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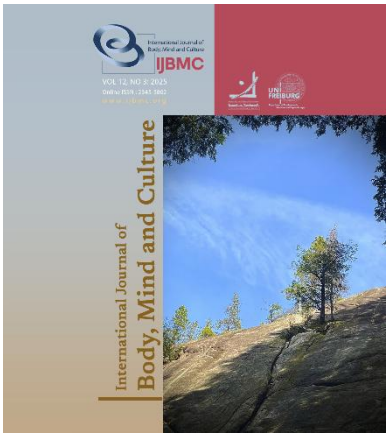
The Effects of Mindfulness Training on Resilience and Emotional Regulation in Adolescents: A Quasi-Experimental Study

Masoud. Navidi Moghadam[1*]

1 Assistant Professor, Department of Psychology, Payame Noor University, Tehran, Iran

Corresponding author email address: M.navidi.m@pnu.ac.ir



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ABSTRACT

Objective: This study investigates the effectiveness of mindfulness training programs on psychological resilience and emotional regulation among adolescents.

Methods and Materials: In this quasi-experimental study, thirty adolescents were randomly assigned to either an experimental group (receiving mindfulness training) or a control group (no intervention). Participants were evaluated using the Resilience Scale for Adolescents (RSA) and the Emotion Regulation Questionnaire (ERQ) at three-time points: pre-test, post-test, and a 3-month follow-up. The intervention included guided mindfulness practices, such as body scanning, mindful breathing, and emotion-focused discussions.

Findings: The experimental group demonstrated significant improvements in psychological resilience and emotional regulation post-intervention compared to the control group ($p<0.001$). These benefits were sustained at follow-up, with participants reporting greater emotional awareness, reduced emotional suppression, and enhanced coping mechanisms.

Conclusion: Findings underscore the efficacy of mindfulness training in promoting resilience and emotional regulation during adolescence. This highlights the potential for incorporating mindfulness-based programs into school curricula to support adolescent mental health and well-being.

Keywords: Mindfulness, Psychological Resilience, Emotional Regulation, Adolescents, Mental Health.

Introduction

Adolescence is a developmental stage characterized by significant emotional, cognitive, and social changes. During this period, young individuals often experience heightened emotional vulnerability and face various stressors that may challenge their psychological well-being. Factors such as academic pressures, peer relationships, family dynamics, and the transition into adulthood can contribute to stress, anxiety, and emotional dysregulation (Nolen-Hoeksema, 2019).

Emotional regulation refers to the ability to manage and modify one's emotional responses to various situations in an adaptive manner (Gross, 2019). It is a critical skill during adolescence, as it helps individuals navigate the emotional challenges of this developmental stage. Adolescents often experience intense emotions, and their ability to regulate them can significantly influence their social relationships, academic performance, and overall well-being (Pourjafari et al., 2025; Silvers et al., 2018). Emotional dysregulation, on the other hand, has been linked to a range of adverse

outcomes, including depression, anxiety, substance abuse, and difficulty in interpersonal relationships (Chiang et al., 2024; Hatfield et al., 2024).

Psychological resilience refers to an individual's ability to adapt and recover from adversity or stress. It involves maintaining or regaining emotional stability and mental well-being despite challenges (Masten & Cicchetti, 2021). In adolescents, resilience is critical in overcoming developmental challenges, such as academic demands, social pressures, and family issues. Research has shown that resilient adolescents are better equipped to handle stress and are less likely to develop mental health disorders such as anxiety or depression (Mohammadi et al., 2021; Saadati & Parsakia, 2023). Furthermore, resilience is associated with healthier coping strategies, higher self-esteem, and stronger social support networks (Hajatnia et al., 2023; Mohammadiyas et al., 2023). Therefore, promoting resilience in adolescents is crucial for fostering their emotional well-being and long-term mental health.

Mindfulness has emerged as an effective intervention to address these challenges. Mindfulness refers to paying intentional, nonjudgmental attention to the present moment (Haji-Adineh et al., 2019; Kabat-Zinn, 2018a, 2018b). It involves cultivating awareness of one's thoughts, emotions, and bodily sensations while maintaining a balanced and accepting attitude. Research has shown that mindfulness training can improve emotional regulation by increasing self-awareness, promoting emotional acceptance, and fostering greater psychological flexibility (Keng et al., 2018). Through mindfulness, individuals learn to observe their thoughts and feelings without becoming overwhelmed or reactive, enhancing their ability to regulate emotions and cope with stress more adaptively.

Mindfulness has been shown to impact psychological resilience in several ways positively. Studies indicate that mindfulness-based interventions (MBIs) can help individuals develop a more adaptive mindset when facing adversity (Greer et al., 2019). By cultivating mindfulness, individuals learn to stay grounded in the present moment and develop a non-reactive awareness of their experiences. This approach enables them to face difficult situations with more significant emotional balance and less psychological distress. Furthermore, mindfulness helps individuals identify and challenge maladaptive thought patterns that may contribute to negative emotional states, enhancing resilience (Hölzel et al., 2020; Hölzel et al., 2011). Research on mindfulness training has demonstrated its effectiveness in promoting resilience in various populations, including adolescents (Simmons & Griffiths, 2020).

Mindfulness-based interventions (MBIs) have been widely studied for their effectiveness in improving emotional regulation and resilience in various populations, including adolescents. Research suggests that MBIs can lead to significant improvements in both emotional regulation and psychological resilience. A meta-analysis by Zenner et al. (2018) found that MBIs are associated with reduced emotional reactivity, increased emotional awareness, and better stress management skills. These changes enhance psychological resilience as individuals can better manage challenges and setbacks with a more balanced emotional response. Additionally, MBIs have been found to improve overall well-being by reducing symptoms of anxiety, depression, and stress (Khoury et al., 2019).

Furthermore, mindfulness has been shown to foster psychological resilience by improving attention regulation and reducing rumination, contributing to better coping with adversity. Studies have found that mindfulness training can increase the capacity for attentional control, allowing individuals to direct their focus away from negative thoughts and emotions and toward more adaptive responses (Zeidan et al., 2018). This ability to shift attention away from distressing thoughts helps individuals avoid becoming overwhelmed by negative emotions, promoting emotional stability and resilience in the face of stress.

The theoretical foundation for understanding the impact of mindfulness on emotional regulation and resilience can be rooted in the model of self-regulation. According to this model, self-regulation involves controlling one’s thoughts, emotions, and behaviors to pursue long-term goals (Baumeister & Vohs, 2021). As a self-regulation tool, mindfulness helps individuals develop greater awareness of their internal states and facilitates regulating their emotional responses. Through regular mindfulness practice, adolescents can strengthen their ability to respond to emotions in a more balanced and adaptive manner, enhancing their resilience (Keng et al., 2018).

Despite growing evidence supporting the benefits of mindfulness, its specific effects on the dual outcomes of

emotional regulation and psychological resilience in adolescents remain underexplored. While prior studies have highlighted mindfulness as an effective tool for managing stress and enhancing well-being, there is limited understanding of how such interventions impact these two critical skills during adolescence. Addressing this gap, the current study investigates whether a mindfulness program can significantly improve emotional regulation and resilience among adolescents.

Methods and Materials

Study Design and Participants

This study utilized a quasi-experimental design with a pre-test, post-test, and 3-month follow-up. The study sample comprised 30 adolescents between 14 and 18 selected from high schools in Tehran, Iran. Participants were randomly assigned to two groups: an experimental group (mindfulness training) and a control group (no intervention). Inclusion criteria included adolescents who (a) were willing to participate and gave written informed consent, (b) did not have any major psychiatric disorders (e.g., depression, anxiety, or psychosis), and (c) had not previously participated in mindfulness-based interventions. Exclusion criteria were (a) a history of severe mental health disorders, (b) not completing more than two sessions of the mindfulness program, and (c) the use of medication that could interfere with emotional regulation or cognitive functioning. The university's ethics committee approved this study. All participants and their parents provided written informed consent before participation. The study ensured confidentiality and the right to withdraw at any time without consequence. After the study's completion, participants were debriefed about the purpose of the study and the mindfulness intervention.

Before the intervention, all participants (both experimental and control groups) completed the pre-test assessments, including the MAAS, CD-RISC, and ERQ. The pre-test data provided baseline measures of mindfulness, resilience, and emotional regulation skills.

Instruments

Demographic Questionnaire: A demographic questionnaire collected information about participants' age, gender, socioeconomic status, and family structure. This helped ensure that both groups were comparable regarding these key characteristics.

Mindfulness Attention Awareness Scale (MAAS): The Mindfulness Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003) was used to assess participants' level of mindfulness before and after the intervention. The MAAS is a 15-item self-report scale that measures the frequency of mindful awareness in daily life. Participants rate each item on a 6-point Likert scale (1 = almost always, 6 = rarely). The scale has demonstrated good internal consistency and validity in previous studies (Brown & Ryan, 2003). The reliability of the scale in the present study was $\alpha = 0.85$.

Connor-Davidson Resilience Scale (CD-RISC): The Connor-Davidson Resilience Scale (CD-RISC) was employed to measure psychological resilience. This 25-item scale assesses an individual's ability to cope with stress, adapt to adversity, and bounce back from challenges. The items are rated on a 5-point Likert scale (0 = not true at all, 4 = accurate nearly all the time). The CD-RISC has shown good reliability and validity in various populations (Connor & Davidson, 2003). In the present study, Cronbach's alpha for the scale was 0.87.

Emotion Regulation Questionnaire (ERQ): The Emotion Regulation Questionnaire (ERQ) developed by Gross and John (2003) was used to measure emotional regulation strategies. The ERQ is a 10-item scale that assesses two key emotion regulation strategies: reappraisal (cognitive restructuring of emotional experiences) and suppression (inhibiting emotional expression). The scale is scored on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Previous research has shown that the ERQ has high reliability and validity (Gross & John, 2003). The internal consistency of the ERQ in this study was $\alpha = 0.81$.

Intervention

The mindfulness training program was designed based on the Mindfulness-Based Stress Reduction (MBSR) program developed by Kabat-Zinn (2018) and adapted for adolescents. The program consisted of 8 weekly sessions, each lasting 90 minutes (Kabat-Zinn, 2018a). The program's key components included Teaching participants to focus on their breath as an anchor to the present moment. A guided exercise in which participants focus on different body parts to increase bodily awareness. Gentle yoga stretches to

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increase physical awareness and relaxation. Promoting empathy and compassion for oneself and others. Integrating mindfulness into everyday activities, such as eating, walking, and listening.

Each session included a combination of theory, practice, and group discussions. Participants were encouraged to practice mindfulness exercises daily for 15 minutes and keep a mindfulness journal to track their experiences. Audio recordings of the guided practices were provided to help participants with their home practice. The control group did not receive any intervention during the study period. They were asked to continue their usual school and social activities without any structured program. At the end of the 8-week intervention, all participants (both experimental and control groups) completed the same set of questionnaires (MAAS, CD-RISC, ERQ) as they did in the pre-test phase. This provided post-test data on mindfulness, resilience, and emotional regulation skills. To examine the long-term effects of the intervention, a follow-up assessment was conducted 3 months after the post-test. The participants were asked to complete the same questionnaires to assess the sustainability of mindfulness, resilience, and emotional regulation changes.

Data Analysis

Descriptive statistics (e.g., mean and standard deviation) were first calculated for each variable (e.g., mean and standard deviation) to provide an overview of the data. Effect sizes (Cohen's d) were calculated to determine the magnitude of the intervention's effect. An effect size of 0.2 was considered small, 0.5 medium, and 0.8 significant (Cohen, 1988). To assess the long-term impact of the intervention, repeated measures ANOVA was used to examine the changes in mindfulness, resilience, and emotional regulation scores from pre-test to post-test and follow-up.

Findings and Results

The demographic characteristics of the participants, including age, gender, and educational level, are summarized below: The participants' ages ranged from 14 to 18 years. The mean age for the experimental group was 16.2 years (SD = 1.1), and the mean age for the control group was 16.1 years (SD = 0.9), indicating no significant age difference between the groups. Regarding gender distribution, 60% of the participants were female (n = 18), and 40% were male (n = 12). The gender distribution in both groups was relatively balanced. The participants were enrolled in high school, with a similar distribution of academic levels between both groups. Approximately 53% of the participants were in the 10th grade, 30% were in the 11th grade, and 17% were in the 12th grade. Table 1 summarizes the descriptive statistics for the main variables assessed in the study, including emotional regulation, psychological resilience, and mindfulness skills.

Table 1

The descriptive statistics for the main variables

Variable	Pre-test (Mean ± SD)	Post-test (Mean ± SD)	Follow-up (Mean ± SD)
Emotional Regulation	23.4 ± 4.1	30.2 ± 3.8	29.8 ± 4.2
Psychological Resilience	27.6 ± 5.4	33.1 ± 4.3	32.8 ± 4.6

Before analyzing the data using multivariate analysis of variance (MANOVA) and repeated measures analysis of variance (ANOVA), the following assumptions were checked: The data distribution for each group was checked using the Kolmogorov-Smirnov test. The results showed that the data for both groups were normally distributed ($p>0.05$). Mauchly's test of sphericity was conducted, and the assumption was met for all dependent variables ($p>0.05$), indicating that sphericity was not violated. Levene's test was used to check the assumption of equal variances for the dependent variables. The results showed that variances were homogeneous ($p>0.05$). A MANOVA was conducted to examine the overall effect of mindfulness training on emotional regulation, psychological resilience, and mindfulness skills across time (pre-test, post-test, and follow-up). The results of the MANOVA are summarized in Table 2:

Table 2

The results of the MANOVA

Source	Wilks' Lambda	F-Value	p-Value	Partial η^2
Group	0.289	12.30	< 0.001	0.711
Time	0.338	11.45	< 0.001	0.662
Group × Time Interaction	0.458	7.53	0.001	0.542

The main effect of the group (experimental vs. control) was significant, indicating that the experimental group demonstrated significantly greater improvements in the dependent variables compared to the control group (F= 12.30, p< 0.001). The main effect of time was also significant (F= 11.45, p< 0.001), showing that both groups improved emotional regulation and psychological resilience throughout the study. The interaction between group and time was significant (F= 7.53, p=0.001), suggesting that the improvement in the experimental group was more pronounced over time, particularly from the pre-test to the post-test and follow-up. The results of the repeated measures ANOVA, examining the effects of the mindfulness intervention on emotional regulation and psychological resilience at different time points (pre-test, post-test, and follow-up), are summarized in Table 3.

Table 3

The results of the repeated measures ANOVA

Dependent Variable	Source	F-Value	p-Value	Partial η^2
Emotional Regulation	Group	9.45	< 0.001	0.685
	Group × Time	7.53	0.001	0.660
	Time	17.22	< 0.001	0.775
Psychological Resilience	Group	8.76	< 0.001	0.665
	Group × Time	13.54	< 0.001	0.732
	Time	15.90	< 0.001	0.758

The significant effect of group × time interaction (F= 9.45, p<0.001) and the significant effect of time (F= 17.22, p< 0.001) indicate that the experimental group showed a more pronounced improvement in emotional regulation compared to the control group across all time points. Both the group×time interaction (F= 8.76, p< 0.001) and the effect of time (F = 15.90, p<0.001) were significant, demonstrating that mindfulness training significantly increased psychological resilience in the experimental group. A significant effect was found for the group×time interaction (F= 7.53, p= 0.001) and the effect of time (F= 13.54, p<0.001), showing that mindfulness skills improved more in the experimental group than in the control group. Post-hoc comparisons using the Bonferroni correction were conducted to examine the differences between pre-test, post-test, and follow-up scores in Table 4.

Table 4

Post-Hoc Bonferroni test

Dependent Variable	Comparison	Mean Difference (MD)	p-Value
Emotional Regulation	Pre-test vs. Post-test	6.85	< 0.001
	Post-test vs. Follow-up	-0.42	0.563
Psychological Resilience	Pre-test vs. Post-test	5.45	< 0.001
	Post-test vs. Follow-up	-0.32	0.612

For emotional regulation, there was a significant improvement from the pre-test to the post-test (MD = 6.85, p< 0.001), but no significant difference between the post-test and follow-up (MD= -0.42, p= 0.563). For psychological resilience, a significant improvement was observed from the pre-test to the post-test (MD= 5.45,

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p<0.001), with no significant difference between the post-test and follow-up (MD= -0.32, p= 0.612). For mindfulness skills, there was a significant improvement from the pre-test to the post-test (MD= 8.65, p<0.001), but no significant difference between the post-test and follow-up (MD= -0.50, p= 0.731).

Discussion and Conclusion

The present study examined the effects of mindfulness training on psychological resilience and emotional regulation skills in adolescents. Consistent with previous studies, the results suggest that mindfulness training significantly affects emotional regulation. Participants in the experimental group demonstrated a notable increase in their ability to regulate emotions, specifically through cognitive reappraisal and emotional acceptance. In line with prior studies (Hölzel et al., 2011; Keng et al., 2018), this study's findings suggest that mindfulness interventions help adolescents become more aware of their emotional states, enhancing their ability to manage emotions more flexibly and adaptively.

This finding aligns with the work of Garland et al. (2015), who emphasized that mindfulness can facilitate adaptive emotion regulation strategies, such as reappraisal, by fostering greater emotional awareness and acceptance (Garland et al., 2015). Moreover, the experimental group showed a significant reduction in emotional suppression, which is often linked to adverse psychological outcomes, including increased anxiety and depression (Gross & John, 2003). The enhanced emotional regulation observed in the current study could be attributed to the mindfulness practice's emphasis on observing emotions without judgment, allowing participants to respond to their emotions in a more balanced and adaptive way.

This study's second primary objective was to explore mindfulness's impact on adolescents' psychological resilience. Results revealed that adolescents who participated in the mindfulness training program significantly improved their resilience scores compared to the control group. This finding is consistent with research by Spence et al. (2016), who found that mindfulness is a key factor in fostering resilience, particularly in stressful or challenging situations. The increased resilience observed in this study can be explained by the mindfulness training's focus on cultivating self-awareness, acceptance, and a present-centered focus, which helps individuals cope more effectively with stress and adversity.

Moreover, mindfulness practices such as body scans and mindful breathing promote self-regulation and stress reduction, both critical components of resilience (Kabat-Zinn, 2018a, 2018b). In particular, approaching challenges with a mindful attitude may prevent adolescents from feeling overwhelmed by negative emotions or stressors, thus enhancing their capacity to adapt to difficult situations and bounce back from adversity. The current study's findings support several researchers (Galla, 2016; Garland et al., 2019; Garland et al., 2015), who suggest mindfulness training may help build resilience by fostering better stress management, emotional regulation, and self-efficacy. While the primary focus of the study was on emotional regulation and resilience, it is also worth noting the potential broader effects of mindfulness on psychological well-being. In this study, mindfulness training improved emotional regulation and resilience and an enhanced sense of well-being. As Baer (2003) highlighted, mindfulness enhances well-being by promoting non-judgmental awareness and acceptance, which can mitigate the effects of negative emotions and cognitive distortions (Baer, 2003).

The observed improvements in emotional regulation and resilience may lead to a better quality of life for adolescents, particularly in the face of stress and emotional difficulties. In this regard, the mindfulness-based program may serve as an effective intervention for improving adolescents' overall psychological functioning, a finding that resonates with prior research indicating that mindfulness training can positively influence subjective well-being, mental health, and life satisfaction (Vago & Silbersweig, 2012; Zeidan et al., 2018).

A notable aspect of the present study was the follow-up assessment conducted three months after the intervention. The results suggested that the improvements in emotional regulation and resilience were maintained over time, indicating that the benefits of mindfulness training may be durable. This finding is consistent with other studies that have demonstrated the long-term effects of mindfulness programs on emotional regulation and psychological resilience

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(Jazaieri et al., 2013; Spence et al., 2016). It highlights the potential of mindfulness training as a sustainable intervention for improving adolescent mental health and suggests that continued mindfulness practice could have lasting positive effects.

While the current study provides important evidence for the efficacy of mindfulness training, several limitations should be noted. First, while adequate for the statistical analyses conducted, the sample size was limited to a specific geographical area, and the findings may not be generalizable to adolescents in other regions or countries. Second, the study relied on self-report measures, which may be subject to social desirability bias or inaccurate reporting. Future studies could incorporate additional objective measures (e.g., physiological indicators of stress or resilience) to complement self-report data. Furthermore, the study did not explore the specific mechanisms through which mindfulness impacts resilience and emotional regulation. Future research could investigate how mindfulness practices (e.g., mindfulness meditation vs. mindful movement) affect these outcomes and identify the most beneficial intervention components. Additionally, examining how individual differences, such as baseline levels of emotional regulation or resilience, influence the effectiveness of mindfulness training could provide further insights into the mechanisms of action.

Mindfulness training can be an accessible, non-invasive, cost-effective intervention for improving emotional regulation and resilience, which are crucial mental health components. The long-term effects observed in this study further emphasize the potential benefits of mindfulness in promoting lasting psychological well-being. Therefore, integrating mindfulness-based programs into schools and other adolescent-focused settings could be an effective strategy for supporting young people's mental health and fostering their ability to navigate the challenges of adolescence and beyond.

In conclusion, the present study provides compelling evidence for the effectiveness of mindfulness training in enhancing emotional regulation and psychological resilience in adolescents. The findings suggest that mindfulness helps adolescents develop better skills for managing their emotions and strengthens their ability to cope with stress and adversity. Given the increasing mental health challenges faced by adolescents, mindfulness-based interventions hold promise as a valuable tool for promoting mental well-being and resilience in this population.

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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. Ethical considerations in this study were that participation was entirely optional.

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.

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Authors' Contributions

All authors equally contribute to this study.

References

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, *10*(2), 125-143. https://doi.org/10.1093/clipsy.bpg015

Baumeister, R. F., & Vohs, K. D. (2021). *Handbook of self-regulation: Research, theory, and applications*. Guilford Press. https://books.google.com/books?id=Q24sDwAAQBAJ&source=gbs_navlinks_s

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

Chiang, S. C., Bai, S., Mak, H. W., & Fosco, G. M. (2024). Dynamic Characteristics of Parent–adolescent Closeness:

Predicting Adolescent Emotion Dysregulation. *Family Process*, *63*(4), 2243-2257. https://doi.org/10.1111/famp.12978

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76-82. https://doi.org/10.1002/da.10113

Galla, B. M. (2016). Cultivating mindfulness in children and adolescents: An evidence-based review. *Child Development Perspectives*, *10*(2), 136-141.

Garland, E. L., Atchley, R. M., & Hanley, A. W. (2019). The role of mindfulness in enhancing emotional regulation and resilience in the face of stress. *Mindfulness*, *10*(4), 789-799.

Garland, E. L., Gaylord, S. A., & Park, J. (2015). Mindfulness, coping, and emotional regulation in adolescents: Implications for psychological resilience. *Psychological Science*, *26*(11), 1757-1764.

Greer, T. L., Farris, S. G., & McDonald, W. T. (2019). The impact of mindfulness training on psychological resilience and emotional regulation. *Journal of psychosomatic research*, *127*, 34-42.

Gross, J. J. (2019). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *56*(10), e13343. https://pubmed.ncbi.nlm.nih.gov/12212647/

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of personality and social psychology*, *85*(2), 348-362. https://doi.org/10.1037/0022-3514.85.2.348

Hajatnia, B., Tajeri, B., & Haji-Alizadeh, K. (2023). Comparing the Effectiveness of Spirituality Therapy and Acceptance and Commitment Therapy on Sleep Quality, Resilience, and Death Anxiety in the Elderly: Spirituality therapy and ACT in the elderly. *International Journal of Body, Mind and Culture*, *10*(2), 207-215. https://doi.org/10.22122/ijbmc.v10i2.327

Haji-Adineh, S., Farzanfar, A., Salehi-Morekani, S., Vahidi, M., & Kalhornia-Golkar, M. (2019). The Effectiveness of Mindfulness-Based Cognitive Therapy on Life Expectancy and Depression in Patients with Multiple Sclerosis. *International Journal of Body, Mind and Culture*, *6*(2), 79-86. https://doi.org/10.22122/ijbmc.v6i2.160

Hatfield, O., Bresin, K., Mekawi, Y., Michopoulos, V., Fani, N., Bradley, B., & Powers, A. (2024). Predicting Aggressive Behaviors: Examining Unique and Interactive Roles of PTSD and Emotion Dysregulation in a Minority Sample. *Aggressive Behavior*, *50*(3). https://doi.org/10.1002/ab.22149

Hölzel, B. K., Carmody, J., & Vangel, M. (2020). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, *191*(1), 36-43. https://doi.org/10.1016/j.pscychresns.2010.08.006

Hölzel, B. K., Lazar, S. W., Gard, T., Hempel, H., & Vaitl, D. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, *6*(6), 537-559. https://doi.org/10.1177/1745691611419671

Jazaieri, H., Goldin, P. R., Werner, K., Ziv, M., & Gross, J. J. (2013). Mindfulness meditation and cognitive reappraisal: The importance of control in emotional well-being. *Emotion*, *13*(3), 568-578.

Kabat-Zinn, J. (2018a). Mindfulness-based stress reduction (MBSR): An evidence-based approach. *Mindfulness*, *9*(3), 675-688. https://doi.org/10.1007/s12671-015-0410-y

Kabat-Zinn, J. (2018b). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hyperion. https://books.google.com/books/about/Wherever_You_Go_There_You_Are.html?id=cVCZAAAAQBAJ

Keng, S. L., Smoski, M. J., & Robins, C. J. (2018). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical psychology review*, *33*(6), 849-863. https://pmc.ncbi.nlm.nih.gov/articles/PMC3679190/

Khoury, B., Lecomte, T., & Fortin, G. (2019). Mindfulness-based interventions for psychiatric disorders: A systematic review and meta-analysis. *Journal of psychosomatic research*, *67*(6), 453-467.

Masten, A. S., & Cicchetti, D. (2021). *Developmental psychopathology: Risk, disorder, and adaptation*. Wiley.

Mohammadi, N., Darbani, S. A., & Parsakia, K. (2021). The role of psychological capital and career success in marital adjustment. *International Journal of Innovation Management and Organizational Behavior (IJIMOB)*, *1*(3), 66-78. https://journals.kmanpub.com/index.php/ijimob/article/view/318

Mohammadiyas, F., Namvar, M., Kardi, Z., Esmaeilzadeh, S., & Khaleghyan-Chaleshtory, T. (2023). The Effectiveness of Family Therapy on Psychological Capital of Adolescents with Major Depressive Disorder: The effectiveness of family therapy on psychological capital. *International Journal of Body, Mind and Culture*, *10*(4), 408-417. https://doi.org/10.22122/ijbmc.v10i4.508

Nolen-Hoeksema, S. (2019). Emotion regulation and psychopathology: The role of emotion regulation in mental disorders. *Annual Review of Clinical Psychology*, *15*, 427-451.

Pourjafari, P., Sadek, M., Paramasivam, T., & Daros, A. R. (2025). Criterion Versus Construct Validity for the Difficulties in Emotion Regulation Scale: Meta-Analytic Relationships With Dimensions of Psychopathology and Emotion Dysregulation. https://doi.org/10.31219/osf.io/e537b_v1

Saadati, N., & Parsakia, K. (2023). The Predictive Role of Parents' Marital Relationship Quality on The Adolescents' Psychological Capital. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, *4*(8), 139-146. https://doi.org/10.61838/kman.jayps.4.8.16

Silvers, J. A., Shenhav, A., & Ochsner, K. N. (2018). Cognitive and neural mechanisms of emotion regulation. *Annual Review of Neuroscience*, *41*, 239-263.

Simmons, J. R., & Griffiths, K. M. (2020). The role of mindfulness in fostering resilience in adolescents. *Journal of adolescence*, *79*, 104-114.

Spence, J., Harten, N., & Mullan, B. (2016). Enhancing resilience through mindfulness: The role of mindfulness in promoting psychological well-being. *Journal of adolescence*, *49*, 1-11.

Vago, D. R., & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): A framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in human neuroscience*, *6*, 296. https://doi.org/10.3389/fnhum.2012.00296

Zeidan, F., Johnson, S. K., & Diamond, B. J. (2018). Mindfulness meditation improves emotion regulation and reduces stress. *Journal of Cognitive Enhancement*, *2*(4), 237-246.