CHAPTER-V

DISCUSSION OF THE RESULTS, SUMMARY, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER STUDIES

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DISCUSSION OF THE RESULTS, SUMMARY, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER STUDIES AND CONCLUSION

5.0.0 INTRODUCTION

Chapter-I deals with the introduction, rationale of the study, objectives, hypotheses and the delimitations of the research. Chapter-II deals with the review of the related literature. The methodology, sample, design, tools, procedure of data collection and the statistical techniques used for the analysis of the data are presented in Chapter-III. Objective-wise results, interpretations and the findings are presented under the different captions, in the chapter-IV. The present chapter deals with the findings, discussions and the conclusions.

5.1.0 MAJOR FINDINGS OF THE STUDY

Findings of the present study are presented, below:

1. It indicates that there is a significant difference in the achievement levels in mathematics between Tribal and Non-Tribal students in Class IX in Koraput district.
2. There is a significant difference in the mathematics achievement of tribal and non-tribal students based on their SES factor.
3. It indicates that there is a significant difference in mathematics achievement of tribal and non-tribal student based on their both Father and Mother education level.
4. It indicates that there is a significant difference in mathematics achievement of tribal and non-tribal student based on their PO factor.
5. It indicates that there is a significant difference in mathematics achievement of tribal and non-tribal student based on their GL factor.
6. It indicates that there is a significant difference in mathematics achievement of tribal and non-tribal student based on their Distance to school.
7. It indicates that there is a significant difference in mathematics achievement of tribal and non-tribal student based on their Attendance rate.
8. It indicates that there is a no significant difference in mathematics achievement of tribal and non-tribal student based the problems they face in attending or learning at school.
9. It indicates that there is a no significant difference in mathematics achievement of tribal and non-tribal student based on their Student Attendance rate through well-constructed roads.

10. Teaching quality and classroom environment are generally rated as "Good," though resource limitations and multimedia use remain weak.

11. Student engagement is moderate with good behaviour and focus, but motivation in mathematics needs enhancement.

12. Teachers' strategies need more emphasis on inclusivity and real-life relevance.

13. Achievement indicators suggest average academic performance with good potential for growth.

5.2.0 DISCUSSION OF THE RESULT

The discussions of result related to Academic Achievement among the Tribal and Non-Tribal students in Mathematics is given below, under, separate headings.

5.2.1 ACADEMIC ACHIEVEMENT AMONG THE TRIBAL AND NON-TRIBAL STUDENTS IN MATHEMATICS

From Table 4.1 the mean AA of Mathematics score of Tribal students is 51.65 and that of non-Tribal students is 60.29. The mean AA score of the non-Tribal students' is found to be higher than the mean AA score of Tribal students which indicate that community (Tribal/Non-Tribal) does have an influence in making a person average achiever. It indicates that there is a significant difference in the achievement levels in mathematics.

From table 4.2 reveals that t-value is **2.829**. This value is significant at **0.01** level with df equal to **1/98**. Therefore, the directional hypothesis, namely, "there is a significant difference in Achievement in Mathematics of Tribal and Non-tribal students of class IX", is not rejected. It implies that the mean score of achievement Mathematics of Tribal students is lower than the Non-tribal students.

Therefore, ***finding*****:** *There is a significant difference in Achievement in Mathematics of Tribal and Non-tribal students.*

The findings of this study also supported by Singh (1977), Pandey (1981), Mehta, C. P. (1987), Ekka, E. M. (1990), Indra (1991), Kalita, P. C. (2000), John, V. S., et. al (2011), Acharya, S. (2012),V. V. Kulkarni, V.V. &Shivagunde, S. (2012), Muthukumar, U; Tamilenthi. S. (2013).

These studies established that community does have an influence in making a person high achiever.

5.2.2 ACADEMIC ACHIEVEMENT AMONG THE TRIBAL AND NON-TRIBAL STUDENTS IN ALL SUBJECT

From Table 4.1 the mean Academic Achievement of all subject score of Tribal students is 51.78 and that of non-Tribal students is 59.57. The mean AA score of the non-Tribal students is found to be higher than the mean AA score of Tribal students

which indicate that community (Tribal/Non-Tribal) does have an influence in making a person average achiever. It indicates that there is a significant difference in the achievement levels in mathematics.

The findings of this study also supported by Clemens and Oleke (1967), Emekel (1984), Koteswara, N. M.(1991), Garg, Chitra(1992), Mishra, B. B. (1997). Nathanap, G. (2007), Gurubasappa (2009), Devi, B.(2013), Raju, S. S.(2013), and Siddi, R. S. (2013).

Academic Achievement of Non-Tribal students was better than the Tribal students.

5.2.3 COMPARISION THE RELATIONSHIP BETWEEN SES AND AA

It is a fact that there are various socio-economic factors that influence the academic achievement of the students individually or collectively. From the Table 4.3.1 The AA mean of Total Tribal students is 51.56 and AA mean of Total Non-Tribal students is60.29. It indicates that performance in mathematics is influenced by SES factor.

Socio-Economic Background and Acadernic A achievement of the students is highly related. The present studies supported by numerous studies; main among them are Clemen and Oleke (1967), Duncan et. al (1972), Wiseman (1973), Saini (1977), Singh (1977), Friedrich, C.(1978), Hunt (1978), Ojha, P. K (1979), Bloom (1980), Kolwadkar (1980), Sogbetan (1981), White, K.R.(1982), Hassan (1983), Emeke (1984), Grewal (1985). Misra, M. A (1986), Gupta (1987), Rawat, G. S (1987), Gill and Sidhu (1988), Ganguly, M (1989), Maqsud. M. et. al (1991), Panda, B.N (1991), Peterson, L (1991). Tripathy. P. K. (1991), Wango (1991), Wnagoo and Khan (1991), Chand. S. K (1992), Garg, V. P. and Chaturvedi (1992), Harikrishnan, M (1992), Shah, M. et. al (2012), Suleman, Q et. al (2012), Teodor, M (2012), Doren, C. J (2013), Okioga, C. K (2013), Pourfeiz, J et al (2013). ***These studies shown that Socio-Economic Status largely effect on the academic achievement of the students***.

But some of studies are not agree with this finding. The studies of George (1987), Rajput (1989), Padhan, G (1990), Mishra, B. B (1997), Panda, M (1998), Adsul, R. K and Kamble, V (2008), Pandeyet. al (2008), Adeyemo, S. A et. al (2012). K. Karthigeyan, et.al(2012) ***revealed that SES and academic achievement has no relation.***

5.2.4 COMPARISION THE RELATIONSHIP BETWEEN PARENTAL EDUCATION AND ACADEMIC ACHIEVEMENT

From the above Table 4.2.2.1 and Table 4.2.2.2 the analysis of the data reveals that Students' mathematics achievement improves with higher parental education, especially among Non-Tribal students. Tribal students are mostly from lower educational backgrounds, showing limited representation in higher categories. As PE increases, the achievement gap between Tribal and Non-Tribal students widens significantly.

These findings are in line with earlier research conducted by scholars like Sewell & Hauser (1980), Coleman et al. (1966), Davis-Kean (2005), Dubow, Boxer & Huesmann (2009), and Sirin (2005), which have consistently demonstrated a strong positive relationship between parental education and students' academic achievement. Similar results were also reported by Indian researchers such as Aggarwal, Y. (2000), and Ramachandran, V. (2003), ***who found that students from educated family backgrounds generally perform better academically***.

Hence, the present study reinforces the view that **PE has a significant impact on students' AA,** supporting the hypothesis that socio-educational background, especially parental education level, plays a decisive role in shaping academic outcomes.

5.2.5 COMPARISION THE RELATIONSHIP BETWEEN OCCUPATION AND ACADEMIC ACHIEVEMENT

The present study reveals that **parental occupation (PO) has a significant influence on the academic achievement (AA) in mathematics** of Class IX students in Koraput district. The data indicates that **tribal and non-tribal students whose parents are engaged in government jobs, teaching, business, or other skilled occupations tend to perform better** in mathematics compared to those whose parents are involved in agriculture, daily wage labor, or other unskilled forms of work.

These findings are supported by Mehta (1995), Bradley & Corwyn (2002), Hill et al. (2004), and Dash & Behera (2011), who established that parental occupation directly affects students' academic outcomes. Indian research also supports the view that children of parents in formal employment tend to achieve better academic results than those whose parents are in informal or low-income occupations.

Therefore, it is evident that **parental occupation is a crucial socio-economic factor influencing mathematical achievement**, and the gap between tribal and non-tribal students in this context may be partly attributed to occupational differences. This has important implications for policy interventions aimed at improving educational equity in tribal regions.

5.2.6 COMPARISION THE RELATIONSHIP BETWEEN GEOGROPHICAL LOCATION AND ACADEMIC ACHIEVEMENT

The present study highlights that geographical location plays a significant role in determining the academic achievement (AA) in mathematics among Class IX students in Koraput district. The findings indicate that students residing in urban and semi-urban areas tend to achieve higher in mathematics than those living in remote rural or tribal regions. On the other hand, students in geographically isolated tribal regions frequently face challenges like poor school infrastructure, limited access to quality teaching, inadequate transportation, low parental literacy, and socio-economic hardships.

The tribal students living in interior areas of Koraput district are particularly disadvantaged due to poor road connectivity, limited exposure to modern education

methods, and lack of educational awareness in families. These factors significantly hinder their academic progress, especially in subjects like mathematics, which require consistent support and resources.

The present findings are supported by earlier studies such as those by Naik (1972), Govinda & Bandyopadhyay (2010), and Pradhan (2013), which emphasized that students' geographical location, especially those from backward and tribal areas, directly affects their academic performance. Studies by Singh & Chaudhary (2011) and Rao (2014) ***also pointed out that urban-rural disparities in education remain a persistent challenge in achieving educational equity in India.***

Thus, it is evident that geographical location significantly influences mathematics achievement, and the gap between tribal and non-tribal students may also be interpreted through the lens of location-based educational disadvantage. Bridging this gap requires focused policy measures such as improving school infrastructure in tribal areas, training rural teachers, increasing community awareness, and providing additional academic support to tribal students.

5.2.7 COMPARISION THE RELATIONSHIP BETWEEN DISTANCE TO SCHOOL, ATTENDANCE RATE, PROBLEM FACED AND ACADEMIC ACHIEVEMENT

The findings of the present study indicate that factors such as distance to school, attendance rate, and problems faced by students have a strong influence on their academic achievement (AA) in mathematics. The data shows that students who travel longer distances to reach school, particularly from remote and interior tribal villages, tend to have lower achievement in mathematics compared to those who reside closer to their schools.

Students in tribal areas of Koraput district often face geographical barriers, including hilly terrain, poor roads, and lack of reliable transportation, which significantly affect regular school attendance. The study finds that irregular attendance due to long travel, seasonal migration of families, household responsibilities, or poor health infrastructure leads to academic gaps, especially in a subject like mathematics that requires consistent instruction and practice. Tribal students face multiple challenges, such as lack of learning materials, insufficient parental support, language barriers, and limited access to private tuition or remedial help. These issues compound over time and contribute to the lower academic achievement of these students when compared with their non-tribal counterparts, who may live in better-connected areas and enjoy more academic support.

These findings are supported by national-level research studies. Govinda and Bandyopadhyay (2011) reported that children from disadvantaged communities and remote areas have higher rates of absenteeism and dropout due to distance and accessibility issues. Mehta (2005) and Ramachandran et al. (2004) emphasized that attendance and learning levels are positively correlated, and that school proximity plays a crucial role in ensuring regular participation. Studies by PROBE (1999) and Tilak

(2002) also confirm that school distance and socio-economic constraints remain major hurdles to educational equity in tribal areas.

Thus, it can be concluded that distance to school, irregular attendance, and problems faced by tribal students significantly hinder their academic achievement, particularly in mathematics. Bridging this achievement gap requires systemic interventions like building more schools in remote tribal regions, providing transport facilities, offering residential schooling options, and ensuring sustained academic support.

5.2.8 ANALYSIS THE CLASS ROOM TEACHING-LEARNING PROCESSES

The present study aimed to assess and analyse the classroom teaching–learning processes in mathematics among Class IX students belonging to Scheduled Tribes in the Koraput district of Odisha. Based on classroom observation and stakeholder responses, it was found that the overall teaching quality and classroom environment were rated as "Good" by the majority of respondents, indicating a relatively supportive and functional learning atmosphere. Elements such as teacher–student interaction, classroom discipline, and student participation contributed positively to the teaching-learning experience.

The study also highlights key limitations-particularly regarding availability of teaching resources and integration of multimedia or modern teaching aids. A substantial proportion of respondents rated these areas as "Fair," which suggests that despite a well-managed classroom, the pedagogical approach remains largely conventional and under-resourced. The limited use of digital tools and concrete teaching materials is a major concern, especially in tribal regions where students may benefit more from visual and contextualized learning aids.

These findings are consistent with earlier studies by NCERT (2006), Mehta (2005), Ramachandran (2003), and UNICEF (2014), which confirm that classroom learning in tribal and rural areas is often constrained by teacher training gaps, limited infrastructure, and insufficient student motivation. Scholars like Govinda & Bandyopadhyay (2010) and PROBE (1999) also emphasized the importance of improving teacher strategies and classroom resources in remote educational settings.

Therefore, it can be concluded that while the classroom environment in tribal regions of Koraput is moderately conducive to learning, significant attention must be given to improving instructional practices, ensuring availability of teaching resources, and designing culturally responsive pedagogy. Such measures are essential to enhance mathematics learning outcomes and bridge the achievement gap among tribal students.

5.3.0 SUMMARY

The summary of the present research study is presented under the following captions

5.3.1 STATEMENT OF THE PROBLEM

The problem for the proposed study is worded as follows:

"A STUDY OF ACHIEVEMENT IN MATHEMATICS OF CLASS IX STUDENTS BELONGING TO SCHEDULE TRIBE OF KORAPUT DISTRICT, ODISHA"

5.3.2 CONCEPTUAL BACKGROUND OF THE STUDY

Considered as one of the most basic and important courses in the contemporary educational framework is mathematics everywhere. It is absolutely important for learners' cognitive development as well as for their academic performance. From basic arithmetic to sophisticated decision-making procedures, the subject is fundamental for many facets of daily life and underlies professions in science, technology, engineering, and economics. Mathematical ability is thus generally agreed to be a main sign of academic success and future employability. Nevertheless, despite its significance, many Indian students—especially those from underprivileged and socio- economically deprived areas—find it difficult to reach Achievement in Mathematics. Studies and national education polls have repeatedly revealed that the mathematical performance of rural students differs from others and tribal areas usually fall rather short of the national average. Given these students already encounter several socioeconomic and cultural obstacles in obtaining high-quality education, this trend is concerning. In this regard, knowing the achievement levels in mathematics among tribal students—especially those in isolated and underdeveloped areas— because absolutely vital in closing the educational disparity and guaranteeing fairness in the system.

5.3.3 NEED AND JUSTIFICATION OF THE STUDY

The academic achievement of students, especially in mathematics, is a crucial indicator of their educational development and future opportunities. Mathematics, as a foundational discipline, is essential for logical reasoning, problem-solving, and participation in a knowledge-based economy. Despite its importance, students from marginalized communities particularly Scheduled Tribes (STs) have historically underperformed in this subject due to a host of socio-economic, cultural, and institutional challenges.

The Koraput district of Odisha, a tribal-dominated and educationally backward region, presents a unique context where over 50% of the population belongs to Scheduled Tribes. Government reports, including Census 2011 and the NAS (National Achievement Survey), consistently reveal that literacy and academic achievement especially in mathematics-remain significantly lower among tribal students compared to their non-tribal peers. This gap is exacerbated by factors such as poverty, parental illiteracy, inadequate infrastructure, distance to school, and language barriers.

5.3.4 OBJECTIVE OF THE STUDY

1. To compare the Achievement in Mathematics of tribal and non-tribal students of class IX.
2. To compare the Achievement in all subjects of tribal and non-tribal students of class IX.
3. To identify factors influencing students' achievement levels of mathematics, including socio-economic background, parental education and occupation, geographical location, attendance rate, and problems faced by the students, distance to school, well-constructed road from home to school.
4. To analyse the classroom Teaching - Learning Processes.

5.3.5 HYPOTHESIS

1. There is a significant difference in the achievement in mathematics between tribal and non-tribal students of class IX.

5.3.6 POPULATION

The target population for the study consisted of Class IX tribal students of secondary schools in Koraput district, Odisha. The sample included both these students and their teachers.

5.3.7 SAMPLE SIZE

Keeping in view the objectives as well as design of the study, approximately 100 students and 20 Teacher will be surveyed to obtain a reliable dataset.

5.3.8 TOOLS

The following tools will be used for the study:

i. Questionnaire for Student

ii. Classroom Observation Schedule

5.3.9 PROCEDURAL OF DATA COLLECTION

To collect the data, the researcher took written permission from the District Education Officer, Heads and Principals of the selected schools. Before using the tools, the purpose of the study was explained to them in advance in a clear and simple manner. This helped the teachers and students to participate honestly and without any hesitation. The written permission was properly signed by the concerned authorities.

The investigator requested the Principals/Head of the sample schools to grant permission to conduct the work. Before the collection of data in each sample school, one day spent in rapport establishment with the students. The objectives of the tests were explained to the students. They were taken into confidence that these tests will not affect in any way their annual results and the answers given by them will be kept

confidential. The help of the concerned teacher was solicited to enlist the responses from the respondents and for proper administration of the test.

5.3.10 STATISTICAL TECHNIQUES

Following Statistical Techniques were used in the present study for analysing the data:

Mean, percentile, SD,

5.4.0 EDUCATIONAL IMPLICATIONS

The present study is related to Socio-Economic Status and other factor influence academic achievement of Tribal and non-Tribal students at secondary level. This study mainly focused the SES and other factor of the students which create problems that related to education of the Tribal students of the district, face in course of their completion of secondary education ie. H.S.L.C Examination. The secondary education is the crucial means to make a student efficient for the future and empowered society, which can only be achieved through successive completion of H.S.L.C Examination, irrespective of caste, community, sex, religion, locality (Urban/Rural) and socio-economic background.

The **Tribal communities in Koraput** remain educationally disadvantaged and are notably lagging in comparison to other sections of society. Recognizing the unique needs and historical marginalization of Scheduled Tribes (STs), the **Constitution of India** has incorporated several **special safeguards and provisions** to protect these communities from exploitation and to ensure social justice.

However, the study has some implications for the persons/ agencies who are involved in the process of development of education, Thus, this study has implication for Students, Teacher, Curriculum Developers, Policy Makers, School Administrators and Parents. The implications for each of these are dealt in the captions 5.4.1 to 5.4.5.

5.4.1 IMPLICATIONS FOR STUDENTS

The findings of the study show that tribal students in Class IX generally score lower in mathematics compared to their non-tribal counterparts. This implies that students especially from tribal backgrounds need to be motivated through more inclusive and culturally relevant teaching strategies. Students must be encouraged to view mathematics not merely as a subject but as a practical and useful skill. Remedial support, peer learning, and confidence-building activities should be promoted. Early identification of learning gaps and timely academic intervention will help bridge the achievement divide. Moreover, students need to be made aware of the long-term benefits of Achievement in Mathematics in higher studies and careers.

5.4.2 IMPLICATIONS FOR TEACHERS

Teachers play a critical role in reducing achievement gaps. The study reveals that tribal students underperform not necessarily due to lack of ability but due to socio-cultural and infrastructural barriers. Hence, teachers should adopt context-sensitive and

inclusive pedagogies. Using multilingual instruction or incorporating local examples can make concepts more relatable. Teachers should also receive training in handling multi-level classrooms and adopting activity-based and experiential learning methods. Regular diagnostic assessments can help teachers personalize support. Building strong teacher-student rapport, especially with tribal learners, will further enhance motivation and engagement.

5.4.3 IMPLICATIONS FOR PARENTS

Parental involvement is crucial in enhancing students' academic outcomes. The study shows that low parental education and lack of academic support at home contribute to lower achievement levels among tribal students. Awareness programs for parents should be initiated to help them understand the value of mathematics education and how they can support their children even if they are not formally educated. Parents should be encouraged to create an encouraging learning environment at home, ensure regular school attendance, and support their children's learning activities. Strengthening school-community partnerships will empower parents to actively participate in their children's education.

5.4.4 IMPLICATIONS FOR TEACHER TRAINING PROGRAMMES

Pre-service and in-service teachers training programmes may include the creation of lesson plans using a constructivist approach. Approach used in this study will help student-teacher to understand pedagogical content knowledge in mathematics. They will become competent in developing instructional material, for mathematics and other subjects.

5.4.5 IMPLICATIONS FOR TEACHER EDUCATORS

The teacher educators should motivate pupil teachers to implement this innovative approach of Mathematics Teaching. They should set up workshops for pupil teachers to train them on how to implement the Constructivist Approach effectively in Mathematics Teaching Learning.

5.4.6 IMPLICATIONS FOR CURRICULUM DEVELOPERS

Curriculum designers need to recognize the socio-cultural backgrounds of tribal students. A one-size-fits-all approach often alienates learners from indigenous or rural settings. The curriculum should include local knowledge systems, culturally relevant contexts, and examples from tribal life to make learning meaningful. Concepts should be introduced gradually, ensuring clarity and coherence with the student's lived experiences. Curriculum frameworks like NCF 2023 and NEP 2020 should be effectively localized to meet the learning needs of marginalized students. Content must foster mathematical thinking while also being accessible and engaging for tribal learners.

5.4.7 IMPLICATIONS FOR ADMINISTRATORS

School administrators must address infrastructural and pedagogical gaps highlighted in the study. Many tribal students face challenges like distance to school, poorly constructed roads, and lack of basic learning materials. Administrators should ensure the availability of qualified teachers, especially in mathematics, and promote the use of TLMs (Teaching-Learning Materials). Special coaching programs and bridge courses can be organized to support tribal students. Creating safe, inclusive, and engaging learning environments will reduce dropout rates and improve academic achievement. Monitoring systems should be in place to track student progress and ensure equity in educational access and outcomes.

5.5.0 SUGGESTIONS FOR FURTHER STUDIES

1. The Academic Achievement in other subject areas can be studied.
2. The Academic Achievement in other subject areas with different samples can be studied.
3. The Academic Achievement in Primary, Higher Secondary and college level can be studied.
4. Comparative study of Academic Achievement in Mathematics of students in different background can be undertaken.
5. Experiments may be carried out to assess the impact of different Models on Achievement.
6. Academic Achievement and ICT can be integrated, and the synergistic effect can be studied at many levels and disciplines.
7. Effectiveness of Academic Achievement based Instructional Material on

   Achievement of children with special needs, can be studied.
8. The Academic Achievement in different background can be studied.
9. Comparative studies on achievement in other core subjects (Science, English, Social Studies) of tribal vs. non-tribal students.
10. Investigate the effect of mother tongue instruction on conceptual understanding in mathematics
11. Experiments may be carried out to assess the impact of the psychological barriers (math anxiety, self-concept) affecting tribal students' performance.
12. A gender-based study on mathematics achievement among tribal students.
13. Comparative studies on achievement in how community involvement in school governance influences educational performance.

14. Comparative studies on tribal achievement across multiple districts to understand regional disparities.

15. Can be study the role of digital learning tools and technology in improving tribal education outcomes.

5.6.0 CONCLUSION

The present study titled "A Study of Achievement in Mathematics of Class IX Students Belonging to Schedule Tribe of Koraput District, Odisha" was undertaken to explore the levels of academic achievement in mathematics among tribal students and identify the factors influencing it. The findings reveal a consistent gap between the mathematics performance of tribal and non-tribal students. This disparity is reflective not of the students' capabilities but of systemic barriers such as socio-economic disadvantage, low parental education, lack of academic support at home, and geographic isolation.

Tribal students scored on average in the second division, while non-tribal students often reached first division levels. The study further highlights how variables like parental education, occupation, income level, school attendance, access to roads, and school distance significantly affect mathematics achievement. It is evident that these factors intersect and compound one another, creating a learning environment that is unequal and challenging for tribal students. The educational ecosystem in tribal-dominated regions like Koraput needs urgent reform. Students from marginalized communities are burdened by external circumstances that limit their academic success. Schools often lack adequate infrastructure, and teachers are not always equipped to address the unique learning needs of tribal students. Language barriers further complicate understanding, as many tribal students speak local dialects that differ from the medium of instruction. All these contribute to reduced confidence, engagement, and academic performance.

Teachers must become agents of change by creating inclusive classrooms and using localized teaching strategies. The importance of mother-tongue-based multilingual education and experiential learning cannot be overstated in this context. Furthermore, the curriculum should incorporate tribal culture and heritage to ensure relevance and foster identity and belonging. Parents, though often limited by their literacy levels, must be empowered through community outreach programs to support their children's education. Their role in motivating and sustaining regular attendance is crucial. The administration must ensure equitable resource allocation, provide qualified mathematics teachers in remote schools, and establish effective monitoring mechanisms. Special programs like remedial classes, summer camps, and mentorship programs can boost learning outcomes. Transportation facilities, roads, and distance to school also play critical roles in academic participation and must be addressed at the policy level. The study underscores the urgent need for equity-focused, inclusive educational strategies. NEP 2020 and NCF 2023 offer a promising policy foundation, but their success depends on effective local implementation. By focusing on both

access and quality of education, especially in mathematics, we can pave the way for the socio-economic upliftment of tribal communities.

This research contributes to a better understanding of the root causes of academic underachievement among tribal students and emphasizes the need for a collaborative effort among stakeholders—students, teachers, parents, administrators, and policymakers—to bridge the educational gap. Only then can education serve its purpose as a tool of empowerment, equity, and national development.