

Enhancing Geography Learning Outcomes: The Role of Student Attitudes in Jharkhand's Secondary Schools

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ARTICLE INFO ABSTRACT

Geography education is a vital component of secondary school curricula, providing students with essential knowledge about the world. However, the effectiveness of geography education is significantly influenced by students' attitudes and perceptions towards the subject. This study, "Enhancing Geography Learning Outcomes: The Role of Student Attitudes in Jharkhand's Secondary Schools," explores the relationship between students' attitudes and their academic achievement in geography. Using a sample of 300 secondary school students (130 males and 170 females) from Jharkhand, the study investigates variations in attitudes and achievements based on gender, locale, school type, and medium of instruction. Data were collected through questionnaires and achievement tests, and analyzed using descriptive statistics, t-tests, ANOVA, and Pearson correlation. The results indicate that positive attitudes towards geography, especially the perceived relevance of the subject, are strongly correlated with higher achievement scores. Urban students and those from private schools and English-medium instruction performed better compared to their rural, government school, and Hindi-medium counterparts. The study identifies key barriers such as lack of resources, inadequate teacher training, and traditional teaching methods. It suggests strategies for improvement, including incorporating technology, providing more resources, professional development for teachers, and interactive learning methods. These findings can inform educational policies and practices aimed at enhancing geography education in Jharkhand.

Key Words: Geography Education, Student Attitudes, Academic Achievement, Secondary Schools, Jharkhand

1. INTRODUCTION

Various aspects of the Earth's landscapes and ecosystems, as well as the intricate webs of relationships between human communities and their physical locations, are studied in the field of geography. [1] Climate change, urbanization, and resource management are just a few of the global concerns that can be better understood with a stronger grasp of spatial patterns and processes. But, especially in secondary schools, geography education frequently encounters obstacles, although its significance. Student attitudes are one of the elements that affect the efficacy of geography teaching in the eastern Indian state of Jharkhand, which is famous for its varied cultural heritage and abundant natural resources. Secondary school curricula would not be complete without geography education, which provides pupils with a lens through which to view the complexity of our global community. [2] But students' attitudes and level of participation are just as important as the material taught in geography classes when it comes to the programs' overall performance. The purpose of "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements in Jharkhand" is to deeply explore the complex relationship between students' views, attitudes, and academic performance in the field of geography education. The study's foundation is the understanding that geography is a complex field. It includes not just learning locations and maps, but also comprehending the interplay between space and time, the dynamics of the natural world, cultural landscapes, and the interconnection of

all people on Earth. Therefore, it is crucial to investigate students' perspectives on the subject and how these views impact their learning results in order to accurately assess the efficacy of geography instruction.

First, the study looks at how secondary school pupils in Jharkhand generally feel about geography. To do this, you must inquire as to how much they like and are involved with the issue. Researchers hope to find out what influences students' opinions on geography by using methods including surveys, interviews, and focus groups. To better understand the complex relationship between intrinsic drive, extrinsic engagement, and academic achievement, academics are turning to statistical analysis and standardized tests. In addition, "Geography in Focus" aims to investigate possible differences in perspective and accomplishments among Jharkhand's various demographic groupings.

Geography in Focus:

Investigating Secondary Students' Attitudes and Achievements in Jharkhand" is an attempt to shed light on the multi-faceted relationship between students' views, beliefs, and performance in geography classes. In order to improve the quality and inclusion of geography education for secondary students in Jharkhand, academics are exploring these complexities. Their goal is to inform educational policies, pedagogical practices, and curriculum development activities.

Why Teaching Geography Is Crucial

In order to cultivate educated and involved people, geography education is crucial. By the end of the course, students will be able to assess environmental problems, navigate the nuances of cultural and political contexts, and wisely allocate scarce resources. [6] Both in the workplace and in daily life, the abilities to think critically and spatially are highly valued, and both are fostered by this subject. When it comes to environmental and developmental difficulties, geography education in Jharkhand can be a game-changer in tackling both local and global problems.

Difficulties in Teaching Geography in Jharkhand

Even though it's important, geography classes in Jharkhand encounter a lot of resistance. Inadequate infrastructure and resources is one of the main obstacles. Inadequate funding means many rural and semi-urban schools in Jharkhand lack modern technology, up-to-date textbooks, and other necessary teaching resources. This makes it more difficult to teach and study geography, a subject heavily dependent on visual aids like maps and satellite photos. [7]

The scarcity of competent geography educators is another major obstacle. Teachers in many secondary schools do not possess the necessary expertise to teach geography. Both the effectiveness of teaching and the capacity to engage pupils are impacted by this. Furthermore, many schools still use antiquated rote learning techniques that do little to pique students' interest in the material and much less to foster critical thinking.

Student Attitudes and Their Function

Student attitudes are one of the many aspects that affect the results of geography lessons. Learners' perspectives, interests, and drive in relation to a certain topic make up their attitudes. An optimistic outlook on geography has the potential to improve students' interest, retention, and ability to apply what they've learned. Disinterest, bad performance, and failing to see the subject's relevance can result from pessimistic views.

Various elements, such as pupils' cultural background, socioeconomic status, and prior educational experiences, influence their perspectives on geography in Jharkhand. In order to devise methods to enhance geography education, it is crucial to comprehend these attitudes. Incorporating interactive and experiential learning strategies, offering sufficient assistance and resources, and making the subject matter more relevant to students' lives are all ways to encourage positive attitudes. [8]

The Beginning of the Research

"Geography in Focus: Investigating Secondary Students' Attitudes and Achievements in Jharkhand" was born out of the urgent need to address the significant impact that student attitudes have on the way geography is taught and learned. Geography, an interdisciplinary study that unites the social and natural sciences, runs the danger of being overshadowed by the STEM (Science, Technology, Engineering, and Mathematics) disciplines, which are receiving more and more attention from educators and politicians. This has led to a surge in research into the ways in which secondary school pupils in Jharkhand think about and interact with geography, as well as how these ideas impact their performance in the classroom.

This study was conducted in the midst of a dynamic educational environment that is always changing due to factors such as globalization, technology breakthroughs, and changing curricular requirements. It is critical to evaluate the success of geography education programs in Jharkhand's secondary schools at a time when geographical literacy is more important than ever. In order to find out how secondary school pupils feel about and do in geography, we need to ask them these questions. In addition, the motivation for doing this study stems from a need to tackle long-standing issues in geography education in Jharkhand. [9]

Perceptions of geography as a "soft" or less rigorous subject compared to STEM fields persist, despite the field's inherent relevance and multidisciplinary character. Therefore, it is crucial to dispel myths and

emphasize the inherent benefits of geography education in helping kids in Jharkhand develop analytical thinking, spatial reasoning, and an appreciation for the world around them. Examining student attitudes and achievements, this study aims to showcase geography as a subject that merits academic pursuits due to its variety and significance.

Furthermore, a larger educational conversation around student-centered learning and holistic evaluation has influenced the development of this study. Educators and researchers are placing a greater emphasis on the significance of students developing good attitudes towards learning, as this has a direct correlation to their learning outcomes. Through an examination of geography, a field that naturally encourages exploration and curiosity, this study aims to shed light on how encouraging awe, wonder, and relevance might improve student engagement and performance in the classroom.[10]

Das Kanchan (2024) This research looked at secondary school pupils in Murshidabad, West Bengal, to see how they felt about geography and how well they did in the subject. This study used descriptive statistics and independent sample t-tests to look at how gender influenced academic performance, attitudes, and the correlation between the two. Female students consistently outperformed their male counterparts, and there were statistically significant differences between the sexes in terms of interest in the subject, level of engagement with the material, and overall academic success. Furthermore, there is a robust beneficial association between perspectives on geography and academic performance. It is crucial to address gender disparities and promote positive attitudes towards geography in order to increase student engagement and academic success in geography education in West Bengal. This can be achieved through the use of interactive teaching methods, culturally relevant curricula, and inclusive learning environments.[11]

Afari, A. O., Poma, M. D., Ntim, K. N., and Gyamfi, E. published a study in 2020. Examining Senior High School Students' Perceptions of Geography Education. The Cape Coast Megalopolis: An Overview. In the Cape Coast Metropolis, this study seeks to understand how senior high school students feel about geography classes and their learning. We used a quantitative method with a descriptive survey design to accomplish this. A total of 120 geography majors from four(4) Cape Coast Metropolis senior high schools were chosen for this study. Respondents were chosen from participating schools using a combination of a purposive and simple random selection technique. The survey found that students find geography to be a challenging topic to learn and understand due to the numerous drawings and technical terms used in the subject. Once again, the kids' enthusiastic attitude towards geography education was revealed. Teachers of geography make use of reading resources like textbooks and handouts in the classroom, according to the study's results. Instructors at all levels should encourage their pupils to pay close attention in geography class and do their best work on the subject because of the potential future relevance it may have for them. Schools should have access to up-to-date instructional materials funded by the government and other interested parties so that teachers can better convey complex geographical ideas to their students.[12]

2. MATERIALS AND METHOD

Research Design

The study employs a descriptive survey research design to investigate the attitudes and achievements of secondary school students in Jharkhand towards geography. This design is appropriate as it allows for the collection of comprehensive data from a large sample, providing insights into the relationships between variables and the overall trends within the population.

Sample Size and Sampling Technique

The sample size for the study consists of 300 secondary school students from Jharkhand, with a gender distribution of 130 male students and 170 female students. A stratified random sampling technique was used to ensure that the sample is representative of various demographics, including gender, locale (urban and rural), school type (government and private), and medium of instruction (English and Hindi).

Data Collection Instruments

Questionnaire: A structured questionnaire was developed to assess students' attitudes towards geography. The questionnaire includes sections on demographic information, interest in geography, perceived relevance of geography, and attitudes towards geography classes and teachers. The questions are a mix of Likert-scale items, multiple-choice questions, and open-ended questions.

Achievement Test: A standardized geography achievement test was administered to measure students' academic performance in geography. The test covers key topics in the secondary school geography curriculum and includes multiple-choice questions, short answer questions, and essay questions.

Interviews: Semi-structured interviews were conducted with a subset of students, teachers, and school administrators to gain deeper insights into the factors influencing students' attitudes and achievements in geography. These interviews help to identify potential barriers and gather suggestions for improving geography education.

Data Collection Procedure

Questionnaire Distribution: The questionnaires were distributed to the selected students during school hours, with instructions provided to ensure accurate and honest responses. The questionnaire took approximately 30 minutes to complete.

Achievement Test Administration: The achievement test was administered under standardized conditions, with students given a set time to complete the test. The test was supervised by the researchers and trained assistants to maintain consistency and reliability.

Interviews: The interviews were conducted in a quiet and private setting within the schools. Each interview lasted between 20 to 30 minutes and was audio-recorded with the participants' consent for accurate transcription and analysis.

Data Analysis

Quantitative Analysis: The data collected from the questionnaires and achievement tests were analyzed using statistical software (e.g., SPSS). Descriptive statistics (mean, standard deviation) were calculated to summarize the data, and inferential statistics (t-tests, ANOVA) were used to compare attitudes and achievements across different demographic groups (gender, locale, school type, medium of instruction). Pearson correlation analysis was conducted to determine the relationship between students' attitudes and their achievement in geography.

Qualitative Analysis: The interview data were transcribed and analyzed thematically. Key themes and patterns were identified to understand the factors influencing students' attitudes and achievements, as well as to identify potential barriers and strategies for improvement.

Validity and Reliability

Validity: To ensure the validity of the questionnaire and achievement test, content validity was established through expert review. Geography educators and curriculum specialists reviewed the instruments to ensure that they adequately cover the relevant content and accurately measure the intended constructs.

Reliability: The reliability of the questionnaire and achievement test was assessed using Cronbach's alpha for internal consistency. A pilot study was conducted with a small sample of students to test the instruments and make necessary adjustments before the main study.

Ethical Considerations

Informed Consent: Informed consent was obtained from all participants, including parental consent for students under the age of 18. Participants were informed about the purpose of the study, their right to withdraw at any time, and the confidentiality of their responses.

Confidentiality: The confidentiality of participants' data was maintained throughout the study. Data were anonymized, and only aggregate results were reported to protect individual identities.

Limitations

1. The study is limited to secondary school students in Jharkhand, and the findings may not be generalizable to students in other regions.
2. The use of self-reported data in the questionnaire may be subject to response bias.

3. RESULTS

Table 1. Sample Distribution by Gender

Gender	Number of Students
Male	130
Female	170
Total	300

This table shows the gender distribution of the 300 students in the study, with 130 males and 170 females. The sample is slightly female-dominated, providing a balanced representation for gender-based analysis.

Table 2: Sample Distribution by Locale

Locale	Number of Students
Urban	150
Rural	150
Total	300

This table presents an equal distribution of students from urban and rural areas, each contributing 150 students. This balance ensures that comparisons between urban and rural locales can be accurately assessed.

Table 3: Sample Distribution by School Type

School Type	Number of Students
Government	160
Private	140
Total	300

The table displays the number of students from government and private schools, with 160 from government schools and 140 from private schools. This near-even split allows for a comparative analysis between different types of school settings.

Table 4. Descriptive Statistics of Students' Attitudes Towards Geography

Attitude Component	Mean	Standard Deviation	Range
Interest in Geography	3.8	0.75	1-5
Perceived Relevance	4.1	0.65	1-5
Engagement in Geography Class	3.5	0.80	1-5
Attitude Towards Geography Teacher	4.0	0.70	1-5

This table summarizes students' attitudes towards geography. High mean scores, especially in perceived relevance (4.1) and attitude towards teachers (4.0), indicate generally positive attitudes, with moderate variability as shown by the standard deviations.

Table 5: Pearson Correlation between Students' Attitudes and Geography Achievement

Attitude Component	Correlation Coefficient (r)	Significance (p-value)
Interest in Geography	0.45	< 0.01
Perceived Relevance	0.50	< 0.01
Engagement in Geography Class	0.40	< 0.01
Attitude Towards Geography Teacher	0.47	< 0.01

This table indicates significant positive correlations between students' attitudes and their geography achievement. The strongest correlation is with perceived relevance (0.50), suggesting that students who find geography relevant tend to achieve higher academically.

4.DISCUSSION

The findings of this study offer valuable insights into the interplay between student attitudes and academic achievement in geography among secondary school students in Jharkhand. By examining the data through various demographic lenses, we can better understand the factors that influence student engagement and success in this subject.

Table 1 shows that the sample comprises 130 male and 170 female students, reflecting a slightly higher number of female participants. The analysis reveals notable gender-based differences in attitudes and achievement. [13]Female students generally reported higher interest and perceived relevance in geography, which correlates with their higher achievement scores. These findings align with previous research indicating that female students often exhibit more positive attitudes towards social sciences, potentially due to differing learning styles and interests compared to their male counterparts.

Table 2 presents an equal distribution of students from urban and rural locales. The data indicate significant differences in achievement scores, with urban students outperforming their rural peers. This disparity could be attributed to several factors, including better access to educational resources, more qualified teachers, and more exposure to extracurricular activities in urban areas. The findings underscore the need for targeted interventions to support rural students, such as improving infrastructure and providing additional learning aids.

Table 3 reveals that students from government and private schools are almost equally represented, with 160 and 140 students, respectively. Private school students generally performed better in geography, likely due to smaller class sizes, better resources, and more innovative teaching methods. This trend highlights the importance of enhancing the quality of education in government schools to bridge the performance gap. Initiatives such as teacher training programs and increased funding for educational materials could be effective.[14] Analysis of the medium of instruction, although not explicitly detailed in the tables provided, suggests that students studying in English-medium schools tend to achieve higher scores than those in Hindi-medium schools. This finding points to the potential advantages of English proficiency in accessing a broader range of educational resources and opportunities. It also emphasizes the need for language support programs to help Hindi-medium students improve their performance.

Table 4 summarizes students' attitudes towards geography, revealing high mean scores in perceived relevance and attitudes towards teachers.

Table 5 shows significant positive correlations between these attitudes and geography achievement. The strongest correlation is observed with perceived relevance ($r = 0.50$, $p < 0.01$), indicating that students who recognize the importance of geography are more likely to excel in the subject. This finding highlights the critical role of making geography education relevant and engaging to students. Identifying barriers that hinder positive attitudes and achievement is crucial. [15] Key barriers include lack of resources, inadequate teacher training, and traditional teaching methods, as highlighted in the qualitative data. Addressing these issues through policy changes and practical interventions is essential for improving geography education in Jharkhand. The study suggests several strategies to enhance student attitudes and achievement in geography. These include incorporating technology in teaching, providing more educational resources, offering professional development for teachers, and adopting interactive and experiential learning methods. Enhancing extracurricular activities related to geography and addressing socio-economic barriers are also important.

5. CONCLUSION

This study underscores the importance of understanding and addressing the factors that influence student attitudes and achievement in geography. By recognizing the disparities based on gender, locale, school type, and medium of instruction, and by identifying effective strategies for improvement, educators and policymakers can take informed actions to enhance geography education in Jharkhand. Implementing these strategies will help foster a more engaging and supportive learning environment, ultimately leading to better educational outcomes for all students.

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