



Role of Meditation in Stress Management among Youth: A Narrative Review

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Abstract

Stress has emerged as one of the most significant psychological and public health concerns among youth due to increasing academic demands, career uncertainty, social expectations, and rapid technological changes. Persistent stress adversely affects mental health, emotional well-being, academic performance, and overall quality of life. Meditation has emerged as a promising non pharmacological intervention for promoting psychological well-being and enhancing stress management. The present narrative review aims to examine the role of various meditation practices, including Rajyoga Meditation, Mindfulness Meditation, Vipassana Meditation, Transcendental Meditation, and Yoga-based meditation, in managing stress among youth. Relevant literature from peer-reviewed journals, books, and authoritative reports was systematically reviewed to synthesize current evidence on the effectiveness of meditation-based interventions. The reviewed studies consistently indicate that regular meditation practice is associated with reduced perceived stress, improved emotional regulation, enhanced resilience, better cognitive functioning, and overall psychological well-being among young individuals. The review also discusses the possible psychological and neurophysiological mechanisms underlying these benefits and highlights the practical implications of integrating meditation into educational institutions and youth wellness

programs. Although the available evidence strongly supports the beneficial role of meditation in stress management, further longitudinal and high-quality randomized controlled studies are recommended to strengthen the existing evidence base. Overall, meditation represents an accessible, cost-effective, and holistic approach to promoting stress management and psychological well-being among youth.

Keywords: Meditation, Stress Management, Youth, Mental Health, Rajyoga Meditation, Mindfulness, Psychological Well-being.

1. Introduction

Stress has become one of the most significant public health and psychological concerns among youth worldwide. Rapid social change, increasing academic demands, career uncertainty, family expectations, and extensive use of digital technology have substantially contributed to elevated stress levels among adolescents and young adults (World Health Organization [WHO], 2022; Compas et al., 2001).

Although moderate levels of stress may enhance motivation and performance, prolonged or chronic stress adversely affects emotional well-being, cognitive functioning, academic achievement, and overall quality of life (Selye, 1956; Lazarus & Folkman, 1984).

In recent decades, meditation has gained increasing scientific attention as an evidence-based mind–body intervention for stress reduction and mental health promotion. Numerous clinical trials, systematic reviews, and meta-analyses have demonstrated that regular meditation practice can reduce perceived stress, improve emotional regulation, enhance resilience, and promote psychological well-being (Baer, 2003; Goyal et al., 2014; Creswell, 2017). In addition, growing evidence suggests that Rajyoga Meditation is also associated with improved psychological well-being, emotional regulation, and stress reduction across different populations (Sahu & Dubey, 2015; Madhu et al., 2022; Satyanarayana & Suresh, 2025).

Meditation encompasses a variety of practices, including Rajyoga Meditation, Mindfulness Meditation, Vipassana Meditation, Transcendental Meditation, Loving-Kindness Meditation, and Yoga-based meditation. Despite differences in philosophy and technique, these approaches share the common objective of cultivating self-awareness, attentional control, emotional balance, and adaptive coping with stressful experiences (Kabat-Zinn, 2003; Hölzel et al., 2011). Rajyoga Meditation, as taught by the Brahma Kumaris World Spiritual

University, emphasizes soul consciousness, positive thinking, self-awareness, and a conscious connection with the Supreme Being, distinguishing it from many other meditation traditions (Brahma Kumaris World Spiritual University, n.d.; Nagesh & Tandel, 2024).

Given the increasing burden of stress among youth and the growing scientific interest in meditation-based interventions, a comprehensive synthesis of the available evidence is needed. This narrative review aims to examine the role of meditation in stress management among youth by reviewing existing empirical literature, discussing the underlying mechanisms of meditation, identifying research gaps, and highlighting implications for future research and practice. Page | 20

2. Objectives of the Review

To achieve the overall aim of this narrative review, the following specific objectives were formulated:

1. To examine the role of different meditation practices in stress management among youth.
2. To review the empirical evidence on the effectiveness of meditation-based interventions for reducing stress and promoting psychological well-being.
3. To discuss the psychological, physiological, cognitive, and neurobiological mechanisms underlying meditation.
4. To identify existing research gaps and suggest future research directions.
5. To highlight the practical implications of meditation for educational institutions, healthcare professionals, and policymakers.

3. Methodology

This narrative review was conducted to synthesize the available evidence on the role of meditation in stress management among youth. Relevant literature was identified through electronic databases, including Google Scholar, PubMed, Scopus, Web of Science, PsycINFO, and Semantic Scholar, along with authoritative reports from organizations such as the World Health Organization (WHO) and the American Psychological Association (APA). Additional references were identified through manual searches of the reference lists of relevant publications.

The review included peer-reviewed journal articles, systematic reviews, meta-analyses, randomized controlled trials, observational studies, books, and official reports published primarily in English. Studies focusing on Rajyoga Meditation, Mindfulness Meditation, Vipassana Meditation, Transcendental Meditation, Loving-Kindness Meditation, and Yoga-based meditation in relation to stress, stress management, psychological well-being, emotional regulation, and resilience among adolescents and young adults were considered.

Studies unrelated to meditation, those lacking sufficient methodological information, duplicate publications, conference abstracts without full texts, and articles not directly addressing stress management among youth were excluded. The selected literature was reviewed narratively, and the findings were synthesized under thematic headings, including the concept of stress, types of meditation, mechanisms of meditation, empirical evidence, research gaps, practical implications, and future research directions.

4. Literature Review

4.1. Concept of Stress Among Youth

Stress is a natural psychological and physiological response that occurs when individuals perceive that environmental demands exceed their ability or available resources to cope effectively. Although a moderate level of stress may enhance motivation, learning, and performance (often referred to as *eustress*), prolonged or excessive stress (*distress*) can adversely affect mental health, emotional well-being, academic achievement, and physical health (Selye, 1956; Lazarus & Folkman, 1984).

Youth is a critical developmental stage characterized by rapid physical, cognitive, emotional, and social changes. During this period, young people experience increasing academic responsibilities, career-related concerns, changing interpersonal relationships, identity formation, financial challenges, and greater exposure to digital technology and social media. These developmental transitions make youth particularly vulnerable to stress and related psychological problems (Compas et al., 2001; WHO, 2022).

Academic pressure remains one of the most common sources of stress among youth. Competitive examinations, academic workload, high parental expectations, fear of failure, and uncertainty regarding future educational and career opportunities contribute substantially to psychological distress among students. In addition, social stressors such as peer pressure,

interpersonal conflicts, cyberbullying, excessive social media use, and fear of missing out (FOMO) further increase stress levels in adolescents and young adults (APA, 2024).

Stress among youth may be classified into three major categories: acute stress, episodic acute stress, and chronic stress. Acute stress is a short-term response to immediate challenges, whereas chronic stress persists over an extended period and may result in significant psychological and physiological consequences. Persistent stress has been associated with anxiety, depression, sleep disturbances, impaired concentration, emotional exhaustion, reduced academic performance, and diminished quality of life (Selye, 1976; Lu et al., 2021). Page | 22

According to the transactional model of stress proposed by Lazarus and Folkman (1984), stress is not determined solely by external events but also by an individual's cognitive appraisal of those events and the perceived ability to cope with them. Consequently, individuals exposed to similar situations may experience different levels of stress depending on their coping strategies, resilience, personality characteristics, emotional regulation, and social support systems.

Recent advances in neuroscience and health psychology have further demonstrated that chronic stress activates the hypothalamic-pituitary-adrenal (HPA) axis and increases the secretion of cortisol, the primary stress hormone. Persistent activation of the stress response may impair cognitive functioning, emotional regulation, immune function, and overall psychological health (Davidson & McEwen, 2012; Tang et al., 2015).

Given the high prevalence and adverse consequences of stress among youth, effective stress management has become an important public health priority. While counseling, psychotherapy, physical exercise, and social support remain valuable interventions, meditation has emerged as a scientifically supported, low-cost, and accessible strategy for reducing stress and enhancing psychological well-being. Numerous studies have reported that regular meditation practice improves emotional regulation, resilience, self-awareness, and adaptive coping skills, thereby contributing to healthier stress management among young people (Baer, 2003; Goyal et al., 2014; Creswell, 2017). The following section discusses the concept, major types, and characteristics of meditation that have been investigated for their role in stress management among youth.

The following section discusses the concept, major types, and characteristics of meditation that have been investigated for their role in stress management among youth.

4.2. Meditation: Concept and Types

Meditation is a systematic mental training practice that aims to cultivate attention, awareness, emotional balance, and psychological well-being. Although meditation has its roots in ancient spiritual and philosophical traditions, it has gained increasing scientific recognition over the past few decades as an evidence-based intervention for stress reduction, emotional regulation, and mental health promotion (Kabat-Zinn, 2003; Baer, 2003; Goyal et al., 2014). Contemporary research indicates that regular meditation practice contributes to improved cognitive functioning, enhanced self-awareness, greater resilience, and better coping with stressful life events (Creswell, 2017; Tang et al., 2015).

Meditation encompasses a wide range of practices that differ in their philosophical foundations, techniques, and objectives. However, most meditation approaches share common elements, including focused attention, present-moment awareness, relaxation, and the cultivation of positive mental states. These shared characteristics are believed to underlie many of the psychological and physiological benefits reported across different meditation traditions (Shapiro et al., 2006; Hölzel et al., 2011).

4.2.1. Rajyoga Meditation

Rajyoga Meditation is a spiritual meditation practice developed and propagated by the Brahma Kumaris World Spiritual University (BKWSU). Unlike many traditional meditation techniques, it is generally practiced with the eyes open and focuses on cultivating spiritual awareness, soul consciousness, constructive thinking, inner peace, and a conscious relationship with the Supreme Being. Through regular practice, individuals are encouraged to experience themselves as peaceful spiritual beings and to cultivate qualities such as emotional stability, self-mastery, compassion, and positive values (Brahma Kumaris World Spiritual University, n.d.; Sahu & Dubey, 2015).

Recent research suggests that regular Rajyoga Meditation practice may reduce perceived stress, improve emotional regulation, strengthen self-esteem, enhance self-confidence, and promote resilience and overall psychological well-being. These benefits have been attributed

to positive cognitive restructuring, increased self-awareness, enhanced positive thinking, and improved mind–body regulation (Kiran et al., 2014; Madhu et al., 2022; Ramesh Babu et al., 2021; Nagesh & Tandel, 2024).

Several empirical studies have further reported that Rajyoga Meditation contributes to improved mental health, self-regulation, positive thinking, anger management, and anxiety reduction among different populations, including adolescents, college students, and adults (Bhaskar et al., 2023; Jha et al., 2023; Kendole & Patil, 2026; Nagesh & Mehta, 2023). Furthermore, emerging evidence indicates that Rajyoga Meditation may positively influence autonomic nervous system functioning and brain activity, thereby supporting its role in stress management and psychological well-being (Sharma et al., 2018; Jha et al., 2025).

Although the empirical evidence supporting Rajyoga Meditation continues to grow, the available literature remains relatively limited compared with Mindfulness Meditation. Therefore, further large-scale randomized controlled trials, longitudinal studies, and cross-cultural investigations are needed to establish its long-term effectiveness and strengthen the scientific evidence base (Satyanarayana & Suresh, 2025; Sahu & Dubey, 2015).

4.2.2. Mindfulness Meditation

Mindfulness Meditation is one of the most extensively studied meditation practices in psychology and health sciences. It is commonly defined as paying purposeful attention to present-moment experiences with openness, curiosity, and without judgment (Kabat-Zinn, 1994; Bishop et al., 2004). Rather than attempting to suppress thoughts or emotions, mindfulness encourages individuals to observe them with acceptance, thereby reducing emotional reactivity and psychological distress.

Numerous randomized controlled trials, systematic reviews, and meta-analyses have demonstrated that mindfulness-based interventions effectively reduce stress, anxiety, and depressive symptoms while improving attention, emotional regulation, resilience, and overall psychological well-being (Goyal et al., 2014; Creswell, 2017; Dunning et al., 2019).

4.2.3. Vipassana Meditation

Vipassana Meditation is one of the oldest Buddhist meditation traditions and emphasizes insight through continuous observation of bodily sensations, thoughts, and emotions. The practice develops mindfulness, self-awareness, and equanimity, enabling practitioners to

respond to stressful experiences with greater emotional stability. Previous studies have reported improvements in stress management, emotional regulation, and psychological resilience following regular Vipassana practice (Lutz et al., 2008; Tang et al., 2015).

4.2.4. Transcendental Meditation

Transcendental Meditation (TM) is a mantra-based meditation technique popularized by Maharishi Mahesh Yogi. Practitioners silently repeat a personalized mantra for approximately 20 minutes twice daily, allowing the mind to settle into a state of restful alertness. Research has shown that TM may reduce perceived stress, anxiety, blood pressure, and psychological distress while improving cognitive functioning and emotional well-being (Goyal et al., 2014; Davidson & McEwen, 2012).

4.2.5. Loving-Kindness Meditation (Metta)

Loving-Kindness Meditation (Metta) is derived from the Buddhist tradition and focuses on cultivating unconditional kindness, compassion, empathy, and goodwill toward oneself and others. Studies have demonstrated that this practice enhances positive emotions, social connectedness, emotional resilience, and psychological well-being while reducing stress and negative emotional states (Shapiro et al., 2006; Hölzel et al., 2011).

4.2.6. Yoga-based Meditation

Yoga-based Meditation integrates meditative awareness with breathing techniques (*Pranayama*), relaxation practices, and yogic principles to achieve harmony between the body and mind. Numerous studies have reported that yoga-based meditation reduces stress, improves sleep quality, enhances emotional regulation, and strengthens coping abilities among adolescents and young adults (Khunti et al., 2023; Mandlik et al., 2024).

Although these meditation practices differ in philosophy and method, they share a common objective of promoting psychological well-being and strengthening an individual's ability to cope with stress. The following section explains the psychological, physiological, cognitive, and neurobiological mechanisms through which meditation contributes to effective stress management.

4.3. Mechanisms of Meditation in Stress Management

Meditation influences stress management through multiple interconnected psychological, physiological, cognitive, and neurobiological mechanisms. Although different meditation traditions employ diverse techniques and philosophical approaches, scientific evidence suggests that many of their beneficial effects are mediated through common mechanisms that promote self-regulation, emotional balance, and adaptive coping. These mechanisms collectively contribute to reducing perceived stress and improving overall mental well-being among youth (Shapiro et al., 2006; Hölzel et al., 2011; Creswell, 2017). Similar mechanisms have also been reported in studies on Rajyoga Meditation, particularly in relation to emotional regulation, positive thinking, and self-awareness (Madhu et al., 2022; Nagesh & Tandel, 2024).

4.3.1. Psychological Mechanisms

One of the primary mechanisms through which meditation reduces stress is by enhancing psychological functioning. Regular meditation practice improves self-awareness, emotional regulation, acceptance, and resilience. Instead of reacting automatically to stressful situations, individuals learn to observe their thoughts and emotions with greater objectivity and non-judgmental awareness. This process reduces rumination, emotional reactivity, and negative thinking while fostering optimism, self-control, and adaptive coping strategies (Baer, 2003; Shapiro et al., 2006; Creswell, 2017). Studies on Rajyoga Meditation have similarly reported improvements in self-regulation, emotional stability, positive thinking, and self-confidence (Nagesh & Mehta, 2023; Kendole & Patil, 2026).

4.3.2. Physiological Mechanisms

Meditation also produces significant physiological changes associated with the relaxation response. Chronic stress activates the sympathetic nervous system and the hypothalamic-pituitary-adrenal (HPA) axis, resulting in increased secretion of cortisol, elevated heart rate, increased blood pressure, and muscle tension. Regular meditation promotes parasympathetic nervous system activity, decreases physiological arousal, slows breathing, lowers blood pressure, and reduces cortisol levels. These physiological adaptations contribute to improved physical relaxation and lower perceived stress (Benson, 1975; Davidson & McEwen, 2012; Goyal et al., 2014). Recent studies have further shown that Rajyoga Meditation may improve autonomic nervous system functioning and heart rate variability, indicating enhanced physiological resilience to stress (Jha et al., 2025; Kaushik et al., 2020).

4.3.3. Neurobiological Mechanisms

Recent advances in neuroscience have demonstrated that meditation may induce functional and structural changes in several brain regions associated with attention, emotional regulation, memory, and self-control. Neuroimaging studies have reported increased activity and connectivity in the prefrontal cortex, enhanced functioning of the anterior cingulate cortex, and reduced activation of the amygdala, which plays a central role in fear and stress responses. These neuroplastic changes may improve emotional stability, cognitive control, and resilience to stressful experiences (Brewer et al., 2011; Hölzel et al., 2011; Tang et al., 2015). Evidence from Rajyoga Meditation research also suggests alterations in brain structure, cortical activity, and EEG patterns associated with enhanced emotional regulation and cognitive functioning (Ramesh Babu et al., 2021; Sharma et al., 2018).

4.3.4. Cognitive Mechanisms

Meditation enhances several cognitive processes that are essential for effective stress management. Regular practice improves sustained attention, working memory, cognitive flexibility, and executive functioning while reducing cognitive overload and repetitive negative thinking. Individuals become more capable of recognizing maladaptive thought patterns and responding to stressful situations with greater clarity, rationality, and emotional control (Lutz et al., 2008; Tang et al., 2007; Zeidan et al., 2010). Similar cognitive benefits have also been reported among long-term Rajyoga practitioners (Nagesh & Tandel, 2024; Ramesh Babu et al., 2021).

4.3.5. Behavioral Mechanisms

Meditation promotes positive behavioral changes that further strengthen stress management. Individuals who meditate regularly often develop greater patience, self-discipline, emotional self-control, and healthier interpersonal relationships. Meditation has also been associated with improved sleep quality, healthier lifestyle behaviors, effective conflict resolution, and adaptive coping strategies. These behavioral improvements contribute to long-term psychological resilience and overall well-being (Baer, 2003; Goyal et al., 2014). Rajyoga Meditation has likewise been associated with positive behavioral outcomes, including improved anger management, self-confidence, and positive lifestyle changes (Bhaskar et al., 2023; Kendole & Patil, 2026).

4.3.6. An Integrated Perspective

The mechanisms underlying meditation are multidimensional and interrelated rather than independent. Psychological improvements influence physiological functioning, neurobiological changes support cognitive regulation, and behavioral modifications reinforce emotional resilience. Together, these mechanisms enable individuals to perceive, interpret, and respond to stressful situations more effectively. Consequently, meditation not only alleviates stress symptoms but also strengthens the individual's overall capacity to maintain psychological balance and well-being (Hölzel et al., 2011; Tang et al., 2015; Creswell, 2017).

Understanding these mechanisms provides the theoretical foundation for interpreting empirical findings on meditation and stress management. Therefore, the following section reviews the available empirical evidence regarding the effectiveness of different meditation practices in reducing stress and promoting mental well-being among youth.

4.4. Empirical Evidence on Meditation and Stress Management among Youth

A substantial body of empirical research indicates that meditation-based interventions are effective in reducing stress and improving psychological well-being among youth. During the past two decades, numerous randomized controlled trials, quasi-experimental studies, school-based interventions, systematic reviews, and meta-analyses have consistently reported positive effects of meditation on perceived stress, emotional regulation, resilience, attention, and overall mental health (Black et al., 2009; Goyal et al., 2014; Creswell, 2017).

4.4.1. Mindfulness Meditation

Among the various meditation approaches, Mindfulness Meditation has received the strongest scientific support. School- and university-based studies have demonstrated that mindfulness-based interventions significantly reduce perceived stress, anxiety, and depressive symptoms while improving attention, emotional regulation, self-awareness, and academic adjustment. Meta-analyses further confirm that mindfulness interventions produce small-to-moderate but clinically meaningful improvements in psychological well-being among children, adolescents, and university students (Zenner et al., 2014; Zoogman et al., 2015; Dunning et al., 2019).

Several systematic reviews have also concluded that mindfulness-based programs enhance resilience and adaptive coping while reducing emotional distress in educational settings. Although the magnitude of the effects varies according to intervention duration, participant characteristics, and methodological quality, the overall findings consistently support the

effectiveness of mindfulness for youth stress management (Carsley et al., 2018; Halladay et al., 2019).

4.4.2. Rajyoga Meditation

Research on Rajyoga Meditation has reported encouraging findings regarding its role in stress management and psychological well-being. Empirical studies indicate that regular Rajyoga practice promotes positive thinking, emotional stability, self-awareness, resilience, self-regulation, and overall mental health while reducing perceived stress and anxiety. These benefits are primarily attributed to the development of soul consciousness, positive cognitive restructuring, emotional regulation, and improved mind-body balance (Kiran et al., 2014; Madhu et al., 2022; Jha et al., 2023).

Recent randomized and experimental studies have further demonstrated that Rajyoga Meditation enhances self-confidence, emotional regulation, anger management, and positive mental health among adolescents and young adults (Bhaskar et al., 2023; Kendole & Patil, 2026; Nagesh & Mehta, 2023). Moreover, emerging physiological evidence suggests that Rajyoga Meditation positively influences autonomic nervous system functioning, heart rate variability, and neural activity, thereby supporting its effectiveness as a stress-management intervention (Sharma et al., 2018; Ramesh Babu et al., 2021; Jha et al., 2025).

Several review studies have also concluded that Rajyoga Meditation is a promising complementary approach for promoting psychological well-being and stress reduction across different populations. However, compared with Mindfulness Meditation, the number of high-quality randomized controlled trials and longitudinal studies on Rajyoga remains relatively limited. Existing research is also characterized by variations in study design, sample characteristics, intervention duration, and outcome measures, highlighting the need for more rigorous and standardized investigations (Sahu & Dubey, 2015; Satyanarayana & Suresh, 2025; Nagesh & Tandel, 2024).

4.4.3. Vipassana Meditation

Empirical evidence on Vipassana Meditation indicates that insight-based meditation enhances mindfulness, emotional regulation, and psychological resilience. Studies involving adolescents and young adults have reported reductions in stress, anxiety, and emotional reactivity together with improvements in concentration, self-awareness, and adaptive coping. Although the

available evidence is promising, larger controlled studies are required to establish its long-term effectiveness (Lutz et al., 2008; Tang et al., 2015).

4.4.4. Transcendental Meditation

Studies on Transcendental Meditation (TM) have demonstrated beneficial effects on psychological stress, blood pressure, emotional well-being, and cognitive functioning. Several school-based interventions have reported improvements in emotional stability, academic engagement, and stress reduction following regular TM practice. These findings suggest that mantra-based meditation may be an effective complementary intervention for promoting youth mental health (Davidson & McEwen, 2012; Goyal et al., 2014).

4.4.5. Loving-Kindness Meditation

Research on Loving-Kindness Meditation (Metta) has shown that cultivating compassion and positive emotions contributes to reduced psychological distress, improved interpersonal relationships, enhanced empathy, and greater life satisfaction. Such findings suggest that compassion-focused meditation may be particularly beneficial for youth experiencing interpersonal stress and social isolation (Shapiro et al., 2006; Hölzel et al., 2011).

4.4.6. Yoga-based Meditation

Evidence suggests that Yoga-based meditation has demonstrated positive effects on stress reduction, emotional regulation, sleep quality, and psychological well-being. Randomized controlled trials and systematic reviews have shown that combining meditation with yogic breathing and relaxation techniques improves resilience, coping abilities, and overall mental health among school and university students (Khunti et al., 2023; Mandlik et al., 2024).

4.4.7. Summary of Empirical Evidence

Despite differences in meditation techniques, intervention duration, sample characteristics, and outcome measures, the majority of empirical studies consistently report reductions in perceived stress together with improvements in emotional regulation, resilience, attention, and psychological well-being. Similar positive outcomes have also been reported in studies of Rajyoga Meditation, particularly with respect to stress reduction, self-regulation, positive thinking, emotional stability, and mental well-being (Madhu et al., 2022; Jha et al., 2023; Subedi et al., 2026).

Nevertheless, considerable methodological heterogeneity exists across studies, including variations in sample size, research design, intervention protocols, and assessment instruments. These differences limit direct comparisons and highlight the need for more standardized and high-quality research.

Overall, the empirical evidence strongly supports meditation as a safe, accessible, and evidence-based strategy for stress management among youth. Future research should prioritize large-scale randomized controlled trials, longitudinal follow-up studies, comparative investigations of different meditation techniques, and cross-cultural research to strengthen the existing evidence base and identify the most effective interventions for diverse youth populations (Goyal et al., 2014; Satyanarayana & Suresh, 2025).

5. Research Gaps and Future Research Directions

Although the available literature provides substantial evidence supporting the effectiveness of meditation in stress management among youth, several important research gaps remain. First, the majority of published studies have focused on Mindfulness Meditation, whereas comparatively fewer empirical investigations have examined Rajyoga Meditation, Vipassana Meditation, Loving-Kindness Meditation, and other meditation practices. Consequently, the comparative effectiveness of different meditation techniques remains insufficiently understood (Goyal et al., 2014; Creswell, 2017; Sahu & Dubey, 2015; Satyanarayana & Suresh, 2025).

Second, many studies have employed relatively small sample sizes, short intervention periods, and cross-sectional or quasi-experimental designs. Such methodological limitations restrict the generalizability of findings and make it difficult to determine the long-term effectiveness of meditation-based interventions. More randomized controlled trials and longitudinal studies are therefore required (Black et al., 2009; Dunning et al., 2019).

Third, substantial heterogeneity exists in meditation protocols, intervention duration, participant characteristics, and outcome measures. The lack of standardized intervention procedures limits comparisons across studies and reduces the consistency of available evidence.

Fourth, relatively few studies have investigated the biological and neurophysiological mechanisms underlying meditation-induced stress reduction among youth. Future research integrating psychological assessments with biomarkers, neuroimaging, and physiological indicators would provide a more comprehensive understanding of the mechanisms of action (Tang et al., 2015; Hölzel et al., 2011).

Finally, research from South Asian countries, particularly Nepal and India, remains comparatively limited despite the historical origins of meditation in this region. Although recent studies on Rajyoga Meditation have provided encouraging evidence, the overall number of rigorous empirical investigations remains relatively small (Madhu et al., 2022; Jha et al., 2023; Satyanarayana & Suresh, 2025). Cross-cultural studies involving diverse educational and socioeconomic settings are needed to strengthen the global evidence base and improve the applicability of findings across different populations.

Based on the identified research gaps, the following directions are recommended for future research:

- Conduct large-scale randomized controlled trials involving diverse youth populations.
- Undertake longitudinal studies to evaluate the long-term effects of meditation on stress management and psychological well-being.
- Compare the effectiveness of different meditation approaches, including Rajyoga, Mindfulness, Vipassana, Transcendental, Loving-Kindness, and Yoga-based meditation.
- Incorporate objective physiological and neurobiological indicators (e.g., cortisol, heart rate variability, EEG, and fMRI) alongside validated psychological assessment tools.
- Develop standardized meditation protocols and validated outcome measures to improve methodological consistency across studies.
- Conduct more cross-cultural research, particularly in developing countries such as Nepal and India, to strengthen the global evidence base.
- Explore the effectiveness of meditation among different youth populations, including school students, university students, working youth, and young professionals.
- Examine the potential of digital and technology-assisted meditation interventions, such as mobile applications and online meditation programs, for improving stress management among youth.

6. Practical Implications

The findings of this narrative review have important implications for educational institutions, mental health professionals, healthcare providers, parents, and policymakers. Schools, colleges, and universities may integrate structured meditation programs—including Rajyoga Meditation, Mindfulness Meditation, and other evidence-based meditation approaches—into student wellness initiatives to enhance stress management, emotional regulation, resilience, and overall psychological well-being (World Health Organization [WHO], 2022; Satyanarayana & Suresh, 2025). Mental health professionals, psychologists, counselors, and healthcare practitioners may incorporate meditation-based interventions as complementary strategies alongside conventional approaches for stress prevention and management. Such interventions have the potential to improve coping abilities while reducing psychological distress and promoting positive mental health (Goyal et al., 2014).

Mental health professionals, psychologists, counselors, and healthcare practitioners may incorporate meditation-based interventions as complementary strategies alongside conventional approaches for stress prevention and management. Such interventions have the potential to improve coping abilities while reducing psychological distress and promoting positive mental health (Goyal et al., 2014; Madhu et al., 2022).

Parents and community organizations can encourage regular meditation practice as part of a healthy lifestyle to support emotional stability, self-awareness, and adaptive coping among adolescents and young adults. Likewise, educational administrators and policymakers may consider developing evidence-based meditation programs that are culturally appropriate, feasible, and scientifically evaluated within school and university settings.

Researchers may also benefit from adopting standardized intervention protocols, validated assessment instruments, and rigorous research designs to improve the quality and comparability of future studies. Greater collaboration among educators, psychologists, neuroscientists, and public health professionals may further strengthen the evidence supporting meditation-based interventions for youth stress management.

7. Conclusion

Stress has become one of the most significant mental health challenges affecting youth worldwide. Increasing academic demands, social pressures, technological influences, and career-related uncertainties have contributed to higher levels of psychological stress among

adolescents and young adults. Consequently, identifying safe, effective, and accessible stress management strategies has become an important public health priority (World Health Organization [WHO], 2022; Compas et al., 2001).

The evidence reviewed in this narrative review demonstrates that meditation is a promising and evidence-based approach to stress management among youth. Different meditation practices, including Rajyoga Meditation, Mindfulness Meditation, Vipassana Meditation, Transcendental Meditation, Loving-Kindness Meditation, and Yoga-based Meditation, have consistently been associated with reductions in perceived stress and improvements in emotional regulation, resilience, self-awareness, attention, and overall psychological well-being (Goyal et al., 2014; Tang et al., 2015; Madhu et al., 2022; Jha et al., 2023).

Among the reviewed approaches, Mindfulness Meditation currently has the strongest empirical support because of the large number of randomized controlled trials, systematic reviews, and meta-analyses available. Nevertheless, the growing body of research on Rajyoga Meditation and other meditation traditions also indicates encouraging outcomes, highlighting their potential contribution to youth mental health promotion. However, additional high-quality longitudinal studies, randomized controlled trials, and comparative investigations are required to strengthen the existing evidence base (Satyanarayana & Suresh, 2025; Sahu & Dubey, 2015).

In conclusion, meditation represents a holistic, low-cost, non-pharmacological, and sustainable strategy for promoting stress management among youth. Integrating scientifically validated meditation programs into educational institutions, community health initiatives, and mental health promotion policies may contribute to healthier, more resilient, and psychologically balanced young populations while supporting their long-term academic, personal, and social development.

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Conflict of Interest/Competing Interests

No conflict of interest.

Data Availability

The raw data supporting the findings of this research paper will be made available by the authors upon a reasonable request.

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