

Original Article | ISSN (0): 2582-631X

DOI: 10.47857/irjms.2024.v05i03.0780

Effect of Positive Psychology in Mental Health Promotion among Tribal School Adolescents in India

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Abstract

Adolescence is a critical stage in human physical, mental, and emotional growth, and each has to embrace different problems as they enter adults. Adolescents stand out as one of the most vulnerable categories. Moreover, tribal adolescents stand out as a particularly neglected and underserved group, dealing with various difficulties that contribute to a burdensome effect on their mental health. The quantitative research method was used, and the experimental pre-post control design was adopted. The purposive sampling technique was employed, and a questionnaire survey method (DASS-21 scale) was used as the research tool. The results showed that there is a significant correlation at the 0.05 level. It showed a relationship between family debt, the income of the family, stress, anxiety, and depression. The t-test showed a significant decrease. In stress, the mean pre-test score was 22.53, but their mean post-test score was considerably reduced to 15.10 (t = 5.055, p<.001). The mean pre-test score in anxiety was 12.82, notably reduced to 8.93 in the post-test (t = 6.948, p<.001). Further, in depression, the mean pre-test score was 12.80, a considerable decrease from the mean post-test score of 10.97 (t = 4.195, p<.001). In light of the results, it was suggested that tribal schools employ a licensed professional counsellor to assist teenagers with their emotional problems. It also emphasizes the collaborative approach among stakeholders, including mental health professionals, educators, policymakers, parents, non-governmental organizations (NGOs), and community leaders. Further, the study prioritizes mental health initiatives tailored to the unique needs of tribal adolescents.

Keywords: Anxiety, Depression, Mental Health, Positive Psychology, Stress, Tribal Adolescents.

Introduction

"Positive psychology is known as a subfield of psychology, which has gained more popularity among the scientific community in recent years." It also focuses more on what makes people happy and emotionally well rather than emphasizing pathology (1). The main objectives of the study are to assess the mental health status of the tribal school adolescents of Jawadhu Hills, to find out the relationship between mental health (stress, anxiety, depression), annual income, and family debt among tribal school adolescents in Jawadhu Hills, and to evaluate the effectiveness of the positive psychology intervention in improving mental health outcomes among the tribal school adolescents. The importance of mental health in determining the overall well-being and quality of life of adolescents has become more apparent in recent years, making it a major global issue. Adolescents are more susceptible to harm because they face distinct challenges. Within these diversified inhabitants, tribal adolescents in India

stand out as a particularly neglected and underserved group, dealing with difficulties that have a significant negative impact on their mental health (2). During this period, students encounter various physical and mental changes when they enter adolescence, a more critical time of conversion, susceptibility, and complexity. *Stress* is defined as a physical reaction to the situation (3). Folkman and Lazarus introduced the important stress theory (4). According to them, stress results from a relationship between a person's character and evaluations, their surroundings, and their internal and external resources. In stressful circumstances, teenagers may experience psychological stress (5). Moreover, in the world, 16% of illnesses and impairments are related to mental health issues among adolescents (6). Similarly, depression is one of the major global health issues, with far-reaching effects on people's lives, families, and society as a whole. Depression

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(Received 17th March 2024; Accepted 10th July 2024; Published 30th July 2024)

affects 1-6% of teenagers globally each year (7, 8). substantial percentage of high school adolescent students have symptoms of depression and anxiety, which are significant contributors to juvenile impairment globally. Depression and anxiety indications were more widespread in adolescent populations (9). Positive psychology (PP) encompasses positive life experiences, positive personality qualities, and the organizations that support the development of these attributes. The main goals of this profession are human welfare and optimal performance. Positive psychology (PP) was developed in 1998 by psychologists Csikszentmihalyi and Martin Selingman (10). It usually emphasizes the good qualities and traits of people. The basic principles of positive psychology are thriving, emotional competence, hope, optimism, and life satisfaction (11). In a multi-component study, positive psychology training was employed to improve mental well-being by lowering emotional anguish in adolescents, such as stress, anxiety, and depression (12). Similar to that, long-term research has shown that positive psychology fosters pleasant feelings that are stress-relieving and beneficial to wellness (13). Another study referenced the efficacy of optimistic psychology training in upholding well-being and educational success (14). Although there are excellent positive psychology programs for schools, none have been implemented in tribal schools. This study's critical background is provided by socio-cultural and economic elements that affect mental health in tribal groups since these factors have a substantial effect on the prevalence and severity of mental health concerns. Adolescents from tribal communities often encounter obstacles in their educational pursuits, limited access to healthcare, poverty, and the social stigma associated with mental health. The world's most prominent tribal inhabitants are located in India (15) and represent 8.2% of India's overall population. Southern India's biggest state is called Tamil Nadu. Tiruvannamalai is the most backward district, comprising a sizeable tribal population. Furthermore, over 5,74,194 scheduled tribal people, or 1.02 percent of the state's total inhabitants, reside in Tamil Nadu. In the Jawadhu Hills, there are 90,954 indigenous people residing respectively, according to Census of India, 2011 (16). Malayalis and Irulars mainly comprise a

substantial portion of the local Indigenous community in Jamunamarathur—various factors attributed to poor tribal outcomes in India, more especially non-communicable diseases (17). Therefore, the inclusion of stress, anxiety, and depression management techniques, including mindfulness, meditation, and muscle relaxation, will tremendously aid in promoting adolescents' mental health. Adolescents from tribal society are more vulnerable than their counterparts in rural and urban schools.

Hypotheses

This study hypothesizes that there is a significant relationship between stress, anxiety, depression, annual income, and family debt among tribal school adolescents in Jawadhu Hills (H1). Additionally, it is anticipated that participating in positive psychology training will considerably decrease stress, anxiety, and depression levels, thereby improving mental health outcomes in the experimental group (H2).

Materials and Methods

The current study employs an experimental prepost control group design (18). It was conducted between July 1 and November 8 at Jamunamarathur. Students from St Joseph's Higher Secondary School, Government Model Higher Secondary School, Government Forest Higher Secondary School, and Tribal Higher Secondary School were included in this study and opted for the purposive sampling method to complete the validated questionnaire after obtaining informed consent.

Study Participants and Sampling

In all four higher secondary schools, there are (3302) teenagers enrolled, of whom (n=382 Schedule Tribe) were chosen. An average of 90 to 100 teenagers per school was selected as the sample, and 40% were female students. The criteria used to select the sample population is

Age Range: Adolescents aged 12-18 years.

Location: Residing in the Jawadhu Hills, Tamil Nadu.

School Enrollment: Currently enrolled in tribal schools.

These standards guarantee that the sample fairly reflects the more significant population of tribal teenagers in India by concentrating on a specific age range and region, which is representative of the demography of tribal adolescents more

broadly. The research includes a significant portion of the population with comparable educational and socio-cultural backgrounds by choosing participants from tribal schools. The DASS 21 (Depression, Anxiety, and Stress Scale) was used to collect the data. A total of 126 adolescents met the threshold score. Using a simple random procedure based on the lottery technique, every member was allotted a number, and random numbers were chosen. Out of 126 individuals, 60 were chosen for the experiment and control groups (30 adolescents each for the two groups). The study included adolescents aged 10 to 19 who belonged to tribal communities while excluding non-tribal students, students with disabilities, and children under the age of 10.

Data Collection

regarding the participant's demographic profile was taken in the baseline survey. The technique employed to measure the mental health was "Depression, Anxiety, and Stress (DASS-21)". To ensure the dependability and accuracy, the scale was validated in Tamil language and done pilot study among tribal adolescents and used for data collection. The DASS-21 scale developed by S.H. Lovibond and P.F. Lovibond in 1995 (19). It is a shortened version designed to calculate the expressive states of depression, anxiety, and stress and consists of seven questions for each category. The researcher multiplied the sum of the three subscales of the DASS-21 by two. Sum scores of 0-9, 0-7, and 0-14 for depression, anxiety, and stress were regarded as normal. Sum scores of 10-13, 8-9, and 15-18 for depression, anxiety, and stress was regarded as mild. Sum scores of 14-20, 10-14, and 19-25 for depression, anxiety, and stress were regarded as moderate. Finally, a sum score of 21-27, 15-19, and 26-33 for depression, anxiety, and stress were regarded as severe respectively. Any scores over this were seen as being quite severe. The scale has four points with values ranging from 0 to 3 (0 representing that it did not apply to me at all, 1 indicating that it applied to me to some extent, 2 indicating that it related to me to a considerable extent, and 3 signifying that it related to me most of the time). Several constraints were considered in the data collection process, such as self-reported bias, social desirability, and cultural sensitivity. To mitigate these biases, the study used validated questionnaires and assured confidentiality. The collected data were analyzed using SPSS version 22.0. The following statistical measures were used such as mean, correlation ANOVA and t-test. *P* value less .05 was considered significant.

Intervention

Three subject experts, including a psychologist, a medical and psychiatric specialist, and a wellbeing trainer, conducted the content validation of the training component. While preparing the intervention module for specific needs and contexts, moderating or mediating impacts of gender, socioeconomic level, and cultural behaviors such as gender: Differences in coping mechanisms. Socioeconomic Level: Access to resources and stressors related to poverty. Cultural Behaviors: Attitudes towards mental health and beliefs about treatment efficacy were taken into consideration to ensure their effectiveness and sustainability. The experts rated each content's appropriateness for use with tribal students on a scale from 1 to 5. Expert opinion and suggestions were included in the content to improve its quality and make it more appealing to the adolescent audience.

In the intervention, the following positive psychology therapies were employed such as

Strength-Based Activities

Rooted in positive psychology, which emphasizes identifying and leveraging individual strengths to improve well-being. Procedure: Participants complete a strengths assessment and engage in activities that utilize their identified strengths. Workshops are conducted to help adolescents recognize and apply their strengths in daily life (20).

Mindfulness Meditation

Derived from mindfulness-based stress reduction (MBSR), which aims to enhance awareness and acceptance of the present moment. Procedure: Weekly twice-guided mindfulness meditation sessions are conducted, focusing on breathing and body awareness (21).

Positive Affirmations

Based on the idea that self-affirmation can improve self-esteem and resilience. Procedure: Adolescents create and repeat positive affirmations daily. Sessions include discussions on the impact of positive self-talk and strategies to counter negative thoughts (22). The intervention was administered within a classroom environment. Every session had a particular theme

and included talks, exercises, and related activities. For instance, the appropriate position for meditation was shown during the meditation session. The intervention was delivered in person, in a group setting, for 90-minute sessions. Numerous instructional tools, such as reading materials, handouts, and presentation slides, were included in the intervention. The intervention's efficacy was assessed using self-reported measures, assignment completion rates, and attendance records. The participant's progress was evaluated by maintaining a personal log for each participant. The participants in the experimental group underwent another screening using the DASS-21 scale questionnaire. Table 1 illustrates the detailed positive intervention plan for promoting mental well-being adolescents.

Results

The result shows significant improvements in mental health indicators following the positive psychology intervention among tribal adolescents in Jawadhu Hills. Table 2 indicates that 48.3% of

the participants were female and 51.7% were male. Adolescents between the ages of 13 and 15 make up 91.7% of the population, and 16.3 percent of them are between the ages of 16 and 19. 100% of the teenagers who took part in the research were in grades 9–11. Adolescents descend from joint families in 38.3%, whereas 61.7% from nuclear families.

83.3% adolescents' households make between 10,000 and 50,000 rupees as annual income. 30% of respondents' families did not have any type of savings, whereas 70% of households have. 100% of adolescents live in their own houses. 17% of teenagers live in huts, while 57% of homes are made of concrete. Households with adolescents make up 80% of the debt, while just 20% of households are debt-free. All responders (100%) belong to scheduled tribes. Teenagers who practice religion were, 5% Christianity and 95%Hinduism, respectively. The correlation between stress, anxiety, depression, annual income, and family debt can be seen in Table 3.

Table 1: The Positive Psychology Intervention

Session and theme	Objectives	Activities involved
I: Introduction to	Assist adolescents in	Demonstrating the hands, legs, chest, and
Meditation	realizing the benefits of	abdomen in the stance of meditation.
	meditation and how it	Giving the participants instructions on how
	impacts their mental and	to "know thyself" by controlling their body,
	physical health.	thoughts, and breathing.
	Inform the participants on	Using the self-observation method, this
	how to adopt the proper	presents reality from both an internal and
	posture for meditation.	exterior perspective.
		Promoting a detachment from everything
		that happens to them outside of their own
		surroundings.
II: Recognizing and	Help individuals understand	A quick rundown of pain and the signs and
understanding	and recognize the stresses	symptoms of stress
personal stress	that are specific to them.	Creating a stress log
	Demonstrating the stress-	Breathing exercises
	relieving action.	Techniques for muscular relaxation
III: Recognizing and	Assist the participants in	Talk on No Pain, No Gain.
comprehending one's	recognizing and	Educational sharing on anxiety
own anxiety and	comprehending their own	and depression
depression	feelings of depression and	Mindfulness practices
	anxiety	Various Strategies for Coping
	Encouraging participants to	
	think positively.	

Session and theme	Objectives	Activities involved
IV: Instructing a	Talk about the benefits of	A succinct explanation of the benefits of
breathing technique	breathing exercises with the	breathing exercises for general health
	participants.	Body realignment
	Give participants a	Breathing exercises for the abdomen
	breathing exercise	
	demonstration.	
V: Improving mental	Motivate students to	Meditation
health and fostering	enhance their mental and	A brief discussion of the relationship
well-Being	general well-being.	between mental wellbeing, and
		social health.
		Building self-esteem.
		Affirmative talk
VI: Strengthening the	Assist the participants in	Practicing mindfulness
force of optimistic	developing self-control over	fosters confidence in oneself
mindset	their ability to think	Be able to overcome problems
	positively.	Quit stressing
		Aim for the best and you'll succeed
VII: Instructing	To induce a state of calm in	A brief introduction to the concept of
individuals in muscle	participants, cultivate a	muscle relaxation
relaxation methods	desire to practice	shoulders
	progressive muscle	The upper body and belly
	relaxation techniques.	Left arm, Right hand, and forearm
		Eyes and Cheeks
VIII: To enhance	Empower participants with	A breathing exercise
abilities in problem-	life skills improvement	A talk about the significance of adopting a
solving and decision-	techniques.	course of action and dealing with issues
making		Narrating tales
		Presenting case studies
IX: "Instructing	Participants will get the	Preparing individuals for mindfulness
methods for practicing	ability to enjoy each day as it	practice
mindfulness."	comes and live in the	Mindfulness Meditation
	present.	Mindfulness Walk; Body Scan; Five Senses
X: Enhance one's self-	Participants will evaluate	Explain the part that participants'
efficacy and resilience	their own talents and	resilience and self-efficacy play.
behaviour	produce the intended	Group discussions on topics covered at
	outcome.	each session
		Sharing of cases, storytelling, and
		mindfulness

Table 2: Socio-Demographic Characteristics of Tribal Adolescents (n=60)

Demographic variables	Frequency	Percentage
Gender		
Male	31	51.7
Female	29	48.3
Age		
13-15	55	91.7
16-19	5	8.7
Standard of the Respondent		
9th - 11th class	60	100

Demographic variables	Frequency	Percentage
Gender		
Male	31	51.7
Type of Family		
Nuclear Family	37	61.7
Joint Family	23	38.3
Monthly Income of the Family		
1000 - 5000	51	85.0
5001 - 10001	8	13.3
1001 and above	1	1.7
Annual Income of the Family		
10000 - 50000	50	83.3
50001 - 100000	7	11.7
100001 and above	3	5
Family Saving		
Yes	42	70
No	18	30
Type of Saving		
Bank Saving	11	18.3
Land/Property	10	25.9
Cow/Coat	28	36.6
No Saving	11	18.3
House		
Own House	60	100
Rented House	0	0
Type of House		
Concrete/Government House	34	57
Thatched House	16	27
Hut House	10	17
Family Debt		
Family has debt	48	80
Family has no debt	12	20
Community		
Schedule Tribe	60	100
Religion		
Hindu	57	95
Christian	3	5

Table 3: Presents the Correlation among the Variables

		Stress/ Anxiety/Depression	Annual Income of the family	Debt of the family
Stress	Pearson	1	351**	417**
	Correlation		.006	.001
	Sig. (2-tailed)	60	60	60
	N			
Anxiety	Pearson	1	279*	299*
	Correlation		.031	.020
	Sig. (2-tailed)	60	60	60
	N			

		Stress/ Anxiety/Depression	Annual Income of the family	Debt of the family
Depression	Pearson	1	259*	272*
	Correlation		.046	.035
	Sig. (2-tailed)	60	60	60
	N			

^{*}The correlation is significant at the 0.05 level (2-tailed)

As shown in the Table 3 outlines a study that investigates the correlation between stress, anxiety, depression, annual income, and family debt. The data displays correlation coefficients and p-values for every combination of variables. The correlations between stress, anxiety, depression, and both annual income and family debt are inversely related, suggesting that greater levels of

stress, anxiety, and depression are linked to lower annual income and higher family debt. These correlations are statistically significant at the 0.05 level, supporting the hypothesis that there is a relationship between these variables. Table 4 presents the observed effects of the positive psychology intervention on the participants in the experimental group.

Table 4: The Distribution of Research Participants is Categorized Based on the Control Group and the Experimental Group

		Mean		t	P
		Pre Test	Post Test	=	
Stress	Control Group	22.53	23.30	1.500	.145
	Experimental Group	22.53	15.10	5.055	.000
	Control Group	12.74	12.63	.501	.620
Anxiety	Experimental Group	12.82	8.93	6.948	.000
Depression	Control Group	12.60	12.53	.724	.475
	Experimental Group	12.80	10.97	4.195	.000

The analysis in Table 4 illustrates the findings of an intervention study that included a Control Group and an Experimental Group. The Experimental Group was subjected to the intervention, while the Control Group was not. The research assessed the levels of stress, anxiety, and depression both before to and after the intervention. The Experimental Group exhibited substantial decreases in all three metrics from the pre-test to the post-test, suggesting that the intervention had a beneficial impact in reducing stress, anxiety, and depression. The results of the investigation confirm the validity of the second hypothesis. The

statistical finding proved that the mean differences between pre- and post-intervention ratings had tight 95% confidence intervals that did not contain zero. This suggests that the observed gains in mental health are statistically significant and not the result of chance. Positive psychology treatments are beneficial, as shown by the ANOVA, which found significant differences (p <.001) between the intervention and control groups. These results thus highlight the significant and statistically significant improvements in mental health that the teenagers who had the intervention experienced.

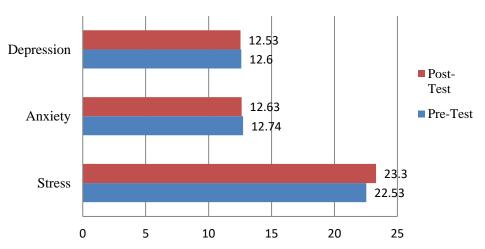


Figure 1: Bar Chart for the Pre and the Post Test of Stress, Anxiety and Depression

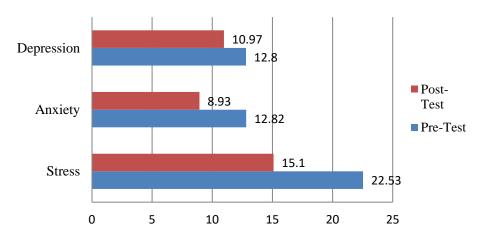


Figure 2: Bar Chart of Mean Value of the Pre and the Post Test of Stress, Anxiety and Depression

The Figure 1 displays a column chart illustrating the average levels of stress, anxiety, and depression among teens attending tribal schools. The graphic clearly demonstrates that there is no significant disparity between the pre-test and post-test subjects in the control group, since they did not receive any kind of intervention. The Figure 2 Column chart indicating that the mean value of stress, anxiety, and depression levels among teenagers from tribal communities. The image makes it abundantly evident that the intervention training significantly reduced the stress, anxiety, and depressive symptoms experienced by pre- and post experimental group tribal teenagers.

Discussion

The present study evaluated how well positive psychology training helped tribal school students manage their stress, anxiety, and depression and thereby promoted their mental health. The study revealed that the indigenous adolescents lacked knowledge and awareness regarding mental health, consistent with previous research findings (23). The study also brought to light that a good number of parents leave their children and adolescents with their elderly parents and leave for different cities to fetch a livelihood due to low income and unemployment. Usually, such parents come to visit their children once in a blue moon, which cause stress and anxiety in children (24). Furthermore, due to peer pressure, sociocultural influences make adolescents addicted to substance and alcohol abuse and also indulge in high-risk behaviors such as reckless driving and early highrisk sexual activity (25). Such situations are highly impacting the mental health of tribal adolescents to a greater extent. "The study discovered that a 'positive psychology intervention' such mindfulness and muscle relaxation methods significantly reduced participants stress, anxiety, and depression level."

Another study replicated these findings, suggesting that employing ("progressive muscle relaxation techniques, meditation, and breathing exercises") can effectively alleviate mental illnesses like ("stress, anxiety, and depression") among adolescents, thereby enhancing their mental health and emotional well-being (26). Similarly, a progressive muscle relaxation program was administered among nursing adolescents and school students. Before the intervention, the level of stress, anxiety, and depression among them was severe, but after administering muscle relaxation techniques, everything was drastically reduced and yielded a higher effect size (27, 28). Our recent study investigated how optimistic thinking can effectively alleviate levels of stress, anxiety, and depression, aligning with existing research focused on students. This research underscores the significance of positive thinking as a vital psychological strategy for coping, particularly in facilitating smoother transitions for teenagers into school, revealing its substantial impact on stress management (29–31). Correspondingly, resilience serves as a valuable attribute aiding adolescents in effectively navigating stress, anxiety, and depression, acting as a coping mechanism during difficult circumstances. Adolescents exhibiting high levels of resilience often demonstrate adeptness in acquiring coping mechanisms, turning challenges into opportunities for growth and learning (32, 33). Furthermore, a technique known as mindfulness raises awareness of one's internal (body sensations, emotions, thoughts) and external experiences in the present moment without passing judgment on them. It also fosters acceptance, openness, and curiosity (34).

The study's results also showed. The correlation suggests that there is a negative relationship between stress, anxiety, depression, annual income, and family debt. As the levels of stress, anxiety, and depression increase, the annual income tends to decrease, and the family debt tends to increase. The negative correlations indicate that these mental health factors are associated with financial aspects, with stronger correlations for family debt than annual income. The p-values indicate that these differences are statistically significant, supporting the validity of the detected changes. The study's findings supported the notion that delivering positive psychology training to tribal adolescents in school

background assisted them in lowering their levels of stress, anxiety, and depression and promoted mental health and coping mechanisms. This demonstrates how educating adolescents about mindfulness, breathing techniques, progressive muscle relaxation methods, and resilience in a classroom setting would provide evidence-based support for educators to use this training to enhance tribal adolescents' comprehensive health, especially mental health.

In the study, the extraneous factors such as environmental influences (home, school), participants' dropout, participants' expectations, and measurement bias were considered and mitigated by collecting detailed background information and including it in the analysis, including regular follow-ups and incentives for continued participation, ensuring control group receives a neutral intervention and standardized, validated instruments were used consistently across all participants to ensure reliability. Moreover, analysis incorporated considered the unique cultural and contextual factors of the tribal adolescents in Jawadhu Hills, such as socioeconomic hardship, limited access to educational resources, and cultural stigmas around mental health. Thus, the study's success in improving mental health despite these barriers highlights the interventions' cultural adaptability and relevance.

Limitations and Recommendations

This study has several limitations. It focused only on tribal adolescent students studying in Jawadhu Hills and did not include other tribal students. The sample comprised adolescents aged 12-18 from tribal schools in Jawadhu Hills, Tamil Nadu, and these demographic features may impact the generalizability of the findings, as the results are specific to this unique population and may not be directly applicable to non-tribal or more socioeconomically advantaged adolescents. The study did not include students below 10 years of age. This constraint results from the research's narrow emphasis on culture or demography. In light of the research the following recommendation are made: We would first want to inform the ministry of tribal affairs of the need for the deployment of a professional counsellor at every school so that students can voice their various grievances and get emotional support (35). Implement culturally sensitive positive psychology

programs and integrate mental health education into the curriculum. Later studies ought to attempt to reproduce the outcomes of the study by using more extensive and heterogeneous sample sizes. One method to enhance comprehension of the efficacy of an intervention is to perform assessments with people from diverse age groups or culturally diverse backgrounds. Community involvement and cultural awareness are crucial for building trust and acceptance in mental health initiatives, tailoring interventions to local needs and beliefs, and ensuring the sustainability and long-term impact of mental health programs.

Moreover, longitudinal research is essential for investigating the long-term effects of positive psychology treatments on adolescent well-being. Furthermore, comparative studies that assess and compare the efficacy of various therapy modalities or methods may provide practitioners with vital information in determining which therapies are best for specific adolescent cohorts. In essence, the amalgamation of qualitative and quantitative research methodologies has promise in shedding light on the fundamental mechanisms contributing to observed results, yielding valuable insights for advancing intervention strategies (36-38).

Conclusion

The study sheds light on the critical issue of mental health challenges among tribal adolescents in India. The findings underscore the alarming prevalence of stress, anxiety, and depression within this vulnerable population, emphasizing the urgent need for targeted interventions. Emotional control is also contributing to mental health. The implementation of the Positive Psychology Intervention (PPI) offers a promising step towards addressing these mental health concerns. The observed reduction in reported symptoms of stress, anxiety, and depression following the intervention provides evidence of its potential effectiveness. The research findings highlight several significant findings. First and foremost, it underscores the need to enhance awareness pertaining to mental health issues among Indigenous adolescents. Furthermore, it emphasizes the need for customized interventions to effectively target the indigenous community's distinct needs, values, and cultural practices. Physical exercise and social relationships should be imparted to adolescents to improve their mental well-being. Finally, it underscores the need to adopt a collaborative strategy that encompasses government agencies, non-governmental organizations (NGOs), and educational institutions to develop and maintain positive psychology tribal schools programs in successfully. Furthermore, it is crucial to prioritize the mental health of Indigenous people by allocating funds for the creation and execution of programs and services that are especially suited to their unique needs and circumstances as tribal adolescents in India.

Abbreviations

PP: Positive psychology

NGO: Non-governmental Organization.

Acknowledgment

The authors thank all the adolescents participated in the study for their time and involvement as well as their parents for their consent for the study.

Author Contributions

The authors' contribution to the research article is as follow: The study is experimental, conception, methodology, data collection, preparation of an intervention module; A. Anbarasu: data collection, data analysis, reviewing, gave intervention sessions to the experimental group, post-test data collection; M. Bhuvaneswari: thoroughly examined the results and endorsed the final version of the manuscript.

Conflict of Interest

The authors declare that they do not possess any conflicts of interest.

Ethics Approval

The study protocol and questionnaire were reviewed and approved by the institutional ethical board of Vellore Institute of Technology, with reference number VIT/IECH/XII/2022/04a; Dated 30/10/2022.

Funding

Nil.

References

- Raftopoulou G, Karakasidou E, Daoultzis KC, Kanellakis K, Stalikas A. Thumbs up! A Pilot Study of a Positive Psychology Intervention for Children in Greece. Psychology. 2022;13(8):1299–313.
- Sumithra MK, Babu J. Lifestyle and Mental Wellbeing of Nomadic Tribal Community Members in Madurai District of Tamil Nadu. Communities. 2020;7(4): 183-195.
- Sekar D, Bhuvaneswari M. A Mixed Method Study of Conduct Disorder & Substance Abuse on Law-

- violating Behavior of Children. N Am J Psychol. 2023;25(2):341–54.
- Folkman S, Lazarus RS. An analysis of coping in a middle-aged community sample. Kango Kenkyu. 1988;21(4):337–59.
- Jang JY. Exploring Physical Activity and Psychological Stress Changes during the COVID-19 Lockdown Periods for Children. J Reatt Ther Dev Divers. 2022;5(2):293–303. Available from: https://jrtdd.com/index.php/journal/article/view/ 152.
- Albinali A, Naja S, Al Kaabi N, Slim N. Screening for anxiety and its determinants among secondary school students during the COVID-19 era: a snapshot from Qatar in 2021. Discov Ment Heal. 2022;2(1):11. Available from: https://doi.org/10.1007/s44192-022-00014-1.
- Abebe DS, Frøyland LR, Bakken A, Von Soest T. Municipal-level differences in depressive symptoms among adolescents in Norway: Results from the cross-national Ungdata study. Scand J Public Health. 2016;44(1):47–54.
- 8. Thapar A, Collishaw S, Potter R, Thapar AK. Managing and preventing depression in adolescents. BMJ. 2010;340(7740):254–8.
- Osborn TL, Venturo-Conerly KE, Wasil AR, Schleider JL, Weisz JR. Depression and Anxiety Symptoms, Social Support, and Demographic Factors Among Kenyan High School Students. J Child Fam Stud. 2020;29(5):1432-43.
- 10. Seligman MEP, Csikszentmihalyi M. "Positive psychology: An introduction": Reply. Am Psychol. 2001;56(1):89–90.
- 11. Shek DTL, Chai WY, Wong T, Zhou K. Stress and depressive symptoms in university students in Hong Kong under the pandemic: Moderating effect of positive psychological attributes. Front Psychol. 2023;14(1):32-47.
- 12. Tejada-Gallardo C, Blasco-Belled A, Torrelles-Nadal C, Alsinet C. Effects of School-based Multicomponent Positive Psychology Interventions on Well-being and Distress in Adolescents: A Systematic Review and Meta-analysis. J Youth Adolesc. 2020;49(10):1943–60
- 13. Avey JB, Wernsing TS, Mhatre KH. A longitudinal analysis of positive psychological constructs and emotions on stress, anxiety, and well-being. J Leadersh Organ Stud. 2011;18(2):216–28.
- 14. Waters L. A review of school-based positive psychology interventions. Aust Educ Dev Psychol. 2011;28(2):75–90.
- 15. Bindhani BK. Status and problems of educational scenario among the tribals in Koraput district, Odisha. Orient Anthropol. 2021;21(1):158–63.
- 16. Census of India. 2011. Available from: https://censusindia.gov.in/census.website/.
- 17. Nayak BC, Mohanty S, Epari V, Mohapatra G, Mohanty S, Saha SB, et al. Prevalence of Risk Factors of Non-Communicable Diseases (NCDs) Among Vulnerable Tribal Groups (PVTGs) in the Intensive Area of Rayagada District of Odisha, India. Int Res J Multidiscip Scope. 2024;5(1):224–31.
- 18. Flannelly KJ, Flannelly LT, Jankowski KRB. Threats to the internal validity of experimental and quasiexperimental research in healthcare. J Health Care Chaplain. 2018;24(3):107–30. Available from:

- https://doi.org/10.1080/08854726.2017.1421019
- 19. Antony MM, Cox BJ, Enns MW, Bieling PJ, Swinson RP. Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. Psychol Assess. 1998;10(2):176–81.
- 20. Burke J, Passmore J. Theoretical Approaches to Multi-Cultural Positive Psychological Interventions. 2019;6(4):1-14.
- 21. Steger M, Ekman E. Handbook of Mindfulness and Positive Psychology. Taylor and Francis. 2016;(4):1-30.
- 22. Rana M. Positive Affirmations and its Benefits on Psychological Well-Being Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh. Indian J Psychol Sci. 2020;13(1):11–8.
- 23. Rajeshwar G, Ramchandram V. Positive Psychology to Overcome Stress and Improve Mental Health. Int J Sci Eng Res. 2019;10(12):353–62. Available from: http://www.ijser.org.
- 24. Umamaheswari K. A Study on Socio Economic Problems of Malayali Tribes in Jawadhu Hills. J Emerg Technol Innov Res. 2020;7(10):2168–74. Available from: www.jetir.org
- 25. Selvam T. A Study on quality of life among Jawadhi tribal adolescence. Int J Recent Sci Res. 2017;8(10):20628–31. Available from: http://dx.doi.org/10.24327/ijrsr.2017.0810.0929.
- 26. Toussaint L, Nguyen QA, Roettger C, Dixon K, Offenbächer M, Kohls N, et al. Effectiveness of Progressive Muscle Relaxation, Deep Breathing, and Guided Imagery in Promoting Psychological and Physiological States of Relaxation. Evidence-based Complement Altern Med. 2021;6(8):5924040. Available from: https://doi.org/10.1155/2021/5924040.
- 27. Hamdani SU, Zill-e-Huma, Zafar SW, Suleman N, Umul-Baneen, Waqas A, et al. Effectiveness of relaxation techniques 'as an active ingredient of psychological interventions' to reduce distress, anxiety and depression in adolescents: a systematic review and meta-analysis. Int J Ment Health Syst. 2022;16(1):1–17. Available from: https://doi.org/10.1186/s13033-022-00541-y.
- 28. Gangadharan MP, Amna M, Madani H, Priya Gangadharan M. Efektivitas Relaksasi Otot ProgresifTeknik Depresi, Kecemasan dan Stres pada Mahasiswa S1 Keperawatan. Int J Heal Sci Res. 2018;8(2):155-68. Available from: www.ijhsr.org
- 29. Ong AD, Bergeman CS, Bisconti TL, Wallace KA. Psychological resilience, positive emotions, and successful adaptation to stress in later life. J Pers Soc Psychol. 2006;91(4):730–49.
- 30. Chui RCF, Chan C-K. Positive Thinking, School Adjustment and Psychological Well-being among Chinese College Students. Open Psychol J. 2020;13(1):151–9.
- 31. Naseem Z, Khalid R. Positive Thinking in Coping with Stress and Health outcomes: Literature Review. J Res Reflections Educ. 2010;4(1):42–61. Available from: http://www.ue.edu.pk/jrre.
- 32. Nečasová L. The resilience of high school students, analysis of compensatory measures, and preferred strategies for coping with adverse situations. Sociální Pedagog / Soc Educ. 2021;9(1):54–65.
- 33. Wilks SE. Resilience amid Academic Stress: The

- Moderating Impact of Social Support among Social Work Students. Adv Soc Work. 2008;9(2):106–25.
- 34. Khazraee H BM, Kianimoghadam AS GE. The effectiveness of mindful hypnotherapy on difficulties in emotion regulation, mindfulness, and mental health in patients with major depressive disorder. J Edu Heal Promot. 2023;12(6):365-79.
- 35. Pugh E. Social Work in Child Care. J Soc Work and Child Care. 2022;4(2):1-11.
- 36. Neena PC, Maini B, Verma V. Mental Health and Psychological Reattachment in Adolescent
- Emigrants: A Longitudinal Study. J Reatt Ther Dev Divers. 2023;6(7):119–28.
- 37. Merlin JI, Prabakar S. Understanding the Relationship Between Self Referential and Socially Oriented Emotional Intelligence Constructs: A Cross-sectional Study. Int Res J Multidiscip Scope. 2024;5(1):14–25.
- 38. Priyadarshini SR, Sahoo PK, Patnaik S, Rath S. Occupational Stress Amongst Dental Professionals During COVID-19: A Questionnaire Based Study. Int Res J Multidiscip Scope. 2024;5(1):216–23.