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Swarnaprava Mallick
Assistant Teacher, Govt. Girls' High School, Bhubaneswar, Odisha, India

Jitendra Kumar Panda
Teacher Educator, DIET, Ganjam, Odisha, India

Dr. Antima Das
Associate Professor, Department of Education (Retd.) Bhubaneswar, Odisha, India

Corresponding Author:
Swarnaprava Mallick
Assistant Teacher, Govt. Girls' High School, Bhubaneswar, Odisha, India

A comprehensive study on the relationship between study involvement and academic achievement of secondary students

Swarnaprava Mallick, Jitendra Kumar Panda and Dr. Antima Das

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Abstract
This research undertakes a thorough examination of the intricate association between study involvement and academic achievement among secondary students. Employing a comprehensive research design, the study explores the multifaceted aspects of students' engagement with their studies, aiming to unravel the underlying factors that significantly impact scholastic success. Through a combination of qualitative and quantitative analyses, the study provides nuanced insights into the complex interplay between study involvement and academic achievement. The findings offer valuable perspectives for educators, policymakers, and other stakeholders, informing evidence-based strategies to optimize learning experiences and enhance academic success for secondary students. This research contributes to the broader discourse on educational effectiveness by providing actionable recommendations grounded in a comprehensive understanding of the dynamics between study involvement and academic achievement in secondary education.

Keywords: Study involvement, academic achievement, secondary students

Introduction
Education is a dynamic process that engages students in a multifaceted journey, requiring not only access to resources and quality instruction but also active participation and commitment from the learners themselves. In the realm of secondary education, where students undergo critical developmental phases, the relationship between study involvement and academic achievement becomes a focal point of exploration. The degree, to which students invest themselves in their studies, both in terms of time and cognitive effort, has a profound impact on their academic success. The link between study involvement and academic achievement forms a multifaceted interplay, influenced by an array of factors such as personal motivation, learning strategies, and external support systems. Negotiating this intricate relationship becomes particularly challenging for secondary students, who grapple with the demands of a rigorous curriculum and heightened academic expectations. Through this inquiry, we set forth on a quest to untangle the intricacies of the correlation between study involvement and academic achievement, offering valuable insights that contribute to the ongoing dialogue on achieving educational excellence.

Conceptual Framework
"Study Involvement" refers to the measure of the involvement of students in their scholastic pursuits.
"Academic Achievement" refers to the level of attainment of an individual or a group of individuals after completion of an academic programme. In the present study the term academic achievement refers to the academic attainment of the pupils in terms of the percentage of aggregate mark obtained by them individually at the last School Annual Examination.

Review of Related Literature
Many studies have been conducted in India and abroad to find the relationship between Stud involvement and academic achievement of secondary school students in relation to their

gender and locality of the institution. Some of the findings directly related to the present studies are: discussed in the following paragraph.

Nirmalkanta (1979) [15] conducted a comparative study of study habits of high school students. The investigation was conducted to find out the relationship of study habits with scholastic performance; to find out the variation in study habits with age, sex and urban and rural areas. A representative sample of 2966 students of classes IX and X was drawn by employing the random sampling technique from different schools situated in rural and urban areas of Varanasi district. The findings of the study were: scholastic performance in various school subjects had low but positive relationship with study habits; students of class X scored significantly higher on the study habit inventory than those of class IX; girls score higher on study habit inventory.

Shejwal (1980) conducted an investigation in to study habits of college students. The major objectives of the investigation were: to identify the good and poor study habits of students and to find out the difference, if any between the study habits of boys and girls. The tool used was Palsane's study habit inventory. Means, S.Ds and `t` test were the statistical techniques used for data analysis. The major findings of the investigation were: the mean score for boys was 61.16 and that for girls 56.94. The difference is significant at 0.05 level; The boys were found to have better study habits than the girls; there were sex difference in different aspect of study habits.

Badhri (1991) [12] conducted an investigation into the causes for low achievement in government high schools in chengla patto educational district, Tamil Nadu. The objective of the study was to find out reason for low achievement and to find out differences, if any, in the reason for boys and girls. The result showed that low motivation, policy of liberal promotion to the next higher class, poor study habits, lack of parental involvement in education and poor teachings are the causes of poor achievement.

Patel (1997) [13] conducted on investigation in to the causes of under achievement in mathematics of grade VII pupils having high numerical ability. The major objective of the study was to ascertain the causes of under achievement in mathematics of the pupils studying in standard VII. A stratified cluster sampling technique was employed for drawing 500 pupils studying in grade VII from six Guajarati medium schools located in Gandhinagar. The finding of the study was that study habits of pupils showed tremendous effect on the achievement, poor study habits made for lower achievement.

Ahsaan Siddique (2023) [16] conducted a study on Academic Motivation an Engagement: A Correlational Study of Students' Perspective at Secondary School Level. The purpose of the quantitative correlational study was to investigate the association between students & #39; academic motivation and academic engagement. This study included 600 10th - grade students who were selected at random from 20 secondary schools in the district Lahore. The data from selected students were gathered using two research instruments. The independent sample t-test, Pearson r, and linear regression were used to analyze the data. As r =.781 (p & gt; 0.01), the findings demonstrated a strong and significant correlation between academic motivation and students & #39; academic engagement.

Statement of the Problem

The problem is stated as "A Comprehensive Study on the relationship between Study Involvement and Academic Achievement of secondary students."

Objectives

The present study has the following objectives

1. To study the academic achievement of secondary school students with reference to gender and school-location variations.
2. To study the study involvement of secondary school students with reference to gender and school location.
3. To study the relationship between study involvement and academic achievement of secondary school students.

Hypotheses

- **H_{01}:** There is no difference in academic achievement of the secondary school students due to gender and school-location variations
- **H_{02}:** There is no difference in study involvement of secondary school students irrespective of their gender and school location.
- **H_{03}:** There is no relationship between study involvement and academic achievement of secondary school students irrespective of gender and school location.

Method

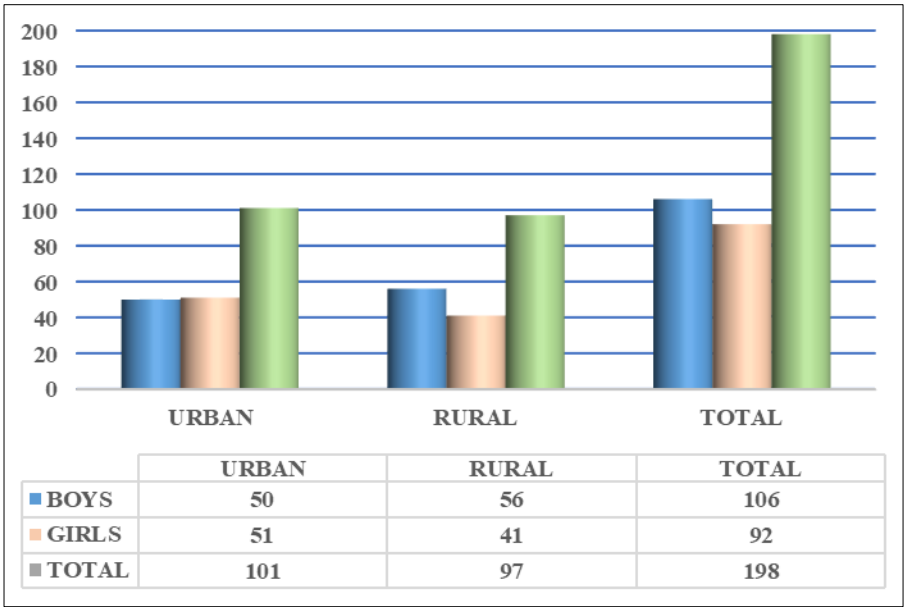
In this study the researcher used the descriptive survey method.

Population

The population in the present study comprises of secondary school students of Odisha.

Sample

The sample for this study was selected on the basis of random sampling procedure. The sample consists of 198 secondary students of class IX, selected randomly. The distribution of the sample is indicated in the table below.



	URBAN	RURAL	TOTAL
BOYS	50	56	106
GIRLS	51	41	92
TOTAL	101	97	198

Fig 1: Distribution of the sample according to Gender & School location variation

Instruments / Tools

Two standardized tools were used in the present study

1. For measuring study involvement of students the "study involvement inventory" of Asha Bhatnagar (1979) [14] was used.
2. For Academic Achievement, the last Annual examination marks of the students were taken in.

Statistical Technique

The researcher used Quantitative techniques for finding the results wherein the percentage, mean, S.D and t-test were used to analyse the data in the present study.

Analysis and Interpretation of Data

Estimation of Academic Achievement

Table 1: Gender wise Means, SD and 't' value of the Academic Achievement scores of secondary school students

Gender	N	Mean	SD	SED	"t"	'P'
Boys	106	63.65	14.5			
Girls	92	65.48	15.5	2.14	0.86	Not Significant
Total	198	63.89	14.36			

The table reveals the significance of mean difference in achievement scores of boys and girls. The 't' value of 0.86 indicates that there is no significant difference in academic achievement between boys and girls. Hence, the null hypothesis i.e. "there is no gender difference in academic achievement of secondary school students" is retained. Such a result tends to presume that both boys and girls compete with other in their academic pursuits and have almost same level of academic achievement of the secondary level.

Table 2: School Location wise Means, SD and 't' value of the Academic Achievement scores of secondary school students

Location	N	Mean	SD	SED	"t"	'P'
Urban	101	67.82	19.60			
Rural	97	60.94	15.80	2.52	2.73	Significant at 0.01 level
Total	198	63.89	14.36			

In the view of mean difference in academic achievement scores between urban and rural students, it is indicated that there is a significant difference in the achievement scores between urban and rural students, the 't' value being 2.73 which is significant at 0.01 level. This result tends to interpret that the urban students may get ample facilities and scope for their studies as compared to rural students. Besides, other support, facilities for academic improvement of students is relatively plentily available in urban areas that might be facilitating the academic performance and achievement of the urban students. Thus, the null hypothesis i.e. "there is no difference in academic achievement of rural and urban secondary school students" is rejected.

Estimation of Study Involvement

Table 3: Gender wise Means, SD and 't' value of the study involvement of secondary school students

Gender	N	Mean	SD	SED	"t"	'P'
Boys	106	80.73	25.09			
Girls	92	87.11	21.13	3.28	1.94	Not Significant
Total	198	83.69	23.33			

The table reveals the significance of mean difference in study involvement scores of boys and girls under the sample. The 't' value of 1.94 indicates that there is no significant difference in study involvement between boys and girls. Hence, the null hypothesis i.e. "there is no gender difference in study involvement of secondary school students" is retained. Such a result tends to presume that both boys and girls compete with each other in their academic pursuits and have almost same level of study involvement of the secondary level.

Table 4: School Location wise Means, SD and 't' value of the study involvement of secondary school students

Location	N	Mean	SD	SED	"t"	'P'
Urban	101	100.98	6.4			
Rural	97	65.69	20.70	2.19	16.11	Significant at 0.01 level
Total	198	83.69	23.33			

In the view of mean difference in academic achievement scores between urban and rural students, it is indicated in the table that- there is a significant difference in the study

involvement between boys and girls, the 't' value being 16.11 which is significant at 0.01 level. This result tends to interpret that the urban students may get ample facilities and scope for their studies which creates more interest to study for more time as compared to rural students. Besides, other support, facilities for academic improvement of students is relatively plentily available in urban areas that might be facilitating the academic performance and achievement of the urban students. Thus, the null hypothesis i.e. "there is no difference in study involvement of rural and urban secondary school students" is rejected.

Relationship between study involvement & Academic Achievement

Table 5: Means, Standard Deviation and 't' values of the Academic Achievement scores of High, Average & Low study involvement groups

	N	Mean	SD	SED	"t"	'P'
High & Average	55	68.96	11.51	2.08	1.16	Not Significant
	98	66.54	13.79			
Average & Low	98	66.54	13.79	2.41	5.96	Significant at 0.01 level
	45	52.16	13.27			
High & Low	55	68.96	11.51	2.51	6.69	Significant at 0.01 level
	45	52.16	13.27			

The table reveals that the variations of high, average and low study involvement groups and its relation with academic achievement is positive. The 't' value 1.16 is of between high and average is not significant and it shows no significant relation between study involvement and academic achievement. On the other hand the 't' value of average & low and high & low are 5.96 and 6.69 respectively. So it indicates a positive relation between study involvement and parental encouragement. From this analysis we can conclude that the null hypothesis "there is no significant relation between study involvement and parental encouragement in secondary school students" is rejected.

Major Findings

Learners Academic Achievement

1. Urban boys and girls have comparatively Higher Academic achievement scores than boys and girls of rural region. This indicates the existence of school location variation in Academic achievement of secondary school learners.
2. Gender variation in respect of academic achievement of secondary school learners is almost negligible although it just slightly favors the girl.

Learners Study Involvement

1. There is very nominal difference between boys and girls in respect of study involvement of the secondary school learners. It tends to presume that both boys and girls compete with each other in their academic pursuits and have almost same level of study involvement of the secondary school level.
2. School location variation in respect of study involvement of the secondary school learners is prominent in favor of the urban students.

Relationship between Study Involvement and Academic Achievement of the Learners

There is a significant relationship between study involvement and academic achievement at the secondary level that means higher the level of study involvement, higher the academic achievement of secondary school learners. Conversely lower the level of study involvement, low is the academic achievement of learners.

Implications

The findings emerging from the results of the study have the following implications

1. Acknowledging the academic achievement gap linked to school location, particularly disadvantaging rural learners, it is crucial for school administrators and teachers in rural schools to enact measures aimed at fostering the academic advancement of secondary school students.
2. While there is no statistically significant difference between boys and girls concerning their academic achievements, boys seem to exhibit relatively lower performance compared to girls. As a result, teachers should pay special attention to the academic improvement of boys.
3. There is very nominal difference between boys and girls in respect of study involvement of the secondary school learners. To address the nominal difference between boys and girls in terms of study involvement among secondary school learners, it is essential to implement gender-inclusive educational strategies.
4. School location variation in respect of study involvement of the secondary school learners is prominent in favor of the urban students. To remedy the prominent variation in study involvement among secondary school learners based on school location, efforts should be made to bridge the urban-rural gap in educational resources and opportunities.

Conclusion

In summary, the identified correlation between study involvement and academic achievement at the secondary level highlights a substantial relationship. The results indicate that higher levels of study involvement correspond to increased academic achievement among secondary school learners. Conversely, lower levels of study involvement are linked to diminished academic success. This emphasizes the critical role of nurturing and promoting active study engagement to positively influence the academic outcomes of secondary school students. As educators and stakeholders endeavor to improve the overall learning experience, prioritizing the cultivation of robust study habits becomes essential for fostering academic success among learners at the secondary level.

References

1. https://www.academia.edu/
2. Goswami PK. A study of the self-concept of adolescents and its relationship with scholastic achievement and adjustment. In: Buch MB, editor. Third Survey of Research in Education. New Delhi: NCERT; c1978.
3. Magotra. A study on mental health as a correlate of intelligence education, academic achievement, and socio-economic status. In: Buch MB, editor. Third Survey of Research in Education (1978-1983). New Delhi: NCERT; c1982.

4. Saraswat A. A differential study of achievement, motivation, occupational aspiration, and academic achievement of adolescents in different types of school climate in Aligarh District. In: Buch MB, editor. Fifth Survey of Research in Education. New Delhi: NCERT; c1988.
5. Sharma M. A study of factors in pupil academic achievement in different streams of courses of the higher secondary stage. In: Buch MB, editor. Fifth Survey of Educational Research. New Delhi: NCERT; c1988.
6. Sahoo KK. A comparative study of study habits of degree level boys and girls. M.A. Thesis in Education, Ravenshaw College (Autonomous); c1996.
7. Agrawal S. A study of creativity as a function of self-esteem, risk-taking, and home background. In: Buch MB, editor. Third Survey of Research in Education. New Delhi: NCERT; c1982.
8. Padhi J. A study of home environment, parent-child relationship, and children's competence during adolescence. In: Buch MB, editor. Fifth Survey of Research in Education, (1988-92). New Delhi: NCERT, 1989, 1.
9. Wright BA. Parent involvement: impact on students' achievement, parent-child interactions, student behavior, and attitudes. The efficacy of the megaskills approach. Dissertation Abstracts International, 1994, 55(6).
10. Suneeta B, Mayuri K. Effect of familial factors on academic achievement of school children. Indian Psychological Abstracts and Review, 1999, 7(2).
11. Haseen T. Academic achievement as a function of social class, parent-child interaction, dependency behavior, and school management. Indian Psychological Abstracts and Reviews, 1999, 7(2).
12. Badri M. Crustal structure of central Saudi Arabia determined from seismic refraction profiling. Tectonophysics. 1991 Jan 10;185(3-4):357-374.
13. Patel P, Pavitt K. The technological competencies of the world's largest firms: Complex and path-dependent, but not much variety. Research policy. 1997 May 1;26(2):141-56.
14. Bhatnagar A. Study of some of the factors affecting student involvement in studies (Doctoral dissertation, IIT Delhi); c1979.
15. Kanta N. A comparative study of study habits of high school students. In Buch, M.B. (Ed.) Third Survey of Research in Education, New Delhi: NCERT; c1979.
16. Siddique M, Siddique A, Khan EA. Academic Optimism and Teachers' Commitment: An Associational Study of Pakistani Teachers. Journal of Educational Research and Social Sciences Review (JERSSR). 2023 Mar 31;3(1):178-88.