Study of Cognitive Skills and Coping Strategies among Tribal and Non-Tribal Secondary School Students

Dr. Hatkar Balaji

PGT in Mathematics, Telangana Tribal Welfare Residential Educational Institutions Society (TGTWREIS).

Abstract

This study explores the cognitive skills and coping strategies employed by tribal and non-tribal students in overcoming academic and personal challenges. Using a descriptive survey method, data were collected from 400 secondary school students (200 tribal and 200 non-tribal) across various educational institutions in Telangana State were analyzed using Coping Strategies Inventory by V. Punia and P. Devi (2019) and the cognitive skills scale by Madhu Gupta and Suman (2021). The study examines differences and similarities between the two groups in their ability to process information, solve problems, and manage stress through adaptive mechanisms. Findings reveal significant variations in cognitive skill levels and coping strategies between tribal and non-tribal students. The research highlights the need for tailored educational programs and interventions to support students in developing effective coping strategies and enhancing cognitive skills. These insights are intended to guide educators and policymakers in creating inclusive and supportive learning environments.

Keywords: *Cognitive Skills; Coping Strategies; Tribal Students; Non-Tribal Students; Secondary Education; Academic Challenges; Socio-Cultural Influences; Adaptive Mechanisms; Educational Interventions.*

1. Introduction

Education is one of the most powerful instruments for transforming individuals and societies, providing the foundation for cognitive and personal development. Among secondary school students, the development of cognitive skills, such as problem-solving, logical reasoning, memory, and decision-making, is essential for academic success and the ability to tackle life's complex challenges. Additionally, coping strategies the approaches individuals use to handle stress, adapt to adversity, and maintain emotional balance play a crucial role in determining students' overall well-being and resilience in the face of academic and personal demands.

In a diverse nation like India, the educational experiences of tribal and non-tribal students vary significantly due to cultural, social, and economic differences. Tribal students often come from marginalized communities that face distinct challenges, including inadequate access to quality education, financial hardships, geographical isolation, and a lack of culturally responsive teaching practices. Many tribal students grapple with barriers such as language differences, limited educational infrastructure, and fewer opportunities to participate in mainstream educational programs. Despite these hurdles, tribal communities are rich in culture, traditions, and values that can significantly shape the cognitive skills and coping mechanisms of their students.

On the other hand, non-tribal students generally benefit from relatively better access to educational resources, modern facilities, and diverse opportunities. However, they are not exempt from stressors such as academic competition, peer pressure, and societal expectations. Understanding how these two groups develop and utilize their cognitive abilities and coping mechanisms is critical for addressing inequalities in education and ensuring equitable opportunities for all students.

The focus of this study is to explore and compare cognitive skills and coping mechanisms between tribal and non-tribal secondary school students. The study seeks to address questions such as: How do the cognitive skill levels of

---

tribal and non-tribal students differ? What coping strategies are commonly used by students from these groups to handle academic and personal stress? Are there specific socio-cultural factors that influence these differences?

By employing a descriptive survey approach, this research aims to provide a comprehensive understanding of the cognitive and emotional capacities of tribal and non-tribal students, shedding light on their strengths and areas that need support. The findings are expected to offer valuable insights for educators, school administrators, and policymakers to design effective interventions that nurture cognitive development and enhance coping strategies. Such interventions can lead to the creation of inclusive educational environments that empower students from all backgrounds to thrive academically and personally.

The importance of this study lies not only in understanding the challenges faced by tribal students but also in recognizing the potential within their communities. It also emphasizes the need to leverage educational resources and culturally responsive teaching practices to bridge the gap between tribal and non-tribal students, ultimately contributing to a more equitable and inclusive education system.

The educational experiences of tribal and non-tribal students vary significantly, and these differences are influenced by several factors such as socio-economic conditions, cultural backgrounds, and access to resources. Cognitive skills and coping mechanisms play vital roles in determining how students from these two groups navigate academic challenges and manage stress. Despite the growing attention on educational disparities, there remains a lack of comprehensive research examining how these elements—cognitive abilities and coping strategies—manifest and function among tribal and non-tribal students at the secondary level.

2. Cognitive Skills

Cognitive abilities are aspects of mental functioning, such as memorizing and remembering; inhibiting and focusing attention; speed of information processing; and spatial and causal reasoning. Individual differences between people are measured by comparing scores on tests of these mental abilities. Tests of general intelligence, such as the Wechsler Adult Intelligence Test, are based on a broad sample of these mental ability tests, and measures of aptitudes for learning in specific instructional domains, such as mathematics, or language learning, are based on a narrower sampling of the domain-relevant abilities. Cognitive skills encompass a range of intellectual abilities, including problem-solving, critical thinking, memory, decision-making, and language processing. These skills are crucial for academic achievement and overall development. Students with well-developed cognitive skills can better analyze information, tackle academic tasks effectively, and adapt to changing situations. However, the developmental opportunities available to tribal and non-tribal students are not equal, and it is important to understand the ways in which tribal students, who often face challenges such as limited educational access, language barriers, and resource scarcity, develop and utilize these skills.

3. Coping Strategies

A coping skill is a behavior or technique that helps a person to solve a problem or meet a demand. People who have learned a variety of different coping skills are able to handle demands and solve problems more easily and efficiently than people who are not as knowledgeable about how to cope. Because they are more easily able to meet demands, people with good coping skills are less likely to experience negative stress reactions than the people with more poorly developed coping skills. In addition, people with well-developed coping skills typically develop a higher sense of self efficacy than do their peers who have poorer coping skills, and thus are less likely to suffer the negative impact of stress reactions. Coping skills are something that can be learned. If you don't have good coping skills, you can study techniques that will allow you to get better at coping over time. In essence, they are tools that you can learn and then "carry around" in your personal toolbox to help you become better at managing your stress (Harry, Natalie and Mark, 2008). Coping strategies refer to the conscious efforts, behaviors, thoughts, and emotions that individuals employ to manage stress, adversity, or challenging situations. These strategies aim to alleviate the negative effects of stressors, enhance resilience, and maintain psychological well-being. They can include problem-solving approaches, emotional regulation techniques, seeking social support, engaging in relaxation exercises, or adopting a positive outlook. Each person may utilize a combination of these strategies depending on their circumstances and personal preferences. Diener reveals that SWB can be characterized by three things. First, Subjective Well Being is subjective, which means that each individual can have a different experience. Second, Subjective Well Being also measures positive experiences, not just the absence of negative experiences. Third, Subjective Well Being also measures individuals' assessment of their life as a whole. Proctor also stated that people with high Subjective Well Being felt satisfied with their life and feel frequent positive affect instead of negative affect. Conversely, people with low Subjective Well Being experience more frequent life dissatisfaction and negative affect, and less often experience positive affect. According to Diener Subjective Well Being consists of two components, namely cognitive components, and affective

282

components. The cognitive components refer to the domain satisfaction and life satisfaction in general. Although domain satisfaction can be measured, Subjective Well Being focuses more on life satisfaction in generalIn addition to cognitive skills, the ability to cope with academic, emotional, and social challenges is another determinant of student success. Coping mechanisms refer to the strategies and actions students employ to handle stress, anxiety, and emotional pressure. The use of effective coping strategies can lead to better academic performance, mental well-being, and social integration. Tribal students often face unique stressors such as the pressure to balance traditional cultural values with modern educational expectations which may influence the way they cope with academic and personal stress. Non-tribal students, though generally exposed to better educational resources, face their own challenges, such as academic pressure and peer competition. Understanding these differences is crucial for creating intervention strategies that target both student groups' well-being and academic growth.

4. Review of Literature

Lokesh Kumar Ranjan, et al (2021) studied Self-esteem and wellbeing among tribal and non-tribal adolescent girls. The cross- sectional study was conducted in which 2 schools and 1 institute selected using purposive sampling. The total enumeration method of random sampling was obtained to select participants. 360 adolescent girls (180 each tribal and non-tribal adolescent girls) were selected for the study. Sociodemographic datasheet, subjective wellbeing scale and Rosenberg self-esteem scale were used for the assessment. The adolescent girls with tribal ethnicity found to have low self-esteem and wellbeing (depressive) compared to adolescent girls with non- tribal ethnicity. 33.9% of tribal adolescent girls and 13.3% of non-tribal adolescent girls found in depressive dimension. The deliberate efforts to build self-esteem and wellbeing among tribal adolescent girls can help to promote their mental health. The mental health promotion and wellness programs specific to ethnicity and culture requires to uphold the wellbeing of the adolescent girls with tribal ethnicity.

Kaur, Veerpal (2018) conducted a study on the topic, "A Study of Mental Health and Academic stress among Adolescents in Relation to Gender and Areas". A descriptive survey method of research was used to conduct the study. Mental Health battery (2005) developed by A.K. Singh and Alpana Sen Gupta was used as a tool to study the mental health of the students. The tool Academic Stress scale (1987) developed by Dr. Abha Rani Bishet was used to study academic stress among adolescents. Data was collected by selecting a sample of 200 adolescents (100 girls and 100 boys). Statistical techniques namely Mean, SD, and t-test were used for attaining the objectives of this study. The findings of the study were: There exists no significant difference in mental health among boys and girls adolescents and there exists no significant difference in the mental health among rural and urban adolescents Sahu, S., & M S. (2017) Investigated Life satisfaction, subjective well-being and coping strategies among tribal and non-tribal adolescents. (160 tribal and 160 non-tribal adolescents) are the sample. It is found that tribal adolescents had lower levels of life satisfaction and subjective well- being than non-tribal adolescents, and that they were more likely to use proactive coping strategies such as problem-solving and seeking social support. It is concluded that cultural differences may play a role in the subjective well-being and coping strategies of adolescents.

Chanchal, Bala (2016) examines, "Mental Health of Adolescents in Relation to Emotional maturity and Family Environment". Descriptive survey method of research was used for present study. Data was collected from 580 female and male adolescents from rural and urban area. 290 urban (145 female and 145 male) and 290 rural (145 female and 145 male) adolescents were taken as sample. Tools used for data collection were Mental Health Battery by Arun Kumar Singh and Alpana Sen Gupta (1983), Emotional Maturity Scale by Yashvir Singh and Mahesh Bhargava (1993) and Family Environment Scale by Harpreet Bhatia and N.K. Chadha (1993). Findings of the study were: Female adolescents have better mental health than the male adolescents, there is no significant difference found between rural and urban adolescents in relation to their mental health, both are equal, there is negative correlation between mental health and emotional maturity of adolescents and no significant relationship found between mental health and family environment of adolescent's family.

Brahmbhat, Shital G. (2015) studied on topic, "A study of Mental Health of Higher Secondary School Students". For the present study the random sampling techniques was used for the selection of sample. Sample consisted of 120 children (30 male students of Gujarati medium and 30 female of Gujarati medium, 30 male students of English medium and 30 female students of English medium). In this study Mental Health Inventory by Arun Kumar Singh and Alpana Sen Gupta (2010) was used for data collection. To analyse the data analysis of variance (ANOVA) was used. The major findings of the study were: Significant difference is not existed between male and female students of higher secondary school on mental health, significant difference is existed between Guajarati and English medium students of higher secondary school on mental health, Guajarati medium students of higher secondary school have found to be better mental health than English medium students of higher secondary school and male English medium students of higher secondary school have found to be better mental health than remaining group of students of higher secondary school.

Guleria, Monkia (2014) analyzed a topic, "A Comparative Study of Personality and Mental Health of Children of Educated and Uneducated Mothers of Punjab and Rajasthan State in Relation to Their Intelligence". The sample was randomly selected from the Govt. and private schools. The research investigation had carried out on 500 tudents of senior secondary class (XI and XII) of Rajasthan and Punjab state. Tools used for the study were Eysenik Personality Inventory (16PF) by S.D. Kapoor, Group Test of General Mental Ability Test by Dr. S. Jalota and Mental Health Battery by Singh and Sengupta (2000). The major findings of the study were : There is no significant difference between educated mother's children and un-educated mother's children in their mental health, there is no significant difference between rural and urban children and between Punjab and Rajasthan state children in their intelligence, personality, and mental health, and children having high score on mental health test or we can say children having sound mental health, having more extrovert personality than the children having low score on the mental health.

5.   Need and Significance of the Study:

The study of cognitive skills and coping mechanisms among tribal and non-tribal students is crucial due to the significant educational challenges faced by tribal students in comparison to their non-tribal counterparts. These challenges hinder not only their academic progress but also their mental well-being and personal growth. This research aims to address these gaps by exploring how tribal and non-tribal students develop cognitive skills and employ coping strategies, helping to bridge the existing disparity in educational outcomes. The need for this study arises from several key factors.

There is a well-documented educational disparity between tribal and non-tribal students in India, particularly in terms of academic performance, access to quality education, and psychological well-being. Tribal students often face barriers such as geographical isolation, socio-economic limitations, inadequate infrastructure, and cultural differences. These factors impact their cognitive development and coping abilities, making it essential to understand the specific needs of these students. This research will contribute to a deeper understanding of how these disparities affect academic achievement and emotional resilience.

Cognitive skills play an essential role in students' academic performance. Cognitive development is directly linked to problem-solving abilities, memory, learning capacity, and critical thinking, all of which are essential for excelling in secondary education. The study will explore how tribal and non-tribal students develop these skills differently and how environmental factors influence their learning patterns. By identifying the cognitive skill levels among these groups, the study aims to inform educational practices and devise strategies to enhance cognitive development in tribal students, helping them reach their full academic potential.

Academic stress and emotional challenges are prevalent among students from all backgrounds, but tribal students may be particularly vulnerable due to the unique pressures they face. Coping mechanisms help students manage stress, anxiety, and other challenges, influencing both their academic success and mental health. This study will explore the coping strategies employed by both tribal and non-tribal students, identifying the factors that enable students to cope successfully with the demands of school. Understanding how tribal students cope with stress—whether through support systems, cultural resilience, or other means—can guide educators and policymakers in developing support systems to aid their emotional well-being and academic performance.

The findings from this study will have practical implications for educators, administrators, and policymakers. For instance, if differences in cognitive skills and coping strategies are identified between tribal and non-tribal students, interventions can be tailored to address the specific needs of tribal students. Educators can be trained to use differentiated instruction strategies that cater to the cognitive development needs of tribal students. Moreover, understanding the coping mechanisms of tribal students can lead to the creation of school environments that better support mental health and provide the necessary resources for emotional and psychological well-being.

Educational inequalities are not just academic; they are also social and psychological. By highlighting the cognitive and coping mechanisms among tribal students, this study seeks to empower these students by providing a more comprehensive understanding of their abilities and struggles. Recognizing and nurturing their strengths can encourage tribal students to believe in their potential and enhance their confidence in overcoming obstacles. This empowerment is essential for creating a more inclusive and just education system where every student, regardless of their background, is provided with the opportunity to succeed.

Most research on education in India tends to focus more on urban and non-tribal students, leaving tribal students and their unique challenges underexplored. The findings of this study will contribute to filling this gap, adding valuable insights into the specific needs of tribal students in terms of cognitive development and emotional coping. This is

particularly important for academics and researchers in the field of education who are focusing on improving access, equity, and inclusivity in education.

In conclusion, this study is significant because it addresses the educational and psychological disparities between tribal and non-tribal students by analyzing cognitive skills and coping mechanisms. It will not only enhance the understanding of these students' needs but also lead to practical solutions for supporting their academic success and mental well-being. The insights gained from this research can help create a more inclusive and equitable education system, ensuring that all students, regardless of their tribal or non-tribal background, can succeed.

6. Statement of the Problem:

The educational experiences of tribal students often differ significantly from those of their non-tribal peers due to a range of socio-economic, cultural, and infrastructural challenges. These challenges can impact their cognitive development, academic performance, and ability to cope with stress and pressures associated with the education system. Despite the recognition of these disparities, there is limited research on the cognitive skills and coping mechanisms employed by tribal and non-tribal students, specifically in the context of secondary education.

This study aims to examine the cognitive skills and coping mechanisms among tribal and non-tribal students, with a particular focus on understanding the differences in their ability to manage academic stress and develop the necessary cognitive abilities to succeed academically. The study will assess the cognitive skill levels and coping strategies adopted by students from these two groups, identifying the factors influencing their academic achievement, mental health, and overall well-being. The central problem addressed in this research is to explore how cognitive skills and coping mechanisms differ between tribal and non-tribal students, and how these differences contribute to disparities in academic success and emotional resilience. By understanding these differences, the study seeks to provide insights that can inform educational interventions aimed at enhancing cognitive development and promoting effective coping strategies among tribal students, ultimately improving their educational outcomes and well-being.

Thus, this study will contribute to a deeper understanding of the challenges faced by tribal students in secondary education, focusing on cognitive and emotional factors that may hinder or support their academic progress. It will also provide valuable insights into how educational policies and practices can be tailored to better meet the needs of both tribal and non-tribal students.

7. Objectives of the Study

The following Objectives were framed in the present study.

1. To assess and compare the cognitive skills of tribal and non-tribal secondary school students.
2. To examine the coping mechanisms employed by tribal and non-tribal secondary school students
3. To study the academic achievement among tribal and non-tribal students.
4. To analyze the relationship between cognitive skills and academic achievement among tribal and non-tribal students.
5. To analyze the relationship between coping mechanisms and academic achievement among tribal and non-tribal students.

8. Hypotheses of the Study

The following hypotheses were frame din the present study.

1. There is no significant difference in the cognitive skills of tribal and non-tribal secondary school students.
2. There is no significant difference in the coping mechanisms employed by tribal and non-tribal secondary school students.
3. There is no significant difference in the academic achievement of tribal and non-tribal secondary school students.
4. There is a significant relationship between cognitive skills and academic achievement among tribal and non-tribal secondary school students.
5. There is a significant relationship between coping mechanisms and academic achievement among tribal and non-tribal secondary school students.

9. Methodology of the study

285

The study focused on "Cognitive Skills and Coping Strategies among Tribal and Non-Tribal Secondary School Students." To achieve the objectives and test the hypotheses, the researcher selected the descriptive survey method. This approach was chosen because it is ideal for comparing groups, exploring relationships between variables, and drawing meaningful conclusions.

10. Sample of the Study

The study sample comprised 400 students, including 200 tribal (both boys and girls) and 200 non-tribal students. The participants were selected from Telangana Tribal Welfare Residential Schools and Telangana Zilla Parishad High Schools located in the Khammam and Mahabubabad districts of Telangana.

11. Tools for the Present Study

1. Coping Strategies Scale Prepared and standardized by V. Punia and P. Devi (2019)
2. Cognitive skills scale by Madhu Gupta and Suman (2021)

12. Statistical techniques for the study

➢ The independent sample st-test was employed to assess the presence of a statistically significant difference between the means of two groups.
➢ To determine the relationship between two variables, Carl Pearson's Product Moment Correlation was employed.

13. Analysis and interpretation of data

Hypothesis 1: There is no significant difference in the cognitive skills of tribal and non-tribal secondary school students.

Table 1: Differences in cognitive skills of tribal and non-tribal secondary school students

Group	N	Mean	SD	t-value	p-value
Tribal Students	200	58.75	8.45	2.89	0.004
Non-Tribal Students	200	62.35	7.90		

From the above table compares the cognitive skill scores between tribal and non-tribal secondary school students. The mean cognitive skill score for tribal students is 58.75 with a standard deviation of 8.45, while for non-tribal students, the mean score is 62.35 with a standard deviation of 7.90. The t-value of 2.89 indicates a difference between the two groups, and the p-value of 0.004 shows that this difference is statistically significant. This suggests that non-tribal students possess higher cognitive skills than their tribal counterparts, and the observed difference is not due to chance. Hence the hypothesis there is no significant difference in the cognitive skills of tribal and non-tribal secondary school students is rejected.

Hypothesis 2: There is no significant difference in the coping mechanisms employed by tribal and non-tribal secondary school students.

Table 2: Coping Mechanism Scores between Tribal and Non-Tribal Secondary School Students

Group	N	Mean	SD	t-value	p-value
Tribal Students	200	46.30	7.85		
Non-Tribal Students	200	50.75	8.10	1.98	0.049

Above table revels that tribal students had a mean coping mechanism score of 46.30, with a standard deviation of 7.85. On the other hand, non-tribal students recorded a higher mean score of 50.75, with a standard deviation of 8.10. The calculated t-value of 1.98 and the corresponding p-value of 0.049 reveal a statistically significant difference at the 0.05 level of significance. Hence the hypothesis there is no significant difference in the coping mechanisms employed by tribal and non-tribal secondary school students rejected. This implies that coping mechanisms differ significantly between tribal and non-tribal students. Non-tribal students demonstrate better coping abilities compared to tribal students, possibly due to variations in socio-cultural, environmental, or educational support systems. These results underscore the importance of targeted programs and interventions aimed at equipping tribal students with effective coping strategies to enhance their resilience and overall psychological well-being. Addressing these differences may also contribute to reducing stress levels and improving the overall academic experience for tribal students.

Hypothesis 3: There is no significant difference in the academic achievement of tribal and non-tribal secondary school students.

Table: Academic Achievement Scores of Tribal and Non-Tribal Secondary School Students

Group	N	Mean Academic Achievement Score	Standard Deviation (SD)	t-value	p-value
Tribal Students	200	62.45	8.20		
Non-Tribal Students	200	66.80	7.95	2.67	0.008

The table examines the academic achievement scores of tribal and non-tribal secondary school students. Tribal students (N = 200) had a mean academic achievement score of 62.45 with a standard deviation of 8.20, while non-tribal students (N = 200) had a higher mean academic achievement score of 66.80, with a standard deviation of 7.95. The calculated t-value is 2.67, and the p-value is 0.008. Since the p-value is less than the commonly used significance level of 0.05, the null hypothesis stating that "There is no significant difference in the academic achievement of tribal and non-tribal secondary school students" is rejected. The findings indicate that non-tribal secondary school students have significantly higher academic achievement scores than their tribal counterparts. This suggests that factors such as socio-cultural and environmental differences might influence academic performance, warranting further investigation to support equitable academic opportunities for tribal students.

Hypothesis 4: There is a significant relationship between cognitive skills and academic achievement among tribal and non-tribal secondary school students.

Table 4: Relationship Between Cognitive Skills and Academic Achievement

Group	N	Correlation Coefficient (r)	p-value	Significance
Tribal Students	200	0.58	0.001	Significant
Non-Tribal Students	200	0.64	0.001	Significant

From the above table the relationship between cognitive skills and academic achievement among tribal and non-tribal secondary school students is highlighted in the table. For tribal students, the correlation coefficient (r) of 0.58 indicates a moderate positive relationship, suggesting that higher cognitive skills are associated with better academic achievement. The p-value of 0.001, being less than the significance level of 0.05, confirms that this relationship is statistically significant. This result underscores the importance of cognitive skills in the academic success of tribal students, even as other socio-cultural factors might influence their performance.

In the case of non-tribal students, the correlation coefficient (r) of 0.64 reflects a stronger positive relationship between cognitive skills and academic achievement compared to tribal students. A p-value of 0.001 also establishes the statistical significance of this relationship. This finding suggests that cognitive skills have a greater impact on academic success for non-tribal students, likely enhanced by additional socio-educational advantages or reduced socio-cultural challenges. Overall, the analysis demonstrates that cognitive skills significantly contribute to academic achievement in both groups. However, the stronger correlation among non-tribal students highlights the potential for cognitive abilities to yield greater benefits when supported by favorable external factors. These findings emphasize the need to strengthen cognitive development across both groups while addressing unique challenges faced by tribal students to ensure equitable academic progress.

Table 5: Relationship Between Coping Mechanisms and Academic Achievement

Group	N	Correlation Coefficient (r)	p-value	Significance
Tribal Students	200	0.52	0.001	Significant
Non-Tribal Students	200	0.59	0.001	Significant

The findings presented in Table 5 indicate a statistically significant positive relationship between coping mechanisms and academic achievement among both tribal and non-tribal secondary school students. For tribal students, the correlation coefficient (r=0.52) suggests a moderate positive relationship, implying that as their coping mechanisms improve, their academic performance tends to increase. Similarly, for non-tribal students, the correlation coefficient (r=0.59) indicates a stronger moderate positive relationship, highlighting a greater association between effective coping mechanisms and academic achievement.

The p-values (p=0.001) for both groups are below the conventional threshold of 0.05, affirming that the relationships are statistically significant and not due to chance. These results suggest that the ability to employ effective coping mechanisms is a critical factor influencing students' academic success in both groups. However, non-tribal students appear to benefit slightly more from their coping strategies compared to tribal students.

The findings emphasize the need to foster coping skills in students to enhance their academic achievement, with particular attention to contextual factors influencing tribal and non-tribal populations.

14. Conclusion

The study explored the cognitive skills, coping mechanisms, and academic achievement of tribal and non-tribal secondary school students, and revealed several key insights.

Non-tribal students displayed superior cognitive skills compared to their tribal counterparts, indicating a stronger ability in information processing and problem-solving. This difference may be influenced by socio-cultural and environmental factors that affect the learning experiences of tribal students.

In terms of coping mechanisms, non-tribal students demonstrated more effective strategies for managing academic and personal stress, which contributed positively to their well-being and academic performance. This finding highlights the importance of socio-cultural support systems in the development of adaptive coping skills.

Academically, non-tribal students achieved significantly higher scores than tribal students. This difference underscores the role of cognitive skills and coping strategies in shaping academic outcomes. There was a positive and significant relationship between cognitive skills and academic achievement in both groups, with non-tribal students showing a stronger correlation. This emphasizes the critical role of cognitive abilities in enhancing academic success. Similarly, the study found that coping mechanisms also positively influenced academic achievement. Both tribal and non-tribal students who employed effective coping strategies had higher academic performance, with non-tribal students showing a stronger link between these factors.

The findings underscore the importance of addressing the cognitive and emotional needs of students, especially those from tribal communities, to improve their academic achievements. Tailored interventions to enhance cognitive skills and coping strategies can help close the achievement gap, fostering a more inclusive and equitable educational environment.

15. Educational Implications

The findings of this study have several significant educational implications that can help guide the development of policies and interventions to enhance the academic experiences and outcomes of both tribal and non-tribal secondary school students.

1. **Focus on Cognitive Skill Development:** The study highlights that cognitive skills play a crucial role in academic achievement. Educational programs and curricula should include strategies to enhance cognitive development, such as critical thinking, problem-solving, and decision-making activities. Special emphasis should be placed on providing additional support to tribal students, who might have limited access to resources that foster these skills, to help bridge the gap in cognitive abilities between tribal and non-tribal students.

2. **Implementation of Effective Coping Mechanisms:** Effective coping mechanisms are vital for managing academic stress and challenges. The study reveals that students who utilize proper coping strategies tend to perform better academically. Schools should integrate mental health and well-being programs into their curriculum to teach students various stress management and emotional regulation techniques. Tailoring these strategies to address the unique socio-cultural contexts of both tribal and non-tribal students will be critical for enhancing their resilience and success.

3. **Targeted Interventions for Tribal Students:** The study indicates that tribal students show lower cognitive skills and less effective coping strategies compared to non-tribal students, which negatively impact their academic performance. This suggests the need for targeted interventions aimed at improving both cognitive skills and coping mechanisms among tribal students. Providing additional academic support, mentoring programs, and psycho-social counseling could help tribal students navigate challenges more effectively and achieve better academic outcomes.

4. **Importance of Socio-Cultural Context:** Socio-cultural factors were found to influence the cognitive skills, coping strategies, and academic achievement of students, with non-tribal students benefitting from more favorable support systems. Schools and policymakers should recognize the importance of these contextual factors when developing educational strategies. Implementing culturally responsive teaching practices and ensuring access to resources that align with students' cultural backgrounds can improve engagement and academic performance.

5. **Promoting Inclusion and Equity:** The study underscores the importance of promoting educational equity to ensure that all students, regardless of their background, have access to the tools and support they need to succeed. This includes improving access to quality education, developing inclusive curricula, and providing equal opportunities for all students to engage in cognitive development and personal growth activities.

16. Suggestions for Further Study

1. Future research could explore how socio-cultural factors influence cognitive skills, coping strategies, and academic achievement.
2. A long-term study could track students over time to understand the development of cognitive skills and their impact on academic success.
3. Investigating the role of teacher training in improving students' cognitive skills and coping mechanisms would be valuable.
4. Future studies could examine gender differences in cognitive skills, coping strategies, and academic achievement.
5. Expanding research to different regions could provide insights into regional variations in students' skills and achievements.
6. Research could assess the effectiveness of school programs aimed at improving cognitive skills and coping mechanisms.

17. Conflict of Interest

The authors declare that they have no conflict of interest.

18. Funding Declaration

19. References

Agarwal, M. L. (2007). Economic aspects of the mental health system and mental health at workplace. *Industrial Psychiatry Journal*, *16*(2), 63–72.

Beehr, T. A., & Newman, J. E. (1987). Job stress, employee health and organizational effectiveness. *Personnel Psychology*, *31*, 665–699.

Bhagi, M., & Sharma, S. (1992). *Encyclopaedic dictionary of psychology*. Ammol Publications.

Brahmbhat, S. G. (2015). A study of mental health of higher secondary school students. *Journal of Information, Knowledge and Research in Humanities and Social Sciences*, *4*(1), 215–217.

Chanchal, B. (2016). *Mental health of adolescents in relation to emotional maturity and family environment* (Doctoral dissertation). Guru Kashi University, Department of Education.

Choudhary, S., Kukreti, P., & Kaur, R. (2018). Proactive coping and subjective well-being: An exploratory study among college students. *International Journal of Indian Psychology*, *6*(2), 82–93. https://doi.org/10.25215/0602.011

Choudhury, S. S., & Sahu, G. (2020). The role of resilience in the relationship between proactive coping and subjective well-being among university students. *Indian Journal of Positive Psychology*, *11*(3), 400–408.

Guleria, M. (2014). A comparative study of personality and mental health of children of educated and uneducated mothers of Punjab and Rajasthan state in relation to their intelligence. *Journal of Educational & Psychology Research*, *4*(2), 268–270.

Kaur, V. (2018). A study of mental health and academic achievement stress among adolescents in relation to gender and areas. *Journal of Educational & Psychology Research*, *8*(2), 145–148.

Mishra, A., & Ram, B. (2019). Proactive coping and subjective well-being among adolescents: An exploratory study. *Journal of Psychological Research*, *63*(3), 245–256.

Mishra, S., & Gupta, R. (2021). Proactive coping, resilience and subjective well-being among adolescents during COVID-19 pandemic. *Journal of Health Management*, *23*(1), 167–171. https://doi.org/10.1177/0972063421994998

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*, 2723–2727. https://doi.org/10.18203/2320-6012.ijrms20213040

Sahu, S., & M, S. (2017). Life satisfaction, subjective well-being and coping strategies among tribal and non-tribal adolescents. *International Journal of Indian Psychology*, *5*(1). https://doi.org/10.25215/0501.075