-SF subscale as the outcome variable, using gender and age (both linear and quadratic components) as predictors.

Ethical Considerations:

The human subjects committee at the university approved the study in terms of ethics. Adolescent implicit assent and passive parental consent were acquired. Sufficient steps were done to guarantee participant privacy and confidentiality.

Experimentation:

The process of gathering data was carried out in the week of May 11, 2020, which fell inside the 9th week of Peru's COVID-19 shutdown. At this point, Peru had imposed strict lockdown regulations, including a COVID-19. All students were confined to their homes, unable to leave, and participating.

Problem Statement:

The development of sleep habits and emotion control, two things that are vital for general wellbeing and mental health, happen during adolescence. A person's emotional and behavioral functioning may be significantly impacted by disruptions in any one of these systems. Teenagers' struggles to control their emotions and maintain regular sleep patterns have been made worse by the COVID-19 outbreak and the lockdown measures that followed it globally.

Proposed Solution:

The Yang et al. (2023) study. Emotional dysregulation issues and sleep quality in adolescence during the early COVID-19 lockdown aims to investigate the connection between insufficient sleep and emotional dysregulation issues in teens in Peru during the early stages of the COVID-19 lockdown. The authors postulated that inadequate sleep would be linked to more challenges controlling one's emotions, especially when it comes to goal-directed activity when one is feeling down.

RESULTS AND DISCUSSION

According to Yang et al. (2023), poorer sleep quality was strongly linked to greater challenges with emotion regulation in both of the teenage study samples. In particular, poor sleep quality was linked to difficulties with emotional clarity, the Goals subscale's ability to help people behave toward goals when they're upset, and the capacity to use appropriate emotion management techniques. The subscale of objectives showed the highest correlation with sleep quality, indicating that adolescents' capacity to pursue goals and participate in goal-directed activity may be especially impacted by sleep deprivation when they are feeling depressed.

The study also found disparities in emotion management issues and sleep quality according to age and sex. Compared to boys and younger adolescents, girls and older adolescents reported reduced quality of sleep and increased difficulties controlling their emotions.

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Limitations/Research Gaps:

Although Yang et al.'s study from 2023 sheds light on the relationship between adolescents' struggles with emotion management and their sleep quality during the COVID-19 lockdown, it is not without limitations. First, because the study is cross-sectional, it is impossible to determine which way sleep and emotion regulation are related. It's unknown if insufficient sleep causes problems regulating emotions, or if the opposite is true.

Furthermore, the research failed to consider the personal effects of the COVID-19 pandemic, such as disease, financial hardship, or stressors connected to family, all of which may have affected the regulation of emotions and sleep patterns.

Proposed Solution to Address Limitations:

A longitudinal research approach might be used to look into the reciprocal association between poor quality of sleep and issues with emotion regulation over time, in an effort to overcome the aforementioned limitations. Using this method would enable researchers to ascertain whether insufficient sleep is a predictor of later difficulties with emotion regulation or vice versa, and how these relationships might evolve over the course of teenage development.

Table Summarizing Literature Review:

Study	Sample	Measures	Key Findings	Limitations
Yang et al. (2023)	2563 Peruvian adolescents (11-17 years)	Self-report measures of sleep quality (PSQI) and emotion regulation (DERS-SF)	Worse sleep quality associated with more emotion regulation difficulties, particularly in goal-directed behavior, emotional clarity, and emotion regulation strategies. Girls and older adolescents reported worse sleep quality and emotion regulation.	Cross-sectional design, self-report measures, no individual-level COVID-19 impact data.
Palmer et al. (2018)	National sample of adolescents in the United States	Self-report questionnaires for affective disorders, emotion control, and sleep issues	Teens who had trouble sleeping demonstrated poorer emotion management skills and were more prone to mood disorders.	Cross-sectional design, self-report measures.
Kirwan et al. (2017)	Managing emotions as a modulator of anxiety	regulating as a mediating factor between anxiety		

The literature review concludes by emphasizing the significance of examining the relationship between teenage emotion management and sleep quality, especially in light of the COVID-19 pandemic. Although Yang et al.'s study from 2023 offers insightful information, there are a number of shortcomings that should be addressed in further studies.

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These include the use of longitudinal designs, the inclusion of objective metrics, and the consideration of the pandemic's effects at the individual level.

Data Availability Statement (DAS).

This study is a comprehensive literature review and does not generate new empirical data. All sources and studies cited in this review are available in the public domain and are fully referenced within the manuscript. No datasets were generated or analysed for this review article. The information presented is based on previously published research, which can be accessed through the provided citations. Any inquiries regarding the sources used in this review can be directed to the corresponding author.

REFERENCES

- Baum, K. T., Desai, A., Field, J., Miller, L. E., Rausch, J., & Beebe, D. W. (2014). Sleep restriction worsens mood and emotion regulation in adolescents. *Journal of Child Psychology and Psychiatry*, 55(2), 180-190. <https://doi.org/10.1111/jcpp.12125>
- Dahl, R. E., & Lewin, D. S. (2002). Pathways to adolescent health sleep regulation and behavior. *Journal of Adolescent Health*, 31(6), 175-184. [https://doi.org/10.1016/S1054-139X\(02\)00506-2](https://doi.org/10.1016/S1054-139X(02)00506-2)
- Gordon-Hollingsworth, A. T., Moore, M., & Danitz, S. B. (2018). Mindfulness, emotion regulation, and sleep quality in adolescents. *Mindfulness*, 9(5), 1548-1556. <https://doi.org/10.1007/s12671-018-0906-x>
- Kirwan, M., Pickett, S. M., & Jarrett, N. L. (2017). Emotion regulation as a moderator between anxiety symptoms and insomnia symptom severity. *Psychiatry Research*, 254, 40–47. <https://doi.org/10.1016/j.psychres.2017.04.028>
- Palmer, C. A., Oosterhoff, B., Bower, J. L., Kaplow, J. B., & Alfano, C. A. (2018). Associations among adolescent sleep problems, emotion regulation, and affective disorders: findings from a nationally representative sample. *Journal of Psychiatric Research*, 96, 1–8. <https://doi.org/10.1016/j.jpsychires.2017.09.015>
- Short, M. A., Gradisar, M., Lack, L. C., Wright, H. R., & Dewald, J. F. (2013). The sleep patterns and well-being of Australian adolescents. *Journal of Adolescence*, 36(1), 103-110. <https://doi.org/10.1016/j.adolescence.2012.09.008>
- Tavernier, R., & Willoughby, T. (2014). Sleep problems: Predictor or outcome of media use among emerging adults at university? *Journal of Sleep Research*, 23(4), 389-396. <https://doi.org/10.1111/jsr.12132>
- Weinstein, S. M., Mermelstein, R. J., & Hedeker, D. (2006). Sleep patterns and problems in adolescence: Associations with emotional regulation and mood. *Journal of Youth and Adolescence*, 35(5), 541-548. <https://doi.org/10.1007/s10964-006-9061-6>
- Yang, C.-C., Llamas-Díaz, D., Bahena, Y. A., Cabello, R., Dahl, R. E., & Magis-Weinberg, L. (2023). Emotion regulation difficulties and sleep quality in adolescence during the early stages of the COVID-19 lockdown. *Journal of Affective Disorders*, 338, 92–99. <https://doi.org/10.1016/j.jad.2023.05.036>

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Conflict of Interest

The author(s) declared no conflict of interest.

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