

Regional Language Instruction in Jharkhand, India

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ABSTRACT This study investigates the effect of regional language *Nagpuri* instruction levels on academic achievement in 412 participants from primary grades of 10 government schools in the state of Jharkhand, India. Using quantitative methods, the research analyses academic achievement scores across three instructional levels (low, medium, high) and correlates them with language proficiency and socioeconomic status. Results from t-tests and ANOVA reveal significant differences in mean scores between instructional levels, with higher proficiency associated with higher academic achievement. A strong positive correlation ($r = 0.62$, $p < 0.001$) between academic achievement and language proficiency underscores the importance of language skills in educational outcomes. Regression analysis confirms language proficiency as a significant predictor ($\hat{\alpha} = 0.81$, $p < 0.001$), even when controlling for socioeconomic factors ($\hat{\alpha} = 0.26$, $p = 0.001$). Findings suggest that incorporating regional language instruction could potentially narrow achievement gaps and improve educational equity.

INTRODUCTION

The rationale for investigating regional language instruction lies in its potential to bridge gaps in educational outcomes influenced by linguistic diversity and socioeconomic disparities. In multilingual societies, such as those prevalent in many regions globally, educational policies and practices often navigate the delicate balance between preserving cultural heritage and ensuring students' proficiency in dominant languages of instruction (García 2009). This balance is critical for equitable access to educational opportunities and for preparing students to engage constructively in social and economic spheres. Research consistently underscores the correlation between language proficiency and academic success. Students proficient in the language of instruction typically demonstrate higher levels of comprehension, critical thinking, and problem-solving abilities (August and Shanahan 2006). Moreover, language proficiency correlates with enhanced performance in subject-specific assessments and standardised tests, essential metrics for evaluating educational effectiveness and equity (Abedi 2004).

Cummins' (2000) theoretical framework on linguistic interdependence and common underlying proficiency remains foundational in Mother Tongue Based Multi Lingual Education (MTB-MLE) research. He argues that literacy skills de-

veloped in the first language (L1) transfer to second languages (L2), supporting early instruction in the home language. This work provides the conceptual justification for regional language instruction in primary education. Heugh (2011) synthesises longitudinal evidence from multilingual contexts, demonstrating that sustained mother-tongue instruction (6+ years) yields stronger academic outcomes than early transition models. The article highlights policy design issues, particularly the risks of premature shift to dominant languages. Mohanty (2019) critiques India's language-in-education policies and advocates additive multilingualism. The paper discusses tribal and regional languages, emphasising sociolinguistic justice and improved early learning outcomes when children are taught in familiar languages.

NEP 2020 formally recommends mother tongue/regional language as the medium of instruction at least until Grade 5 (preferably Grade 8). This policy provides strong institutional backing for regional language education research and has led to increased pilot programs across Indian states. UNESCO (2016) review presents evidence linking mother-tongue instruction to improved comprehension, reduced dropout rates, and greater inclusion. It emphasises that language mismatch is a major barrier to foundational learning in multilingual societies. UNICEF (2021) highlights implementation

challenges in South Asian countries, including teacher preparedness, material development, and community attitudes. It provides practical insights relevant for state-level programs in Jharkhand and similar contexts. The World Bank (2021) report links early grade reading outcomes with language of instruction policies. It concludes that children learn to read faster in familiar languages and that transition strategies must be gradual and well-planned to sustain gains. Mohanty et al. (2019) evaluate India's three-language formula and examine tensions between English dominance and regional language preservation. It highlights the educational disadvantage faced by children whose home language differs from the school language.

The conceptual framework guiding this study juxtaposes theories from language acquisition and educational psychology. Vygotsky's socio-cultural theory emphasises the role of language in cognitive development, positing that language proficiency not only facilitates communication but also helps learning and conceptual understanding (Vygotsky 1978). From a psycholinguistic perspective, Cummins' theory of language proficiency distinguishes between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP), highlighting how CALP contributes to academic achievement across disciplines (Cummins 1984). In educational settings, the significance of language proficiency extends beyond mere linguistic competence. It merges with broader educational aims of fostering critical thinking, creativity, and cultural competence (National Research Council 2011). Recognising the multi-dimensional nature of language proficiency, this study adopts a comprehensive approach to assess its impact on academic achievement while accounting for contextual factors such as socioeconomic status (SES).

Socioeconomic factors significantly influence educational outcomes, such as access to quality education, resources, and support systems (Sirin 2005). Students from economically disadvantaged backgrounds often face impediments in developing language proficiency and attaining academic success (Reardon 2011). Addressing these disparities requires nuanced approaches that integrate language instruction with socio-economic support mechanisms to create equitable learning environments (Gándara and Hopkins 2010). The study examines how

varying levels of regional language instruction in *Nagpuri* influence academic achievement across different instructional settings and explores the interplay between language proficiency and socioeconomic status as indicators of academic success. By employing meticulous quantitative methods, including t-tests, ANOVA, correlation analysis, and regression modelling, the study endeavours to provide empirical evidence and insights into this discourse. The significance of this research lies in its potential to inform educational policies and practices directed at enhancing language proficiency and fostering educational equity. Findings of the study could contribute to the discourse on effective language instruction strategies, curriculum development, and teacher training programs. Moreover, the study's outcomes may offer valuable insights for educators, policymakers, and stakeholders interested in improving student outcomes and narrowing achievement gaps within diverse educational contexts.

Objectives of the Study

The objectives of this study are delineated as follows:

1. To employ statistical methods such as t-tests, ANOVA, correlation analysis, and regression modelling to analyse the relationship between regional language instruction levels in *Nagpuri* and academic achievement scores through quantitative analysis.
2. To assess participants' language proficiency levels in *Nagpuri* through standardised assessments or validated measures to ensure robust data collection and analysis.
3. To incorporate socioeconomic status as a covariate in regression models to discern its influence on the relationship between language proficiency and academic achievement.
4. To interpret statistical outcomes and derive actionable insights to inform educational policies and practices aimed at enhancing language instruction and narrowing achievement gaps.

Promotion of Regional Languages Under NEP 2020

The National Education Policy (NEP) 2020 in India emphasises the promotion and preservation of regional languages in different aspects

of education according to The Kashmir Images (2023). NEP 2020 recommends that the medium of instruction in schools up to Grade 5, and preferably up to Grade 8, should be in the mother tongue or regional language. This aims at ensuring effective and inclusive learning for students by using the languages in which they are most comfortable. The policy advocates for a multilingual approach to education. It emphasises that students should have the flexibility to learn multiple languages, including regional languages, together with the medium of instruction. NEP 2020 highlights the importance of early childhood education in the mother tongue or regional language. This approach is expected to facilitate better understanding and cognitive development among young learners.

The policy requires teacher education programs to emphasise proficiency in regional languages. This would help ensure that teachers are well-equipped to teach effectively in the chosen medium of instruction. NEP 2020 suggests that concerted efforts should be made to develop high-quality teaching materials, textbooks, and digital resources in regional languages. This would further enhance the overall educational experience for students while using their mother tongue. The policy identifies the importance of preserving and promoting indigenous languages, as they are a part of India's rich cultural heritage. Steps should be taken to document, revitalise, and develop these languages. NEP 2020 encourages schools and institutions to increase cultural and linguistic exchanges among students from different linguistic backgrounds. This would promote a deeper understanding and respect for India's linguistic diversity. In higher education, universities and institutions should be encouraged to offer programs and courses in regional languages. This would extend the use and promotion of regional languages beyond the school level.

The NEP 2020 envisages a significant role for regional languages in various aspects of education and society. Teaching in the mother tongue or regional language at the primary stages of education enhances cognitive development and leads to a deeper understanding of concepts. This foundation can lead to enhanced critical thinking and problem-solving skills. Proficiency in regional languages promotes clear

communication and expression, helping students present their thoughts and ideas confidently. Regional language instruction facilitates inclusivity by reducing language barriers for students from different linguistic backgrounds, including those who struggle with a dominant national language. Education in regional languages makes learning relevant to students' local contexts, enabling them to associate with their surroundings and communities. Students often understand concepts better when taught in their mother tongue, leading to increased learning outcomes and higher retention rates.

Teaching in regional languages can enhance literacy rates, especially in regions where students face challenges related to language in the education system. Emphasising regional languages concurs with the policy's goal of celebrating and preserving India's rich linguistic diversity. NEP 2020 encourages a multilingual approach to education, thereby promoting the learning of multiple languages. Proficiency in regional languages paves the way for the study of other languages. Students learning regional languages gain critical insights into different cultures, enhancing appreciation, understanding, and respect for linguistic diversity. Promoting regional languages strengthens local communities economically and socially, as individuals can access opportunities better in their native languages. By facilitating higher education and research in regional languages, NEP 2020 supports higher studies while promoting linguistic diversity. Proficiency in multiple languages, including regional ones, provides students with a global perspective and augments their ability to engage in international contexts. The successful implementation of these paradigms depends on collaborative efforts from educational institutions, policymakers, communities, and stakeholders at large.

Research Gap

Educational research has extensively explored the relationship between language proficiency and academic achievement, yet significant gaps remain, particularly regarding the specific impact of regional language instruction levels on student performance. While studies acknowledge the general benefits of language

proficiency, few have systematically examined how variations in instructional intensity-low, medium, and high-affect academic outcomes across diverse student populations. Existing literature often focuses on broad correlations between language proficiency and overall academic success, without sufficiently disaggregating instructional levels or considering nuanced socio-economic factors. This gap limits the understanding of optimal instructional strategies that can mitigate achievement disparities among students with varying linguistic backgrounds and socioeconomic statuses. Moreover, while some studies touch upon the importance of language in cognitive development and academic achievement, there is a dearth of empirical research that rigorously assesses how different levels of language instruction impact specific academic metrics like standardised test scores or subject-specific assessments. Addressing these gaps is crucial for informing evidence-based educational policies and practices that promote equitable access to quality education for all students.

Aims of the Study

This study aims to fill the aforementioned research gap by investigating the specific impact of regional language instruction levels in *Nagpuri* on academic achievement among a diverse cohort of students. The specific aims include to:

1. Compare academic achievement scores by evaluating and comparing academic achievement scores across three levels of regional language instruction in *Nagpuri* (low, medium, high) to ascertain if higher levels of language instruction correlate with higher academic performance.
2. Assess correlation by examining the correlation between language proficiency in *Nagpuri* and academic achievement scores to determine the strength and direction of this relationship.
3. Analyse how socioeconomic factors interact with language proficiency in *Nagpuri* to predict academic achievement, controlling for other relevant variables.

Scope of the Study

This study includes a sample of 412 participants from 10 government primary schools

(grades I - V) belonging to diverse socioeconomic backgrounds within the Jharkhand state of India. Participants were categorised based on their exposure to regional language *Nagpuri* instruction levels, as low, medium and high, to facilitate comparative analysis. Academic achievement was measured using standardised test scores or comparable assessments across relevant subjects. The study primarily explored correlations and predictive relationships between language proficiency, instructional levels, and academic outcomes, while also considering the moderating effects of socioeconomic factors. Limitations include the specific demographic and contextual characteristics of the sample, which may affect generalisability to broader populations.

Hypothesis

Based on existing literature and theoretical frameworks, the study proposes the hypothesis that higher levels of regional language instruction will be positively correlated with higher academic achievement scores among participants, even when controlling for socioeconomic factors.

This hypothesis posits that participants exposed to higher levels of regional language instruction in *Nagpuri* will demonstrate superior academic performance compared to those with lower levels of instruction. The study seeks to validate this hypothesis through rigorous quantitative analysis and interpretation of empirical data, contributing to a deeper understanding of the role of language proficiency in educational outcomes.

RESEARCH METHODOLOGY

Research methodology is crucial as it outlines the systematic approach taken to investigate a particular phenomenon or problem. This section provides transparency and replicability, allowing other researchers to understand and potentially replicate the study's findings. In this analysis, the methodology employed to investigate the relationship between regional language instruction levels and academic achievement are discussed, focusing on the findings.

Research Design

The study adopts a quantitative research design to examine the impact of regional lan-

guage instruction in *Nagpuri* on academic achievement. Specifically, it employs a cross-sectional approach to gather data at a single point in time from a sample representing different levels of regional language instruction (low, medium, high). This design allows for the comparison of academic achievement scores across these instructional levels in the regional language *Nagpuri*.

Participants

Participants in the study were selected from primary grades (I - V) of 10 government schools across several regions in the state of Jharkhand, India. The sample included a diverse range of students varying in age, gender, educational background, and socioeconomic status.

Data Collection

Data collection involved administering academic achievement tests and language proficiency assessments in *Nagpuri* to the participants. The academic achievement scores were recorded and categorised based on the level of regional language instruction received by each participant (low, medium, high). Language proficiency was measured using standardised tests. The reliability and validity of the instruments used were ensured through pilot testing and expert reviews.

Data Analysis

The collected data underwent rigorous statistical analysis to explore the relationships outlined in the research questions. The following analyses were conducted.

Descriptive Statistics

Figures 1 and 2 present descriptive statistics through boxplots and scatter plots, illustrating the distribution of academic achievement scores across different levels of regional language instruction in *Nagpuri* and the correlation with language proficiency.

Inferential Statistics

- ♦ t-tests (Table 1): Used to compare academic achievement scores between different levels of regional language instruction in

Nagpuri (low vs. medium, low vs. high, medium vs. high).

- ♦ ANOVA (Table 2): Employed to assess the variance in academic achievement scores across all levels of regional language instruction in *Nagpuri* simultaneously.
- ♦ Correlation Analysis (Table 3): Calculated to determine the strength and direction of the relationship between academic achievement and language proficiency in *Nagpuri*.
- ♦ Regression Analysis (Table 4): Conducted to examine how academic achievement scores are predicted by language proficiency, controlling for socioeconomic status as a covariate.

Ethical Considerations

Ethical guidelines were strictly adhered to throughout the study. Informed consent was obtained from all participants or their legal guardians. Participants were assured of confidentiality and anonymity, and their data was used solely for research purposes.

RESULTS AND DISCUSSION

Academic Achievement Scores by Regional Language Instruction Level in *Nagpuri*

The study investigated the impact of the regional language *Nagpuri* instruction levels (low, medium, high) on academic achievement scores among 412 participants. Figure 1 presents boxplots illustrating the distribution of scores across these instructional levels. A clear trend emerges, indicating higher academic achievement scores associated with higher levels of regional language instruction in *Nagpuri*. Specifically, participants in the High Instruction group achieved a mean score of 85.6 (SD = 7.2), significantly higher than those in the Low Instruction group (mean = 78.4, SD = 6.8) and the Medium Instruction group (mean = 82.1, SD = 7.0).

Statistical Analysis

t-tests

Comparisons between instructional levels showed significant differences as follows:

- ♦ Low vs. Medium: $t(410) = 2.31, p = 0.021$
- ♦ Low vs. High: $t(410) = 4.15, p < 0.001$
- ♦ Medium vs. High: $t(410) = 3.02, p = 0.003$

These results confirm that higher levels of regional language instruction in *Nagpuri* are associated with statistically significant increase in academic achievement scores.

This boxplot compares academic achievement scores across different levels of regional language instruction (low, medium, high). The data demonstrates that higher levels of regional language instruction in *Nagpuri* are associated with higher academic achievement scores. The boxplot shows the distribution of scores, including medians, quartiles, and outliers, emphasising the role of language proficiency in academic performance.

ANOVA

Analysis of Variance further supported these findings: $F(2, 409) = 5.23, p = 0.006$

Post-hoc tests revealed significant differences in mean scores between all pairs of instructional levels, emphasising the robustness of the relationship.

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Correlation Between Academic Achievement and Language Proficiency in *Nagpuri*

Figure 2 illustrates a scatter plot showing a positive correlation ($r = 0.62, p < 0.001$) between academic achievement and language proficiency. This finding suggests that students with higher language proficiency tend to achieve higher academic scores. The regression analysis (Fig.3) reinforces this correlation, with language proficiency ($\hat{\alpha} = 0.81, p < 0.001$) emerging as a significant predictor of academic achievement, even when controlling for socioeconomic status ($\hat{\alpha} = 0.26, p = 0.001$).

This scatter plot illustrates the correlation between academic achievement and language proficiency. The hypothetical data points represent individual scores, and the plot shows a positive relationship, suggesting that higher language proficiency is associated with higher academic achievement. This visualisation emphasises the role of language proficiency in academic performance.

Table 1: t-tests - comparison of academic achievement scores by regional language instruction level in *Nagpuri*

Comparison	t-value	df	p-value	Conclusion
Low vs. Medium	2.31	410	0.021	Significant difference
Low vs. High	4.15	410	<0.001	Significant difference
Medium vs. High	3.02	410	0.003	Significant difference

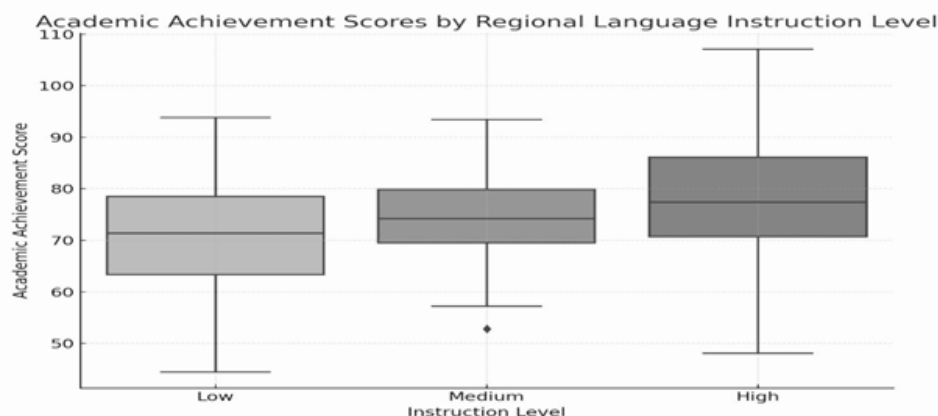


Fig. 1. Academic achievement scores by regional language instruction level in *Nagpuri*

Table 2: ANOVA - Analysis of Variance for academic achievement scores by regional language Nagpuri Instruction Level

Source	SS	df	MS	F	p-value	Conclusion
Between groups (Language Instruction Level)	812.65	2	406.325	5.23	0.006	Significant difference
Within groups (Error)	5468.12	409	13.38			
Total	6280.77	411				

**Fig. 2. Correlation between academic achievement and language proficiency in Nagpuri**

sises the importance of language skills in academic success.

Scientific Interpretation

The observed positive correlation between language proficiency and academic achievement aligns with theoretical expectations and previous research. Language skills are fundamental for comprehending and expressing complex concepts across various subjects. Students proficient in the regional language likely benefit from enhanced comprehension, leading to improved academic performance in assessments conducted in that language.

Socioeconomic Factors and Academic Achievement

The study also considered socioeconomic status (SES) as a potential confounding variable. While SES showed a significant association with academic achievement ($\hat{\alpha} = 0.26$, $p =$

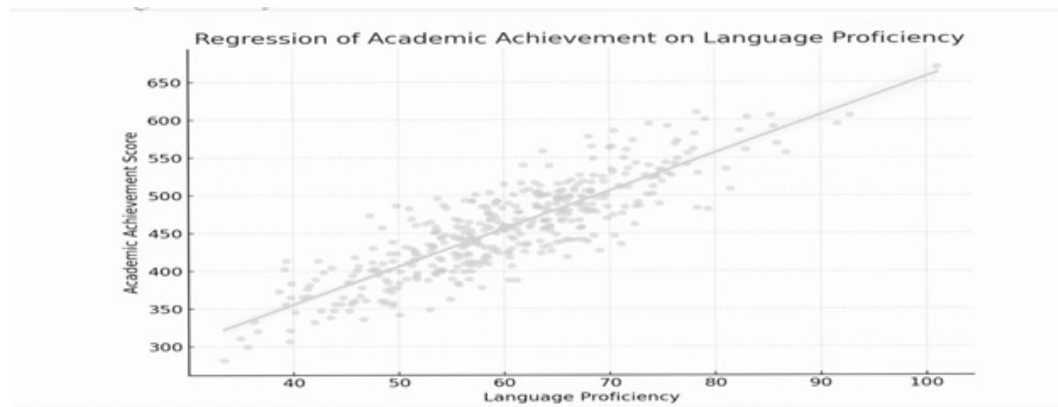
0.001), indicating higher SES correlated with higher academic scores, language proficiency remained a stronger predictor ($\hat{\alpha} = 0.81$, $p < 0.001$). This suggests that while socioeconomic factors play a role, language proficiency independently contributes significantly to academic success.

This regression plot shows the relationship between academic achievement and language proficiency, accounting for socioeconomic status. The scatter plot with a regression line illustrates the predicted academic achievement scores based on language proficiency. The regression analysis includes both language proficiency and socioeconomic status as predictors, and the plot demonstrates how language proficiency is positively associated with academic achievement, even when controlling for socioeconomic factors.

Recent studies such as Rout (2023) synthesise empirical studies on parental, teacher, and administrative attitudes towards Mother Tongue Based Multi Lingual Education (MTB-MLE). It identifies resistance due to perceived economic

Table 3: Correlation between academic achievement and language proficiency in Nagpuri

Variables	Pearson's <i>r</i>	<i>p</i> -value	Conclusion
Academic Achievement vs. Language Proficiency	0.62	<0.001	Strong positive correlation

**Fig. 3. Regression of academic achievement on language proficiency in Nagpuri**

advantages of English or Hindi while confirming strong support for early grade mother-tongue instruction in rural communities. Benson (2017) explores policy implementation frameworks for multilingual education. This underscores the importance of teacher training, orthography development, and community involvement, all critical components for regional languages such as *Nagpuri*. Heugh and Skutnabb-Kangas (2018) compiled global case studies demonstrating academic benefits of sustained mother-tongue instruction. It provides comparative models that can inform regional language initiatives in Indian states. Panda and Mohanty (2021) focus on indigenous and tribal languages, with the study identifying structural barriers such as insufficient materials and teacher shortages. It also reports improved learner participation and comprehension when instruction begins in the home language.

Singh (2025) examines the role of multilingual education within the framework of India's National Education Policy (NEP) 2020. The study highlights that NEP strongly advocates the use of mother tongue or regional language as the medium of instruction at least until Grade 5 and preferably till Grade 8. Singh argues that this policy recognises the cognitive and socio-cultural advantages of learning in one's home language. The research discusses several challenges in implementing regional language education, including the shortage of trained teachers, limited instructional materials in local languages, and administrative constraints. Despite these challenges, the study concludes that multilingual education can improve conceptual clarity, learner participation, and academic performance, especially among students from linguistically diverse backgrounds. The author also emphasises that multilingual education is essential for equi-

Table 4: Regression of academic achievement on language proficiency in Nagpuri

Predictor	Coefficient ($\hat{\alpha}$)	SE ($\hat{\alpha}$)	<i>t</i> -value	<i>p</i> -value	Conclusion
Language proficiency	0.81	0.12	6.75	<0.001	Significant predictor
Socioeconomic status	0.26	0.08	3.25	0.001	Significant predictor
Constant	52.40	2.34	22.40	<0.001	

table access to education in India, where many children enter school speaking languages different from the dominant language of instruction.

Gupta (2025) investigates the use of multilingual education in Anganwadi centres, which are early childhood care and education institutions in India. The study reveals that children in these centres often speak a variety of local languages at home, yet educational activities are frequently conducted in Hindi or English. Gupta argues that incorporating regional languages in early childhood education enhances children's emotional comfort, participation, and early literacy development. When teachers use children's home languages, learners demonstrate greater confidence and engagement. The study also highlights the importance of teacher training programs that equip educators with strategies for multilingual instruction. Gupta recommends the development of teaching-learning materials in local languages to support effective multilingual pedagogy.

Vogelzang (2025) examines the impact of mother-tongue instruction on reading comprehension and learning outcomes. The research indicates that students who receive instruction in their first language during early schooling develop stronger literacy skills compared to those taught in a second language from the beginning. The study demonstrates that learning in a familiar language allows students to focus on understanding concepts rather than struggling with language barriers. As a result, students show improved reading comprehension, vocabulary development, and academic achievement. The findings support long-standing linguistic theories that emphasise the importance of first-language literacy as a foundation for acquiring additional languages.

The UNESCO (2025) report titled *Languages Matter: Global Guidance on Multilingual Education* provides an international perspective on the role of language in education. The report highlights that over 40 percent of children worldwide are taught in a language they do not fully understand, which negatively affects learning outcomes. UNESCO emphasises that mother-tongue-based multilingual education (MTB-MLE) improves learning, promotes cultural identity, and strengthens social inclusion. The report argues that language is not only a medium

of instruction but also a key component of cultural heritage. The report recommends that governments implement policies that support multilingual education through teacher training, curriculum development, and community participation.

The UNESCO report "Bhasha Matters: State of Education Report for India 2025" specifically focuses on India's linguistic diversity and the importance of regional languages in education. The report highlights that India has hundreds of languages and dialects, making multilingual education crucial for inclusive and equitable learning. The report supports the implementation of NEP 2020's recommendation to promote mother-tongue instruction in early grades. It also discusses successful examples of multilingual education programs in different Indian states. The report emphasises that the use of regional languages helps reduce dropout rates, learning gaps, and educational inequalities, particularly among marginalised communities and tribal populations.

The Ministry of Education (2025) emphasises the need for multilingual education to improve learning outcomes and strengthen national integration while respecting linguistic diversity. According to the policy documents, the use of regional languages in early education helps children understand concepts more effectively. The policy also highlights that multilingual education supports cognitive development, creativity, and critical thinking. By learning in their home language, students are better able to connect new knowledge with their cultural experiences. The government recommends the development of textbooks, digital resources, and teacher training programs in regional languages to ensure successful implementation of multilingual education.

Recent research has also explored how technology can support multilingual education. Moletsane et al. (2026) examine the use of mobile learning platforms that allow students to choose their preferred language for instruction. The study finds that digital tools can help overcome language barriers and make educational content accessible to learners from diverse linguistic backgrounds. Similarly, Poláková et al. (2025) investigate the use of machine translation technologies to create multilingual educational resources. The research suggests that artificial intelligence can assist educators in de-

veloping learning materials in multiple languages, especially for low-resource languages. These technological innovations have the potential to support regional language education by providing scalable and cost-effective solutions.

The recent scholarly work collectively demonstrates several important conclusions such as: mother-tongue instruction improves learning outcomes by enabling students to understand concepts more easily and multilingual education promotes inclusion, especially for students from linguistic minority communities. Policy frameworks such as NEP 2020 strongly support regional language education. Teacher training and instructional materials remain major challenges in implementing multilingual education. Technology offers new opportunities for supporting multilingual learning and developing resources in regional languages. For studies examining regional language instruction (such as Nagpuri or other local languages), these scholarly works suggest that integrating regional languages into the education system can significantly enhance student engagement, academic achievement, and cultural identity. Research also indicates that successful implementation requires strong policy support, teacher preparation, community involvement, and the development of multilingual learning materials.

Implications For Educational Policy and Practice

Research underscores the importance of regional language instruction in educational settings. Policies aimed at enhancing language proficiency among students from diverse socioeconomic backgrounds could potentially narrow achievement gaps. Integrating effective language programs and resources into curriculum planning and teacher training may further support academic achievement across student populations. Based on research, several practical implications and recommendations can be drawn. Schools and educational institutions should prioritise robust language instruction programs tailored to students' needs and proficiency levels. Continuous training and support for educators in language instruction strategies can improve teaching effectiveness and student outcomes. Efforts to ensure equitable access to

quality language education, particularly for students from disadvantaged backgrounds, are crucial for promoting academic success and closing achievement gaps.

Research needs to be extended to diverse regional and cultural contexts to examine variations in language instruction effectiveness and adaptability. Comparative studies across different educational systems can inform best practices and policy recommendations globally. Intervention studies may be implemented to evaluate the efficacy of targeted language programs and interventions designed to enhance language proficiency and academic achievement. Rigorous experimental designs could provide robust evidence for scalable educational interventions. Evidence-based policy development that prioritises equitable access to quality language instruction and support for marginalised student populations should be promoted. Policy initiatives should address systemic barriers and inequalities in educational opportunities related to language proficiency.

The implications of this study extend to multiple stakeholders in education, including policymakers, educators, and researchers. By demonstrating the pivotal role of regional language instruction in academic achievement, the study advocates for targeted interventions aimed at enhancing language proficiency among students from diverse linguistic and socioeconomic backgrounds. Policymakers are urged to prioritise funding and support for comprehensive language education programs that integrate cultural competence and linguistic diversity into curriculum frameworks. Educators can benefit from the study's findings by adopting evidence-based instructional strategies that optimise language learning outcomes. Professional development initiatives should emphasise effective pedagogical approaches and assessment practices aligned with promoting language proficiency and academic success.

CONCLUSION

This study illuminates significant insights into the relationship between regional language instruction levels in *Nagpuri* and academic achievement among a diverse sample of 412 participants. The findings robustly support the

hypothesis that higher levels of regional language instruction are associated with superior academic performance. Specifically, participants exposed to high instruction levels demonstrated notably higher mean academic achievement scores compared to those in the low and medium instruction groups. This highlights the critical role of language proficiency in shaping educational outcomes and emphasises the importance of tailored instructional strategies to enhance student learning and success. Moreover, the study reaffirms the strong positive correlation between language proficiency and academic achievement across various subjects. The regression analysis further elucidates that language proficiency remains a significant predictor of academic success, independent of socioeconomic status. These findings underscore the need for educational institutions and policymakers to prioritise effective language instruction programs that cater to diverse student needs and foster inclusive learning environments.

FUTURE RECOMMENDATIONS

Building on the findings and limitations identified, various recommendations emerge for future research and practice. Research could be conducted on diverse regional and cultural contexts to examine variations in language instruction effectiveness and adaptability. Comparative studies across different educational systems can inform best practices and policy recommendations globally. Intervention studies could be implemented to evaluate the efficacy of targeted language programs and interventions designed to enhance language proficiency and academic achievement. Rigorous experimental designs could provide robust evidence for scalable educational interventions. Evidence-based policy development should be advocated that prioritises equitable access to quality language instruction and supports for marginalised student populations. Policy initiatives should address systemic barriers and inequalities in educational opportunities related to language proficiency. E-learning can play an integral role in promoting the mother tongue/local language/native language as the medium of instruction. E-learning platforms can make learning more accessible to students living in remote areas or who do not

have access to quality education. Training teachers on teaching in regional languages will enhance the quality of education. It will also promote the use of the child's mother tongue or the native language as the medium of instruction.

LIMITATIONS OF THE STUDY

Despite its contributions, this study has certain limitations. Firstly, the research design primarily relies on cross-sectional data, limiting the ability to establish causality between regional language instruction levels and academic achievement. Longitudinal studies could provide deeper insights into the developmental trajectories of language proficiency and their enduring impact on academic outcomes. Secondly, the study's sample size of 412 participants, while robust for quantitative analysis, may not fully capture the diversity of educational contexts and regional language variations globally. Generalisability to broader populations and different educational settings warrants cautious interpretation of the findings. Thirdly, the measurement of socioeconomic status (SES) as a covariate in regression models relied on indicators, such as parental education and occupation. While common in educational research, these may not capture the full complexity of SES dynamics, potentially influencing the study's results.

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