Mental Health and Lifestyle Journal

Year 2024
Volume 2
Issue 2

The Impact of Unresolved Grief in Children on Sleep Disorders with the Mediating Role of Cognitive Emotion Regulation and Rumination in Adolescents

Narjes Yosefvand[1], Marjan Rahmani[2*], Parisa Vafapor[3]

1 M.A., Department of General Psychology, Lorestan University, Lorestan, Iran
2 M.A., Department of Personality Psychology, North Tehran Branch, Islamic Azad University, Tehran, Iran
3 Assistant Professor, Rehabilitation Counseling Department, Quchan Branch, Islamic Azad University, Quchan, Iran
*Correspondence: mas_azemod@iaut.ac.ir

Article type:
Original Research

Article history:
Received 20 February 2024
Revised 17 March 2024
Accepted 26 March 2024
Published online 01 April 2024

ABSTRACT

This study aimed to investigate the impact of unresolved grief in children on sleep disorders in adolescents, with cognitive emotion regulation and rumination examined as mediating variables. A descriptive correlational design was employed, involving 363 adolescents aged 13 to 18 years from Tehran. Participants were selected using stratified random sampling based on the Morgan and Krejcie sample size table. Standardized self-report questionnaires were used to measure unresolved grief, cognitive emotion regulation, rumination, and sleep disorders. Data analysis was performed using SPSS-27 for Pearson correlation and AMOS-21 for structural equation modeling (SEM). Model fit indices and path coefficients were calculated to examine both direct and indirect effects. The results revealed that unresolved grief had a significant direct effect on sleep disorders ($\beta = 0.28$, $p < .001$) and also influenced sleep through cognitive emotion regulation ($\beta = 0.10$, $p = .004$) and rumination ($\beta = 0.15$, $p < .001$). Cognitive emotion regulation positively predicted rumination ($\beta = 0.52$, $p < .001$), and both mediators significantly predicted sleep disorder ($\beta = 0.24$ and $\beta = 0.33$, respectively). The total effect of unresolved grief on sleep disorder was substantial ($\beta = 0.48$, $p < .001$). The model demonstrated a good fit to the data ($\chi^2/df = 2.32$, CFI = 0.96, RMSEA = 0.058, TLI = 0.95). The findings highlight the critical role of cognitive and ruminative mechanisms in linking unresolved grief to sleep disturbances in adolescents. Early intervention targeting emotion regulation strategies and rumination may mitigate the adverse psychological and physiological consequences of childhood grief and improve adolescent sleep health.

Keywords: Unresolved grief, sleep disorder, cognitive emotion regulation, rumination, adolescent mental health

How to cite this article:
Yosefvand, N., Rahmani, M., & Vafapor, P. (2024). The Impact of Unresolved Grief in Children on Sleep Disorders with the Mediating Role of Cognitive Emotion Regulation and Rumination in Adolescents. *Mental Health and Lifestyle Journal, 2*(2), 48-58. https://doi.org/10.61838/mhlj.2.2.6

Introduction

Grief is a deeply personal and multidimensional experience that extends beyond emotional suffering to influence cognitive, behavioral, and physiological functioning. When this grief remains unresolved, particularly in children and adolescents, it may lead to adverse mental and physical health outcomes that persist well into adulthood. Among the most commonly reported sequelae of unresolved grief are sleep disturbances, cognitive-emotional dysregulation, and ruminative thought patterns, all of which can have compounding effects on adolescent development (1, 2). With adolescence being a critical period of neurocognitive and emotional reorganization, unresolved grief can disrupt the stability and growth required for healthy psychosocial functioning (3, 4).

Grief-related complications such as Prolonged Grief Disorder (PGD) have been recognized in diagnostic systems including DSM-5-TR and ICD-11, highlighting the clinical significance of intense, persistent mourning that interferes with daily life (5, 6). While the psychological effects of PGD have been well-documented, less is known about its physiological correlates in adolescents, such as sleep disorders. Studies have shown that disrupted sleep is not only a symptom but also a consequence of persistent grief and emotional dysregulation (7, 8). This link is supported by findings that show prolonged grief is associated with irregular sleep cycles, fragmented sleep, and reduced sleep quality in bereaved individuals, especially when compounded by trauma or sudden loss (9).

Sleep disorders in adolescents are not only prevalent but also particularly detrimental, affecting emotional regulation, attention, academic performance, and interpersonal relationships (10). Grief-induced sleep disturbances are theorized to arise from heightened physiological arousal, intrusive memories, and disrupted cognitive-emotional processing (11). Adolescents experiencing unresolved grief may ruminate excessively, engaging in repetitive, negative thought patterns that delay sleep onset and reduce restorative sleep stages (12). Rumination has also been found to amplify depressive symptoms and anxiety, creating a vicious cycle that entraps the adolescent in emotional dysregulation and somatic distress (13).

Cognitive Emotion Regulation (CER) serves as a crucial mechanism through which adolescents manage their grief experiences. When adaptive regulation strategies such as positive reappraisal and planning are underutilized, and maladaptive strategies such as catastrophizing or self-blame are employed, the risk of developing sleep disturbances and other psychological issues increases (14, 15). These maladaptive coping patterns often correlate with heightened levels of unresolved grief and increase the susceptibility to prolonged sleep fragmentation, nightmares, or insomnia (16, 17). In this regard, CER not only serves as an outcome of grief but also as a mediator linking grief to behavioral dysfunctions, particularly those affecting sleep.

The mediating role of rumination between unresolved grief and sleep disorders has gained attention in recent years. Rumination exacerbates the psychological impact of grief by reinforcing negative cognitive schemas, thereby increasing emotional arousal and autonomic dysregulation (18, 19). This mechanism is particularly relevant in adolescents who are cognitively mature enough to reflect on the implications of loss but emotionally vulnerable to its consequences. Studies have consistently found that adolescents who ruminate over the death of a loved one show increased sleep latency and poorer sleep efficiency, linking cognitive processes with physiological outcomes (11, 20).

Unresolved grief in childhood, especially due to parental or close family member loss, has been associated with long-term psychological dysfunction, often manifesting during adolescence through depressive symptoms, anxiety, and post-traumatic stress (21, 22). These psychological responses not only impair emotional development but also disrupt biological rhythms such as the sleep-wake cycle. Adolescents who fail to cognitively integrate the loss into a coherent narrative often experience heightened vigilance, nightmares, and sleep avoidance behaviors (23, 24). The role of caregivers and professional counselors in supporting healthy mourning processes has been emphasized as a protective factor against such outcomes (3).

Emerging research also underscores the intersection between grief, trauma, and physiological functioning, suggesting that emotional dysregulation arising from grief can interact with biological vulnerabilities to amplify sleep-related problems (4, 25). For instance, physiological arousal resulting from grief may inhibit melatonin production and destabilize circadian rhythms, making restful sleep difficult to achieve. This psychobiological framework supports the need for holistic models that consider emotional, cognitive, and somatic factors in understanding the impact of unresolved grief on adolescent health.

Furthermore, socio-environmental contexts such as the COVID-19 pandemic have intensified experiences of unresolved grief in youth. Studies conducted during and after the pandemic report heightened levels of anxiety, depression, and sleep disorders among adolescents who lost loved ones or were exposed to collective trauma (2, 26). The restricted mourning practices and isolation further complicated the grieving process, leading to increases in PGD and sleep-related symptoms (13, 15). Additionally, cultural norms around mourning and emotional expression may influence the strategies adolescents adopt to regulate their grief, thus affecting both mental and physical health outcomes (8, 9).

Given these complex interrelations, the current study aims to investigate the impact of unresolved grief on sleep disorders in adolescents, with a specific focus on the mediating roles of cognitive emotion regulation and rumination.

Methods and Materials

Study Design and Participants

This study employed a descriptive correlational design to examine the relationship between unresolved grief and sleep disorders, with the mediating roles of cognitive emotion regulation and rumination in adolescents. The study population included adolescents aged 13 to 18 years residing in Tehran, Iran. A total of 363 participants were selected using a stratified random sampling method based on the Morgan and Krejcie (1970) sample size determination table. Prior to participation, informed consent was obtained from both adolescents and their legal guardians. Participants completed standardized self-report questionnaires in a supervised classroom setting, and all procedures were approved by the relevant institutional ethics committee.

Data Collection

The Sleep Disturbance Scale for Children (SDSC), developed by Bruni et al. (1996), is a widely used standardized instrument designed to assess sleep disorders in children and adolescents aged 6 to 18. It consists of 26 items rated on a 5-point Likert scale (1 = never to 5 = always), covering six subscales: Disorders

of Initiating and Maintaining Sleep (DIMS), Sleep Breathing Disorders (SBD), Disorders of Arousal (DA), Sleep–Wake Transition Disorders (SWTD), Disorders of Excessive Somnolence (DOES), and Sleep Hyperhidrosis (SHY). The total score reflects the overall severity of sleep problems, with higher scores indicating more severe disturbances. The SDSC has shown strong psychometric properties, with Cronbach's alpha reported above 0.80 for the total scale. Its validity and reliability have been confirmed in several international and Iranian studies, making it a suitable and culturally adaptable tool for this research.

The Inventory of Complicated Grief—Youth Version (ICG-Y), adapted from the original ICG by Prigerson et al. (1995), is a validated measure tailored to assess unresolved or complicated grief in children and adolescents. This version includes 19 items rated on a 5-point Likert scale (1 = not at all to 5 = very much), and evaluates symptoms such as intense yearning, emotional numbness, and difficulty accepting the loss. The ICG-Y yields a total score where higher values indicate greater unresolved grief. The instrument has demonstrated excellent internal consistency (Cronbach's alpha > 0.85) and construct validity. It has been adapted and validated in Iran, confirming its relevance and appropriateness for assessing grief-related responses in culturally diverse youth populations.

The Cognitive Emotion Regulation Questionnaire (CERQ), developed by Garnefski, Kraaij, and Spinhoven (2001), is a self-report measure designed to assess cognitive strategies used in response to stressful or negative events. The questionnaire contains 36 items, divided into nine subscales: Self-Blame, Acceptance, Rumination, Positive Refocusing, Refocus on Planning, Positive Reappraisal, Putting into Perspective, Catastrophizing, and Other-Blame. Each subscale includes four items scored on a 5-point Likert scale (1 = almost never to 5 = almost always). The CERQ provides a reliable assessment of both adaptive and maladaptive cognitive emotion regulation strategies, with internal consistency coefficients ranging from 0.68 to 0.83. Validity and reliability of the CERQ have been confirmed in various studies, including Persian-language adaptations conducted in Iran, supporting its suitability for use in adolescent populations.

The Ruminative Response Scale (RRS), developed by Nolen-Hoeksema and Morrow (1991), is a widely recognized instrument for measuring the tendency to engage in rumination in response to distress. The revised version (RRS-Short Form), particularly suitable for adolescents, includes 22 items divided into three subscales: Brooding, Reflection, and Depression-related Rumination. Responses are rated on a 4-point Likert scale ranging from 1 (almost never) to 4 (almost always). The RRS has demonstrated strong psychometric properties, with internal consistency coefficients typically exceeding 0.85. Iranian adaptations of the scale have also confirmed its factorial structure and reliability, making it a valid and reliable tool for assessing ruminative thinking in adolescents in the local context.

Data analysis

Data were analyzed using SPSS version 27 and AMOS version 21. Descriptive statistics (mean, standard deviation, frequency, and percentage) were calculated for demographic and study variables. To explore the relationships between the independent variable (unresolved grief), mediating variables (cognitive emotion regulation and rumination), and the dependent variable (sleep disorder), Pearson correlation coefficients were computed. In addition, Structural Equation Modeling (SEM) was conducted to assess the proposed mediational model and examine direct and indirect effects among variables. Goodness-of-fit indices, including CFI, TLI, RMSEA, and χ^2/df, were used to evaluate the adequacy of the SEM model.

Findings and Results

Of the 363 participants, 193 (53.1%) were female and 170 (46.8%) were male. The participants' ages ranged from 13 to 18 years (M = 15.41, SD = 1.61). A total of 134 participants (36.9%) were in the first year of high school, 112 (30.8%) were in the second year, and 117 (32.2%) were in the third year. Regarding parental status, 278 participants (76.5%) reported living with both parents, while 85 participants (23.4%) had experienced the loss of a parent. The distribution of respondents across the educational districts of Tehran was proportionate, ensuring representation from different socioeconomic areas.

Table 1. Descriptive Statistics for Study Variables (N = 363)

Variable	Mean (M)	Standard Deviation (SD)
Unresolved Grief	56.73	10.42
Cognitive Emotion Regulation	84.15	12.67
Rumination	48.96	9.31
Sleep Disorder	52.88	11.84

The descriptive statistics in Table 1 indicate that the mean score for unresolved grief was 56.73 (SD = 10.42), suggesting a moderate to high level of prolonged grief symptoms among participants. The mean score for cognitive emotion regulation strategies was 84.15 (SD = 12.67), reflecting moderate use of both adaptive and maladaptive regulation strategies. Rumination showed a mean of 48.96 (SD = 9.31), pointing to elevated cognitive preoccupation with distress. The mean sleep disorder score was 52.88 (SD = 11.84), suggesting a noticeable prevalence of sleep-related issues among the adolescent sample.

Before conducting the main analyses, assumptions for parametric tests and SEM were examined. Normality was assessed through skewness and kurtosis values, which ranged from −0.71 to 1.02 for all variables, falling within the acceptable ±2 range. Linearity and homoscedasticity were confirmed through scatterplots and residual plots. The variance inflation factor (VIF) values ranged from 1.12 to 1.89, indicating no multicollinearity concerns. Additionally, Mardia's multivariate kurtosis coefficient was 3.47, suggesting multivariate normality suitable for SEM analysis. These findings confirmed that the data met the necessary assumptions for Pearson correlation and structural modeling.

Table 2. Pearson Correlation Matrix and Significance Values

Variable	1	2	3	4
1. Unresolved Grief	—			
2. Cog. Emotion Regulation	.41** (.001)	—		
3. Rumination	.47** (.001)	.52** (.001)	—	
4. Sleep Disorder	.43** (.001)	.38** (.001)	.45** (.001)	—

As shown in Table 2, unresolved grief had significant positive correlations with cognitive emotion regulation ($r = .41$, $p < .001$), rumination ($r = .47$, $p < .001$), and sleep disorder ($r = .43$, $p < .001$). Additionally, cognitive emotion regulation was positively correlated with rumination ($r = .52$, $p < .001$) and sleep disorder ($r = .38$, $p < .001$). Rumination was also positively and significantly associated with sleep disorder ($r = .45$, $p < .001$). These results support the theoretical expectation that unresolved grief relates to emotional and cognitive dysregulation, which in turn relate to sleep dysfunction.

Table 3. Goodness-of-Fit Indices for the Structural Equation Model

Fit Index	Value	Threshold for Good Fit
Chi-Square (χ^2)	213.64	—
Degrees of Freedom (df)	92	—
χ^2/df	2.32	< 3.00
GFI	0.94	> 0.90
AGFI	0.91	> 0.90
CFI	0.96	> 0.95
RMSEA	0.058	< 0.06
TLI	0.95	> 0.95

The model fit indices presented in Table 3 indicate an acceptable to excellent model fit. The χ^2/df ratio was 2.32, within the recommended range (< 3.00). The GFI (0.94), AGFI (0.91), CFI (0.96), and TLI (0.95) all met or exceeded conventional thresholds for good fit. RMSEA was 0.058, also indicating acceptable model parsimony. These values confirm that the proposed structural model adequately represents the relationships among the study variables.

Table 4. Direct, Indirect, and Total Effects in the Structural Model

Path	B	SE	β	p
Unresolved Grief → Sleep Disorder (Direct)	0.23	0.05	0.28	.001
Unresolved Grief → Cog. Emotion Regulation	0.34	0.06	0.41	.001
Cog. Emotion Regulation → Sleep Disorder	0.19	0.04	0.24	.002
Unresolved Grief → Rumination	0.39	0.05	0.47	.001
Rumination → Sleep Disorder	0.27	0.05	0.33	.001
Cog. Emotion Regulation → Rumination	0.43	0.06	0.52	.001
Indirect (Grief → Cog. Reg. → Sleep)	0.06	0.02	0.10	.004
Indirect (Grief → Rumination → Sleep)	0.11	0.03	0.15	.001
Total Effect: Grief → Sleep Disorder	0.40	0.06	0.48	.001

Table 4 shows that all hypothesized paths were statistically significant. Unresolved grief had a direct effect on sleep disorder ($\beta = 0.28$, $p < .001$) and also indirect effects through both cognitive emotion regulation ($\beta = 0.10$, $p = .004$) and rumination ($\beta = 0.15$, $p < .001$). The total effect of unresolved grief on sleep disorder was strong ($\beta = 0.48$), highlighting both direct and mediated pathways. Cognitive emotion regulation had a substantial effect on rumination ($\beta = 0.52$), which in turn strongly influenced sleep disorder ($\beta = 0.33$). These results confirm the mediating roles of both cognitive and ruminative mechanisms in the grief–sleep pathway.

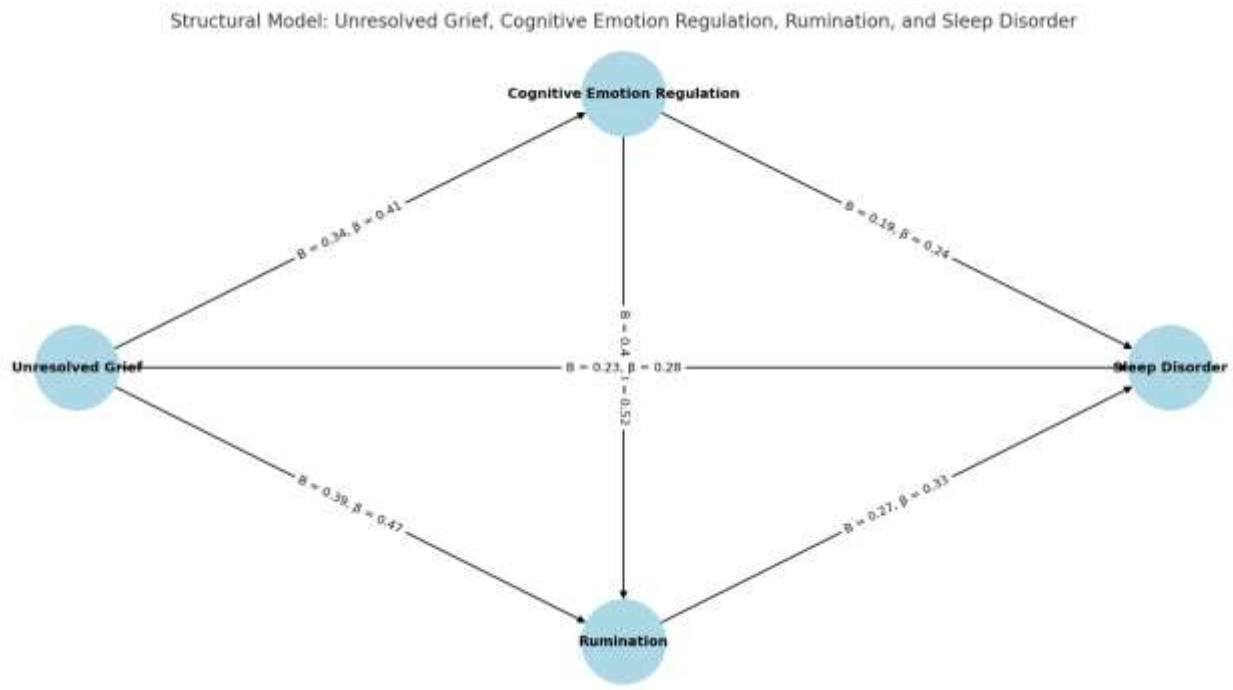

Figure 1. Final Model of the Study

Discussion and Conclusion

The present study investigated the impact of unresolved grief in children on sleep disorders in adolescents, with cognitive emotion regulation and rumination examined as mediating variables. The results revealed a significant positive relationship between unresolved grief and sleep disturbances, indicating that adolescents who experienced unresolved grief in earlier childhood were more likely to suffer from difficulties in falling asleep, maintaining sleep, and achieving restful sleep. Furthermore, both cognitive emotion regulation and rumination significantly mediated this relationship. Specifically, maladaptive emotion regulation strategies and elevated rumination levels exacerbated the impact of unresolved grief on sleep-related problems. The structural equation model confirmed the adequacy of the proposed model and highlighted the indirect effects of cognitive mechanisms in shaping behavioral outcomes, particularly sleep dysfunction.

These findings align with a growing body of literature that emphasizes the adverse psychological and physiological effects of unresolved or prolonged grief in youth. Prior studies have shown that unresolved grief can disrupt emotion regulation processes, resulting in heightened emotional reactivity, mental preoccupation with loss, and impaired functioning in various life domains (5, 23). Adolescents may internalize grief, leading to elevated anxiety, intrusive thoughts, and maladaptive coping behaviors that disturb their natural sleep cycle (7). This is consistent with research by Ludwikowska-Świeboda (2023), which found that rumination in bereaved individuals, especially those who lost spouses or parents, significantly predicted the severity of sleep disturbances (11).

The mediating role of cognitive emotion regulation underscores the importance of how adolescents process and cognitively respond to grief-related emotions. Studies suggest that when individuals employ maladaptive strategies such as catastrophizing or self-blame, they are more vulnerable to emotional

dysregulation and related somatic symptoms, including insomnia and sleep fragmentation (3, 14). The current findings support these conclusions by demonstrating that dysfunctional cognitive strategies serve as a critical pathway through which unresolved grief translates into physiological disruptions. Adolescents who failed to cognitively integrate their grief also exhibited higher rumination scores, highlighting how negative thought loops reinforce sleep problems and emotional distress (19).

Furthermore, the study's results are corroborated by neuropsychological research suggesting that unresolved grief activates stress-related brain regions such as the amygdala and anterior cingulate cortex, increasing physiological arousal and impairing the ability to initiate and maintain restful sleep (8, 9). In this way, unresolved grief does not merely impact emotional states but also contributes to measurable physiological disturbances, particularly in the regulation of sleep cycles. Adolescents appear especially vulnerable to these disruptions due to their ongoing brain development and heightened sensitivity to emotional stimuli.

Another dimension that emerged from this study is the interaction between unresolved grief and rumination. Consistent with prior research, this study found that ruminative thinking—defined as repetitive and passive focus on one's distress—was a significant contributor to both sleep problems and emotional dysregulation in adolescents (13, 20). Rumination may delay sleep onset due to cognitive hyperarousal, making it difficult for adolescents to mentally disengage before bed (18). The current findings build on this by demonstrating that unresolved grief increases the likelihood of engaging in such maladaptive cognitive patterns, thus reinforcing the cycle of emotional pain and sleep dysfunction.

This study's findings also align with those of Rueger et al. (2024), who observed that prolonged grief disorder was significantly associated with poor sleep quality and heightened emotional numbing among psychiatric inpatients (6). Similarly, Raymond et al. (2024) found that relatives of deceased patients in ICUs who received little psychological support exhibited persistent grief symptoms and greater rates of sleep disturbance (22). These studies collectively suggest that both emotional and institutional responses to grief play a critical role in determining psychological and physiological outcomes. The results of this study reinforce the need to address unresolved grief in a timely and structured manner, particularly among children and adolescents.

In addition, this research supports the conceptual framework proposed by Spicer (2024), which posits that prolonged grief alters cognitive processing and emotional regulation in a way that significantly impacts sleep architecture and general well-being (4). The current findings empirically validate this theory, emphasizing the importance of integrating grief counseling and cognitive-behavioral techniques to mitigate long-term consequences. Adolescents who fail to receive early psychological intervention may carry unresolved emotional burdens into adulthood, exacerbating both mental health and physical health issues (2, 16).

Moreover, the pandemic context may have magnified the impact of unresolved grief and complicated the grieving process. Studies conducted during COVID-19 noted that bereaved youth faced disruptions in mourning rituals, reduced social support, and increased isolation—all factors that exacerbate grief and its consequences (21, 26). These challenges likely made it more difficult for adolescents to regulate their emotions, leading to a higher reliance on rumination and a greater risk of sleep problems (15). Our findings

resonate with this perspective and provide empirical evidence for the pandemic's role in amplifying grief-related dysfunction in adolescents.

The present study also adds to the literature by highlighting how cognitive and emotional mediators serve as modifiable targets in interventions. For instance, Kaiser et al. (2022) reported that therapist-assisted online interventions for prolonged grief significantly reduced symptoms and improved sleep quality in bereaved adults (25). Similarly, Doherty and Lykins (2024) emphasized that targeting emotional regulation skills and cognitive distortions can significantly reduce both psychological distress and its somatic expressions (2). Therefore, intervening at the level of cognition and emotion may not only alleviate grief-related emotional suffering but also improve physiological outcomes like sleep.

Finally, the broader theoretical implications of this study underscore the interconnectedness of emotional, cognitive, and physiological systems in the experience of grief. The findings support multidimensional models of grief that integrate biological, psychological, and social components and emphasize that grief is not merely an emotional experience but one that affects the entire organism. In doing so, the study contributes to a more holistic understanding of how unresolved grief functions across systems and highlights the need for comprehensive support strategies for grieving adolescents.

Despite its strengths, this study is not without limitations. First, the cross-sectional design limits causal inference, preventing us from concluding the temporal direction of the relationships between variables. Longitudinal data would be more appropriate to trace the progression from unresolved grief to sleep disorders over time. Second, the reliance on self-report questionnaires introduces the potential for social desirability bias and response distortion. Adolescents may underreport emotional difficulties due to stigma or overestimate symptoms in emotionally heightened states. Third, while the sample size was adequate, the study was conducted solely in Tehran, which may limit generalizability to other cultural or socioeconomic contexts within and outside of Iran. Lastly, the model did not account for potentially confounding variables such as trauma history, socioeconomic status, or parental mental health, which may influence both grief resolution and sleep quality.

Future studies should utilize longitudinal and experimental designs to better understand causal mechanisms linking unresolved grief to sleep disorders in adolescents. Such designs would allow researchers to observe how these relationships evolve over time and identify critical intervention windows. Additionally, it would be valuable to examine gender and developmental differences in how grief is processed and expressed in relation to sleep. Incorporating physiological measures, such as actigraphy or polysomnography, could offer objective insights into sleep patterns and validate self-reported symptoms. Expanding research to include diverse populations across urban and rural settings would also enhance the ecological validity and cultural applicability of findings.

The findings of this study underscore the importance of early psychological screening and intervention for grief-related symptoms in children and adolescents. School-based mental health programs should incorporate training in cognitive emotion regulation and mindfulness to support adaptive coping. Grief counseling protocols should be updated to include modules that address sleep hygiene and the management of ruminative thinking. Multidisciplinary collaboration between psychologists, pediatricians, and school counselors is essential to provide holistic care. Additionally, parents and caregivers should be educated on the signs of unresolved grief and sleep disruption to facilitate timely referral and support.

Acknowledgments

The authors express their deep gratitude to all participants who contributed to this study.

Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

References

1. Werner K, Wick JY. Bereavement and Loss: Understanding Grief in Older People. The Senior Care Pharmacist. 2024;39(3):98-104. doi: 10.4140/tcp.n.2024.98.
2. Doherty TJ, Lykins AD. Mental Health Impacts. 2024:180-204. doi: 10.1093/oso/9780197683293.003.0009.
3. Khaira M, Widyanti N, Nadhirah NA. Coping With Loss: The Role of Guidance and Counseling in Supporting Grieving Counselee. Psikoeduko. 2024;4(2):19-33. doi: 10.17509/psikoeduko.v4i2.76739.
4. Spicer L. Eye Movement Desensitisation and Reprocessing (EMDR) Therapy for Prolonged Grief: Theory, Research, and Practice. Frontiers in Psychiatry. 2024;15. doi: 10.3389/fpsyt.2024.1357390.
5. Eisma MC. Prolonged Grief Disorder in ICD-11 and <i>DSM</I>-5-Tr: Challenges and Controversies. Australian & New Zealand Journal of Psychiatry. 2023;57(7):944-51. doi: 10.1177/00048674231154206.
6. Rueger MS, Lechner-Meichsner F, Kirschbaum L, Lubik S, Roll SC, Steil R. Prolonged Grief Disorder in an Inpatient Psychiatric Sample: Psychometric Properties of a New Clinical Interview and Preliminary Prevalence. BMC Psychiatry. 2024;24(1). doi: 10.1186/s12888-024-05784-2.
7. Faruqui HR, Tomar A. Grief-Induced Sleep Disturbance: A Case Study on Psychological and Behavioral Impact Following Bereavement. 2025:297-301. doi: 10.51767/ic250432.
8. Andersen ML, Tufik S. The Association Between Sleep Disturbances and Erectile Dysfunction During the COVID-19 Pandemic. Sexual Medicine Reviews. 2022;10(2):263-70. doi: 10.1016/j.sxmr.2021.12.001.
9. Yoshiike T. Prolonged Grief and Related Health Factors Modify the Relationship Between Bedroom Light Exposure and Sleep Fragmentation. Sleep. 2025;48(Supplement_1):A541-A. doi: 10.1093/sleep/zsaf090.1256.
10. Santos LRd. Causas E Consequências Do Sono: Evidências De Uma Revisão Para a Qualificação Médica. Brazilian Medical Students. 2025;10(14). doi: 10.53843/fhf8zj52.

11. Ludwikowska-Świeboda K. Rumination About the Death of a Spouse Versus the Severity of Somatic Symptom Disorder and Sleep Disturbances in Widowed Individuals in Late Adulthood. Current Problems of Psychiatry. 2023;24:114-24. doi: 10.12923/2353-8627/2023-0011.
12. Liliana JG, Alma LC, Irene GH. Psychological Impact on the Patient With a History of Pregnancy Loss. International Journal of Medical Science and Clinical Research Studies. 2025;05(01). doi: 10.47191/ijmscrs/v5-i01-28.
13. Soares MJ, Pereira D, Amaral AP, Azevedo J, Bós S, Pereira AT, et al. Grief During the COVID-19 Pandemic: A Cross-Sectional Online Survey in University Students. European Psychiatry. 2022;65(S1):S264-S5. doi: 10.1192/j.eurpsy.2022.678.
14. Pahl N. Efficacy of Therapeutic Photography for Resolving Symptom Coherence in Prolonged Grief. GRF. 2024;1(1):49-60. doi: 10.70089/2g11eb83.
15. Cherblanc J, Gagnon C, Côté I, Bergeron-Leclerc C, Cadell S, Gauthier G, et al. French-Canadian Validation of the Traumatic Grief Inventory-Self Report (TGI-SR). Death Studies. 2022;47(4):430-9. doi: 10.1080/07481187.2022.2085347.
16. Trivedi GY, Thakore P. A Case Study on Post-Traumatic Stress Disorder, Prolonged Grief Disorder, and Adjustment Disorder. Cureus. 2025. doi: 10.7759/cureus.80595.
17. Poxon L. An Antidote to the Pathologizing of Grief: Applying the Power–Threat–Meaning Framework. Ethical Human Psychology and Psychiatry. 2024;26(1):74-81. doi: 10.1891/ehpp-2023-0016.
18. Martínez-Medina CB, Rodríguez-Orozco AR. Prolonged Grief Disorder Treatment: an Approach to COVID-19 Grief. Salud Mental. 2023;46(3):165-75. doi: 10.17711/sm.0185-3325.2023.021.
19. Julia Dian Christiani Adi S, Muagiri H. From Loss to Loneliness: The Effects of Prolonged Grief in Elderly. Jurnal Psikiatri Surabaya. 2024;13(S1):24-34. doi: 10.20473/jps.v13is1.62650.
20. Snijdewind MC, Keijser Jd, Casteelen G, Boelen PA, Smid GE. “Only One Way Out”-Partners' Experiences and Grief Related to the Death of Their Loved One by Suicide or Physician-Assisted Dying Due to a Mental Disorder. Frontiers in Psychiatry. 2022;13. doi: 10.3389/fpsyt.2022.894417.
21. Domínguez-Rodríguez A, Herdoiza-Arroyo PE, Martínez-Arriaga RJ, Valerio EB, Mollá JM, Rosa-Gómez ADl, et al. Prevalence of Anxiety Symptoms and Associated Clinical and Sociodemographic Factors in Mexican Adults Seeking Psychological Support for Grief During the COVID-19 Pandemic: A Cross-Sectional Study. Frontiers in Psychiatry. 2022;13. doi: 10.3389/fpsyt.2022.749236.
22. Raymond V, Aïtout C, Ducos G, Coullomb A, Ferré F, Riu-Poulenc B, et al. Effectiveness of Psychiatric Support for Complicated Grief Among a Cohort of Relatives of Deceased Patients in Intensive Care Unit During the French Covid-19 Lockdown – The OLAF (Opération Liaison Et Aide Aux Familles). 2024. doi: 10.21203/rs.3.rs-5446737/v1.
23. Friedland H, Stripling AM, Crocker J. Prolonged Grief Disorder in Adults Over 65: A Review in Light of Post-Covid-19 Losses. Innovation in Aging. 2024;8(Supplement_1):950-. doi: 10.1093/geroni/igae098.3062.
24. Hernandez-Tejada MA, Desrochers M, Acierno R. Grief on Pain and Quality of Life in Combat Veterans With PTSD. European Journal of Psychotraumatology. 2024;15(1). doi: 10.1080/20008066.2024.2402627.
25. Kaiser J, Nagl M, Hoffmann R, Linde K, Kersting A. Therapist-Assisted Web-Based Intervention for Prolonged Grief Disorder After Cancer Bereavement: Randomized Controlled Trial. Jmir Mental Health. 2022;9(2):e27642. doi: 10.2196/27642.
26. Nafei Z, Samadzadeh G, Ordooei M, Vaghefi M. Psychological Impact of COVID-19 on Children and Adolescents: A Narrative Review. Journal of Pediatrics Review. 2023;11(1):67-76. doi: 10.32598/jpr.11.1.1088.1.