

MINDFULNESS-BASED INTERVENTIONS TO DEVELOP A BETTER FUTURE OF THE TRIBAL ADOLESCENT'S MENTAL HEALTH IN INDIA

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Abstract

The use of mindfulness-based interventions (MBIs) as a treatment for mental illnesses and well-being in children and adults is growing. Though the research may not keep up with the enthusiasm for mindfulness among tribal adolescent groups. Given the growing popularity of mindfulness as a form of intervention, this work has a lot of promise to advance science and public health. By prioritizing research on mindfulness-based interventions tailored to this demographic, we not only contribute to the academic understanding of mental health challenges but also strive to develop practical and culturally sensitive solutions. This call to action encourages future studies to delve into the specific needs of tribal adolescents, offering an opportunity to enhance individual lives and contribute to the harmonious development of Indian society as a whole.

Keywords: Mindfulness-Based Intervention, Tribal Adolescents, Psychotherapy, Effectiveness, Mental Health of Tribal, Tribal Community.

INTRODUCTION

Discussions on mental health are becoming increasingly important in a fast-changing world. The pursuit of mental well-being has led many people to rediscover age-old practices that promote inner harmony and resilience. One such practice gaining widespread recognition is mindfulness, a contemplative technique rooted in ancient traditions that is now embraced for its therapeutic potential. As its popularity increases globally, it is imperative to explore diverse applications in multiple contexts. This article examines mindfulness-based interventions specifically for tribal adolescents in India. Amidst India's rich cultural tapestry, tribal communities face distinct challenges, and their adolescents encounter unique difficulties. Recognizing the importance of addressing the mental health needs of tribal adolescents in India, this literature review takes stock of mental health interventions and highlights the urgency of exploring mindfulness-based interventions.

Understanding Tribal Adolescents in India

There are diverse tribal communities in India, each weaving a unique tapestry of culture, traditions, and heritage. In the 2001 census, India has a tribal population of 8.43 crores, which is 8.2% of the Indian population (Ministry of Tribal Affairs, 2009). Among other countries with a tribal population, India has the second place (Leal Filho, 2010). The tribal population is distributed among approximately 635 tribes (Sachidananda, 1998). Tribal populations predominantly inhabit hilly and plain forest regions. Roughly, 91.7% of the tribal population live in rural regions, while the remaining 8.3% resides in urban regions (Ministry of Tribal Affairs, 2009).

Despite their cultural richness, tribal communities often face distinct socioeconomic challenges, including limited access to education, healthcare, and economic opportunities.

The literacy rate, coupled with a high dropout rate from schools, is the lowest among many tribal groups (Chithra, 2020; Yadav & Soni, 2023). The tribal population is highly susceptible to diseases and show elevated levels of malnutrition, morbidity, and mortality (Balgir, 2004). Their healthcare challenges are exacerbated by limited infrastructure, scarcity of healthcare professionals, and lack of cultural sensitivity and integration of traditional healing practices (Roy et al., 2023). Industrial development in tribal areas has resulted in the displacement of tribes from their lands and homes, forcing them to migrate and abandon traditional sources of livelihood (Hossain, 2021). Many tribal groups face challenges, such as a stagnant or declining population and living on a subsistence level of economy (Chithra, 2020). Researchers also document other afflictions of the tribal population (Yadav & Soni, 2023): They suffer from poverty, and hostile social and physical environments. They struggle from poor sanitation facilities and absence of safe drinking water. There is a high prevalence of alcohol and tobacco use among the tribal population.

The socioeconomic marginalization of the tribal population in India gives rise to multiple mental health challenges for tribal groups in general and tribal adolescents in particular. A recent review covering three decades found a high prevalence (40%) of alcohol abuse, suicide attempts, anxiety, depression, and other mental health conditions in tribal communities (Verma et al., 2022; see also Ghosh et al., 2004; Mohindra et al., 2011). In the case of adolescence, these mental health challenges have an advanced impact, as the psychological well-being of adolescents forms the bedrock of their personal growth, educational attainment, and social integration.

As per the 2001 census, the number of Scheduled Tribe adolescents in India is 18,578,789, out of which 9,660,531 were males and 8,918,258 were females (Ministry of Tribal Affairs, 2009). Researchers observe that in India, tribal adolescents frequently lack educational and employment opportunities crucial for their growth and progress (e.g. Sujatha, 2002). Of the total tribal adolescents, those residing in rural areas face the direst situation. Gharat and Nayak (2022) studied the factors that increase the vulnerability of tribal populations to mental health issues. Factors such as lack of educational and healthcare facilities contribute to the mental health challenges of tribal populations. Additionally, tribal populations become vulnerable due to some of their cultural practices and the rapid changes happening in the wider society. Gharat and Nayak highlighted the need for more research to understand the mental health challenges that the tribal adolescents face in India.

A limited number of studies examine the mental health challenges experienced by tribal adolescents in India. In a study measuring academic achievement in secondary schools in Kashmir, tribal students demonstrated a lower level of academic achievement than non-tribal students did (Andrabi, 2015). Ranjan and colleagues (2021) compared tribal (180 participants) and non-tribal (180 participants) adolescent girls on measures of self-esteem (Rosenberg Self-Esteem Scale) and well-being (Adolescent Wellbeing Scale). They recruited participants from two schools and one institute in North India. The results showed that compared to non-tribal adolescent girls, the tribal adolescent girls exhibited lower self-esteem and well-being (depressive symptoms). The percentage of non-tribal adolescent girls showing depressive symptoms was 13.3, whereas the percentage of tribal adolescent girls showing depressive symptoms was 33.9. Other studies have shown that tribal adolescents are at greater risk of developing mental health problems resulting from stress (Islam, 2013; Gharat & Nayak, 2022; Rao et al., 2006).

Two studies used the Strengths and Difficulties Questionnaire (SDQ) to assess the mental well-being of tribal adolescents. Ali and Eqbal (2016) used the SDQ to survey 780 male adolescent tribal school students. These students were recruited from the rural areas of Jharkhand, in Ranchi district. This survey documents the breadth of the mental health challenges that the tribal adolescents in India faces. Of the 780 tribal adolescent students in this survey, 5.12% experienced emotional symptoms, 9.61% faced conduct problems, 4.23% exhibited hyperactivity, and 1.41% had significant peer problems. Basu and colleagues (2018) used the SDQ with tribal adolescents from the West Bengal district. Their study showed a high prevalence of mental health problems and distress among the adolescents. Two-thirds of the participants were at substantial risk of developing clinically significant mental health problems, with peer problems being the most prevalent.

Zahiruddin et al. (2011) interviewed adolescents aged 11 to 19 years, including both males and females in six tribal villages in the Wardha district of Maharashtra, India. They used a structured interview, including questions related to tobacco use and its forms, exposure to tobacco prevention activities or messages, and perceived harmful effects of tobacco use. This study found a high prevalence of tobacco use among the adolescents. Of the 242 adolescents who participated in the study, 126 (52.07%) used some form of tobacco, with smokeless tobacco being the most commonly used. The prevalence of tobacco use was significantly higher in adolescent boys (66.25%) than in girls (23.45%). The study also found that education did not have a significant effect on tobacco use. Only a small proportion of the adolescents were able to correctly interpret tobacco prevention messages.

Neglecting the mental health concerns of tribal adolescents in India can perpetuate a cycle of vulnerability, impacting not only the lives of those adolescents, but also the tribal communities. Socioeconomic marginalization of tribal populations makes them more vulnerable to mental health challenges, which in turn pushes them to further socioeconomic marginalization.

Subudhi and colleagues (2022) found that mental illness had a significant negative impact on the lives of tribal families, including their education, marriage, financial crisis, family stress, physical abuse, and social isolation. Therefore, prioritizing mental health initiatives for tribal adolescents has the potential to break down barriers to education, employment, and health care. Addressing the mental health needs of tribal adolescents is not just for humanitarian reasons; it is also imperative for the harmonious development of society.

Mindfulness-Based Interventions: An Overview

Mindfulness is a concept that originated in ancient Eastern traditions, specifically Buddhism. The Buddhist tradition, particularly Satipatthana Sutta, is considered the heart and central axis of the philosophy and practice of mindfulness (Hungerford et al., 2022). Various definitions, attributes, and practices are associated with mindfulness (Amaro & Singh, 2020).

In its myriad forms, mindfulness involves focusing on the present moment and fostering a non-judgmental awareness of one's thoughts, emotions, and bodily sensations. Formal mindfulness practice often involves focusing on breathing, bodily sensations, or other objects of attention. Informal mindfulness practices involve focusing attention on the present moment and engaging fully in a task (Urbanowicz et al., 2023).

Mindfulness has been integrated into modern Western strategies to improve health outcomes, particularly in the field of mental health. Kabat-Zinn, a medical researcher, has played a significant role in introducing mindfulness-based interventions to Western mental health settings (Cavanna et al., 2023). Researchers and mental health professionals utilize mindfulness-based interventions to enhance their clients' understanding of their destructive patterns of thinking, feeling, and behaving. The interventions are also utilized to help clients have an accepting stance of their unwanted and negative experiences.

There are various mindfulness-based interventions (Nauphal et al., 2022). Most of these intervention programs rely on mindfulness meditation practices. Some of them integrate mindfulness practices with other therapies. Cognitive behavioural therapies is an example of integrating mindfulness practices with other therapies. Mindfulness-Based Stress Reduction (MBSR) consist of practices such as mindfulness meditation, body awareness, and yoga. It can help clients manage stress and improve well-being. In Mindfulness-Based Cognitive Therapy (MBCT), the therapist uses mindfulness practices and aspects of cognitive therapy to treat individuals with depression. Dialectical Behavior Therapy (DBT) incorporates mindfulness skills as part of a comprehensive treatment approach for individuals with borderline personality disorder and other emotional dysregulation issues. In Acceptance and Commitment Therapy (ACT), the therapist uses mindfulness to foster psychological flexibility in individuals struggling from anxiety and depression. Mindfulness-Based Relapse Prevention (MBRP) combines mindfulness practices with cognitive-behavioral strategies to support individuals in their recovery from substance use disorders. Mindfulness-Based Eating Awareness Training (MB-EAT) focuses on cultivating mindfulness to promote a healthier relationship with food and addresses issues related to disordered eating. Mindfulness-Based Childbirth and Parenting (MBCP) incorporates mindfulness practices to support expectant parents during pregnancy, childbirth, and early parenting.

Bluth and Blanton (2014) summarized the potential pathways through which mindfulness can influence positive emotional outcomes in adolescents: Mindfulness practices help adolescents reduce harmful negative affect, leading to improved emotional well-being. Mindfulness has been associated with greater positive affect, including increased happiness, life satisfaction, and overall well-being, in adolescents. Adolescents practicing mindfulness experience improved self-regulation, which can contribute to improved emotional control and coping skills. Mindfulness has been linked to lower reported stress levels in adolescents, leading to greater calm, balance, and improved self-efficacy. Mindfulness practices facilitate greater understanding of oneself and others, promoting empathy and interpersonal connections. These pathways suggest that mindfulness can have a multifaceted impact on adolescents' emotional well-being, influencing both their internal emotional experiences and interactions with the external environment.

Mindfulness-Based Interventions and Tribal Adolescents in India

Several reviews have examined the efficacy of mindfulness-based programs. For the adult population, mindfulness-based interventions are effective (for a review, see Nauphal et al., 2022). Available reviews also show a positive impact of mindfulness-based intervention programs on adolescents, including cognitive and emotional areas (Engel et al., 2020), well-being (McKeering et al., 2019), health in general (Lin et al.,

2019), and mental health disorders (Kallapiran et al., 2015). Carsley et al. (2018) argued that mindfulness-based interventions were most effective when used with participants in late adolescence (15–18) and when the intervention consisted of combining multiple mindfulness activities. However, Abujaradeh et al. (2018) in their review concluded that mindfulness-based interventions have inconsistent effects on adolescents with chronic diseases in clinical settings (Abujaradeh et al., 2018). They called for larger randomized controlled trial studies to examine the effect of mindfulness-based programs on adolescent health (see also Tan, 2016).

Some individual studies examined the effect of mindfulness programs for participants from the West (Europe and the United States). Bluth and Blanton (2014) examined whether mindfulness was correlated with self-compassion and emotional well-being among participants from an urban high school population in the USA. The study found a statistically significant relationship between mindfulness and emotional well-being outcomes in both males and females.

Biegel and colleagues (2009) assessed the effectiveness of the Mindfulness-Based Stress Reduction (MBSR) program for adolescent students in psychiatric facility in the USA. The researchers compared the MBSR group with the control group called as the treatment-as-usual (TAU) group to assess the impact of the intervention. The MBSR intervention spanned 8-weeks, during which participants practiced various mindfulness techniques. These techniques included various form of meditations such as body scan awareness, Hatha yoga, and mindfulness exercises. Results of this intervention program showed that those undergoing the MBSR intervention program showed reduction in somatic distress, anxiety, and depression. The same participants (those undergoing the intervention program) also experienced better sleep and reported enhancement in their self-esteem.

Carreres-Ponsoda et al. (2017) implemented an 8-week mindfulness intervention among the adolescents from schools in Spain. The mindfulness intervention program consisted of teaching mindfulness skills to manage stress and foster positive social skills. The control group in this study did not receive the mindfulness intervention. The results showed that in comparison to the control group, the intervention group, on average, reported better mindfulness skills including the capacity for observing, describing, and acting with awareness. They were also less judgmental of and less reactive to their inner experiences. More importantly, the intervention group showed decreases in stress levels and enhancements in levels of optimism.

Kennes et al. (2023) conducted an intervention study consisting of eight sessions, each lasting 45 min, in schools in the Netherlands. The intervention was based on mindfulness and character strength use and was called the "Think Happy-Be Happy". The researcher made the assessments at baseline and post-intervention. The baseline assessments were made before the intervention and post-intervention assessments were made one week after the intervention. There was also a follow-up assessment, made six months after the intervention. The findings showed that the experimental group (those who had the intervention), compared to the control group (those who did not have the intervention), reported better social and psychological well-being. The experimental group also reported a decrease in problems related to peers as well as in symptoms related to hyperactivity/inattention. However, in follow-up assessments, participants could not sustain significant improvements observed at post-intervention.

Other studies among Western populations have also demonstrated a positive impact of mindfulness-based interventions on mental health. A school-based mindfulness program improved well-being and resiliency in children aged 9-12 years (Nelson, 2021). A case study analysis in the US showed that adolescent students who practiced mindfulness experienced positive changes in their lives over time (Schussler et al., 2021). An intervention study in Italy showed that those adolescents who had the intervention reported significant improvement in the psychological well-being of the participants (Scafuto et al., 2023). The intervention in this study spanned for a period of 12 weeks and involved teaching skills such as bodily awareness, emotional awareness, and ecological awareness.

Few studies have examined the efficacy of mindfulness-based interventions in the Asian context. Some studies have shown a positive association between mindfulness and well-being. Among Chinese adolescents, there was a positive association between mindfulness and subjective well-being (Ma et al., 2023), and the association between grit and subjective well-being was partly mediated by mindfulness (Li et al., 2018). However, one study that used a mindfulness-based intervention program did not find any effect (Lau & Hue, 2011). The researchers investigated whether a mindfulness-based program has a positive impact on adolescents with low academic performance. The adolescent participants in this study were recruited from two secondary schools in Hong Kong. The mindfulness-based program (derived from the MBSR) comprised four primary activities: stress reduction techniques, exploring the mind-body connection, fostering empathy and compassion towards others, and cultivating appreciation for nature and human connections. However, this study did not show a specific impact of the intervention. The study showed a significant decrease in the symptoms of depression for participants from both the intervention and control groups. This study calls for testing more specific mindfulness-based intervention programs.

Our review did not identify any mindfulness-based intervention studies conducted among either tribal or nontribal adolescents in India. The available intervention studies were on the general population and did not specifically examine the impact of mindfulness interventions. In a recent review, Mehra et al. (2022) evaluated the impact of mental health interventions (not mindfulness-based) for adolescents in India, focusing on studies published between 2010 and 2020. This review identified 11 interventions—9 school-based, 1 community-based, and 1 digital. The school-based intervention program sought to enhance adolescents' well-being by improving a range of life skills. These interventions aimed to bolster students' self-awareness and self-esteem, enhance their coping skills, and foster better communication abilities and interpersonal relationships among participants. The community-based intervention sought to promote mental health by providing training to select people in rural and urban areas to be the promoters of mental health. Digital interventions utilized the use of text messages to promote positive mental health.

School-based intervention programs, particularly those incorporating life skills, coping skills, and resilience curricula, have demonstrated positive effects on a range of mental health outcomes. These intervention programs decreased depressive symptoms and academic stress while enhancing cognitive abilities including problem-solving skills of students. These interventions also enhanced the mental well-being of students. A similar intervention study showed promise in enhancing school climate and mental health outcomes. This review underscores the need to implement and evaluate more

intervention programs for Indian teenagers to promote their mental well-being (Mehra et al., 2021; see also Rath et al., 2020). No mindfulness-based intervention studies have been conducted among tribal adolescents in India. Available studies examining the impact of mental health interventions (not mindfulness-based) have shown contradictory results. Sarkar et al. (2017) examined whether intervention programs that involved teaching life skills had an impact on the resilience of adolescents residing in the tribal areas of Purulia, West Bengal, India. In their study, adolescents from the tribal group, at the baseline, had lower resilience than adolescents from the non-tribal group. The intervention significantly improved resilience for both tribal and non-tribal adolescents, with a more substantial increase in resilience in tribal adolescents. The study also assessed other measures: pathological behavioural patterns, capacity for self-determination, and the locus of control related to health. The intervention had a positive impact on each of these measures. However, Bhatia et al. (2023) show that initiatives such as fostering participatory adolescent groups and leadership training did not lead to an improvement in the mental health of tribal adolescent girls from the Khuntpani block in the West Singhbhum district of Jharkhand, India.

Given the scarcity of intervention studies aimed at promoting mental health among tribal adolescents in India, this review calls for a rigorous examination of mindfulness-based intervention studies among tribal adolescents. The studies reviewed above show that mindfulness-based interventions have potential mental health benefits for adolescents in diverse backgrounds (for example, Engel et al., 2020). Mindfulness-based interventions have been found to be useful with adults in India (Pal et al., 2022). Therefore, given the urgency of attending to the mental health challenges faced by tribal adolescents in India, examining mindfulness-based interventions is paramount. In addition, certain mindfulness practices, such as mindful breathing, are feasible and can be easily incorporated into school routines (Schussler et al., 2021). Mindfulness-based interventions are cost-effective and so can be utilized for improving health-related quality of life (Lengacher et al., 2015; Sobel, 2000). Perhaps, in contrast to more complex psychoeducation-based intervention programs and more costly intervention programs, simple practices such as mindful breathing may be more applicable to tribal adolescent populations in India.

CONCLUSION

Tribal adolescents in India face several unique challenges. The socioeconomic marginalization of tribal communities significantly contributes to the mental health challenges experienced by tribal adolescents. Addressing the mental health issues among tribal adolescents, which includes high rates of alcohol abuse, depression, and anxiety, calls for the implementation of targeted strategies. However, mental health interventions specifically tailored for tribal adolescents in India are scarce. Meanwhile, other studies, in the Western context and a few in the Asian context, highlight the potential therapeutic benefits of mindfulness-based interventions. In light of the limited research on the mental health of tribal adolescents in India, this review serves as a call to action for future studies to delve into mindfulness-based interventions for tribal adolescents. Such research can contribute not only to the academic understanding of mental health challenges but also to the development of practical and culturally sensitive solutions. By prioritizing the mental well-being of tribal adolescents, we have the opportunity not only to enhance individual lives but also to contribute to the harmonious development of Indian society as a whole.

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References

- 1) Abujaradeh, H., Safadi, R., Sereika, S. M., Kahle, C. T., & Cohen, S. M. (2018). Mindfulness-based interventions among adolescents with chronic diseases in clinical settings: A systematic review. *Journal of Pediatric Health Care*, 32(5), 455–472.
- 2) Ali, A., & Eqbal, S. (2016). Mental health status of tribal school going adolescents: A study from rural community of Ranchi, Jharkhand. *Age*, 17(1), 38–41.
- 3) Amaro, A., & Singh, N. N. (2020). Mindfulness: Definitions, attributes, and mechanisms. In *Mindfulness-based Interventions with Children and Adolescents* (pp. 11–33). Routledge. https://books.google.com/books?hl=en&lr=&id=L7sIEAAAQBAJ&oi=fnd&pg=PA11&dq=Mindfulness:+Definitions,+attributes,+and+mechanisms&ots=xtnb6P8QPr&sig=uFJ8gqSUSmAJE_bi_4z mHcuhZx0
- 4) Andrabi, A. A. (2015). A study of academic achievement among tribal and non-tribal adolescents of Kashmir. *Scholarly Research Journal for Interdisciplinary Studies*, 3(21), 1278–1285.
- 5) Balgir, R. S. (2004). Dimensions of rural tribal health, nutritional status of Kondh tribe and tribal welfare in Orissa: A biotechnological approach. *Proceedings of the UGC Sponsored National Conference on Human Health and Nutrition: A Biotechnological Approach (Lead Lecture)*, 47–57.
- 6) Basu, G., Maity, S., Ghosh, A., & Roy, S. K. (2018). Are Tribal Adolescents Mentally Healthy? An Introspect with a Community Based Cross Sectional Survey in a District of West Bengal. *National Journal of Community Medicine*, 9(04), Article 04.
- 7) Bhatia, K., Rath, S., Pradhan, H., Samal, S., Copas, A., Gagrai, S., Rath, S., Gope, R. K., Nair, N., Tripathy, P., Rose-Clarke, K., & Prost, A. (2023). Effects of community youth teams facilitating participatory adolescent groups, youth leadership activities and livelihood promotion to improve school attendance, dietary diversity and mental health among adolescent girls in rural eastern India (JIAH trial): A cluster-randomised controlled trial. *SSM - Population Health*, 21, 101330. <https://doi.org/10.1016/j.ssmph.2022.101330>
- 8) Biegel, G. M., Brown, K. W., Shapiro, S. L., & Schubert, C. M. (2009). Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 77(5), 855–866. <https://doi.org/10.1037/a0016241>
- 9) Bluth, K., & Blanton, P. W. (2014). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child and Family Studies*, 23(7), 1298–1309. <https://doi.org/10.1007/s10826-013-9830-2>
- 10) Carreres-Ponsoda, F., A. Escartí, Escartí, A., Llopis-Goig, R., & Cortell-Tormo, J. M. (2017). The effect of an out-of-school mindfulness program on adolescents' stress reduction and emotional wellbeing. *17(3)*, 35–44.
- 11) Carsley, D., Khoury, B., & Heath, N. L. (2018). Effectiveness of Mindfulness Interventions for Mental Health in Schools: A Comprehensive Meta-analysis. *Mindfulness*, 9(3), 693–707. <https://doi.org/10.1007/s12671-017-0839-2>
- 12) Cavanna, A. E., Purpura, G., Riva, A., Nacinovich, R., & Seri, S. (2023). The Western origins of mindfulness therapy in ancient Rome. *Neurological Sciences*, 44(6), 1861–1869. <https://doi.org/10.1007/s10072-023-06651-w>
- 13) Chithra, N. (2020). Tribal Economy of India with Special Reference to Tiruchirappalli District of Tamilnadu in India. *Shanlax International Journal of Economics*, 8(4), 48–53.
- 14) Engel, N., Schiemann, S., & von Salisch, M. (2020). [School-based Mindfulness Programs for Children and Adolescents]. *Praxis Der Kinderpsychologie Und Kinderpsychiatrie*, 69(4), 289–304. <https://doi.org/10.13109/prkk.2020.69.4.289>
- 15) Gharat, V., & Nayak, S. (2022). Mental Health Status of Tribal Adolescents in India: Need for Research. *National Journal of Community Medicine*, 13(09), 582–583.
- 16) Ghosh, A. B., Banerjee, G., & Biswas, D. (2004). Psychiatric morbidity in a sub-Himalayan tribal community: An epidemiological study. *Indian Journal of Psychiatry*, 46(4), 324.

- 17) Hossain, M. (2021). Industries and Tribal: Erosion of Their Ethos. *The Creative Launcher*, 6(3), 9–13.
- 18) Hungerford, C., Hills, S., Richards, C., Robinson, T., & Hills, D. (2022). Facilitating Mindfulness-Based Interventions for Anxiety in Older People: History, Effectiveness, and Future Possibilities. *Issues in Mental Health Nursing*, 43(11), 1014–1021.
<https://doi.org/10.1080/01612840.2022.2116510>
- 19) Islam, M. S. (2013). Labeling Tribal: State Power in Forming and Transforming Identities. In *Development, Power, and the Environment* (pp. 174–183). Routledge.
<https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifierValue=10.4324/9780203768815-13&type=chapterpdf>
- 20) Kallapiran, K., Koo, S., Kirubakaran, R., & Hancock, K. (2015). Review: Effectiveness of mindfulness in improving mental health symptoms of children and adolescents: a meta-analysis. *Child and Adolescent Mental Health*, 20(4), 182–194. <https://doi.org/10.1111/camh.12113>
- 21) Kennes, A., Lataster, J., Janssens, M., Simons, M., Reijnders, J., Jacobs, N., & Peeters, S. (2023). Efficacy of a school-based mental health intervention based on mindfulness and character strengths use among adolescents: A pilot study of Think Happy-Be Happy intervention. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 24(2), 677–697. <https://doi.org/10.1007/s10902-022-00611-5>
- 22) Lau, N., & Hue, M. (2011). Preliminary outcomes of a mindfulness-based programme for Hong Kong adolescents in schools: Well-being, stress and depressive symptoms. *International Journal of Children's Spirituality*, 16(4), 315–330. <https://doi.org/10.1080/1364436X.2011.639747>
- 23) Leal Filho, W. (2010). *The economic, social and political elements of climate change*. Springer Science & Business Media.
- 24) Lengacher, C. A., Kip, K. E., Reich, R. R., Craig, B. M., Mogos, M., Ramesar, S., Paterson, C. L., Farias, J. R., & Pracht, E. (2015). A cost-effective mindfulness stress reduction program: A randomized control trial for breast cancer survivors. *Nursing Economics*, 33(4), 210.
- 25) Li, J., Lin, L., Zhao, Y., Chen, J., & Wang, S. (2018). Grittier Chinese adolescents are happier: The mediating role of mindfulness. *Personality and Individual Differences*, 131, 232–237. <https://doi.org/10.1016/j.paid.2018.05.007>
- 26) Lin, J., Chadi, N., & Shrier, L. (2019). Mindfulness-based interventions for adolescent health. *Current Opinion in Pediatrics*, 31(4), 469–475.
- 27) Ma, L., & Xiang, Y. (2023). Mindfulness and subjective well-being among Chinese adolescents: A longitudinal study and a weekly diary investigation. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 24(6), 1861–1881. <https://doi.org/10.1007/s10902-023-00662-2>
- 28) McKeering, P., & Hwang, Y.S. (2019). A systematic review of mindfulness-based school interventions with early adolescents. *Mindfulness*, 10(4), 593–610. <https://doi.org/10.1007/s12671-018-0998-9>
- 29) Mehra, D., Lakiang, T., Kathuria, N., Kumar, M., Mehra, S., & Sharma, S. (2022). Mental Health Interventions among Adolescents in India: A Scoping Review. *Healthcare*, 10(2), Article 2. <https://doi.org/10.3390/healthcare10020337>
- 30) Ministry of Tribal Affairs (2009). Government of India, Delhi.
- 31) Mohindra, K. S., Narayana, D., Anushreedha, S. S., & Haddad, S. (2011). Alcohol use and its consequences in South India: Views from a marginalised tribal population. *Drug and Alcohol Dependence*, 117(1), 70–73.
- 32) Nauphal, M., Cardona, N. D., Morgan, L. P., & Eustis, E. H. (2022). Mindfulness-based approaches to mental health.
- 33) Nelson, L., Roots, K., Dunn, T. J., Alice Rees, Rees, A., Hull, D. D., & Van Gordon, W. (2021). Effects of a regional school-based mindfulness programme on students' levels of Wellbeing and resiliency. *International Journal of Spa and Wellness*, 1–15. <https://doi.org/10.1080/24721735.2021.1909865>

- 34) Pal, A., Mukhopadhyay, P., & Pal, N. D. (2022). Effects of a mindfulness based intervention on mental well-being and quality of life in Indian adults: An early attempt for integration into community clinical practice. *International Journal of Community Medicine and Public Health*, 9(5), 2183–2189. <https://doi.org/10.18203/2394-6040.ijcmph20221238>
- 35) Ranjan, L. K., Gupta, P. R., & Gujar, N. M. (2021). Self-esteem and wellbeing among tribal and non-tribal adolescent girls. *International Journal of Research in Medical Sciences*, 9(9), 2723.
- 36) Rao, S. L., Deshingkar, P., & Farrington, J. (2006). Tribal Land Alienation in Andhra Pradesh: Processes, Impacts and Policy Concerns. *Economic and Political Weekly*, 41(52), 5401–5407.
- 37) Rath, S., Prost, A., Samal, S., Pradhan, H., Copas, A., Gagrai, S., Rath, S., Gope, R. K., Nair, N., Tripathy, P., Bhatia, K., & Rose-Clarke, K. (2020). Community youth teams facilitating participatory adolescent groups, youth leadership activities and livelihood promotion to improve school attendance, dietary diversity and mental health among adolescent girls in rural eastern India: Protocol for a cluster-randomised controlled trial. *Trials*, 21(1), 52. <https://doi.org/10.1186/s13063-019-3984-1>
- 38) Roy, A. D., Das, D., & Mondal, H. (2023). The Tribal Health System in India: Challenges in Healthcare Delivery in Comparison to the Global Healthcare Systems. *Cureus*, 15(6). <https://www.cureus.com/articles/160511-the-tribal-health-system-in-india-challenges-in-healthcare-delivery-in-comparison-to-the-global-healthcare-systems.pdf>
- 39) Sarkar, K., Dasgupta, A., Sinha, M., & Shahbabu, B. (2017). Effects of health empowerment intervention on resilience of adolescents in a tribal area: A study using the Solomon four-groups design. *Social Science & Medicine*, 190, 265–274. <https://doi.org/10.1016/j.socscimed.2017.05.044>
- 40) Sachidananda, P. R. (1998). *Encyclopaedic Profile of Indian Tribes*. Vol. 3. Discovery Publishing House.
- 41) Scafuto, F., Ghiroldi, S., Montecucco, N. F., De Vincenzo, F., Quinto, R. M., Presaghi, F., & Iani, L. (2023). Promoting well-being in early adolescents through mindfulness: A cluster randomized controlled trial. *Journal of Adolescence*. <https://doi.org/10.1002/jad.12252>
- 42) Schussler, D. L., Oh, Y., Mahfouz, J., Levitan, J., Frank, J. L., Broderick, P. C., Mitra, J. L., Berrena, E., Kohler, K., & Greenberg, M. T. (2021). Stress and well-being: A systematic case study of adolescents' experiences in a mindfulness-based program. *Journal of Child and Family Studies*, 30(2), 431–446. <https://doi.org/10.1007/s10826-020-01864-5>
- 43) Sobel, D. S. (2000). The cost-effectiveness of mind–body medicine interventions. *Progress in Brain Research*, 122, 393–412.
- 44) Subudhi, C., Biswal, R., & Pathak, A. (2022). Multidimensional impact of mental illness on tribal families in India. *Taiwanese Journal of Psychiatry*, 36(2), 82–87.
- 45) Sujatha, K. (2002). *Education among scheduled tribes*. India Education Report: A Profile of Basic Education, New Delhi: OUP. https://www.academia.edu/download/53945926/analysis_Tribals.pdf
- 46) Tan, L. B. (2016). A critical review of adolescent mindfulness-based programmes. *Clinical Child Psychology and Psychiatry*, 21(2), 193–207. <https://doi.org/10.1177/1359104515577486>
- 47) Urbanowicz, A. M., Shankland, R., Rance, J., Bennett, P., & Gauchet, A. (2023). Informal mindfulness practices: A new approach to the prevention and treatment of parental burnout. <https://www.researchsquare.com/article/rs-3006235/latest>
- 48) Verma, P., Sahoo, K. C., Mahapatra, P., Kaur, H., & Pati, S. (2022). A systematic review of community-based studies on mental health issues among tribal populations in India. *The Indian Journal of Medical Research*, 156(2), 291–298. https://doi.org/10.4103/ijmr.ijmr_3206_21
- 49) Yadav, N. K., & Soni, A. (2023). Public Healthcare Infrastructure to Address Tribal Health Issues and Awareness. *Indian Journal of Research in Anthropology*, 9(1).
- 50) Zahiruddin, Q. S., Gaidhane, A., Bawankule, S., Nazli, K., & Zodpey, S. (2011). Prevalence and pattern of tobacco use among tribal adolescents: Are tobacco prevention messages reaching the tribal people in India. *Ann Trop Med Public Health*, 4(2), 74–80.