



Learning Medium and Its Role in Shaping Achievement Motivation and Anxiety Among Secondary Students

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ABSTRACT

The study aimed to examine the impact of the learning medium on achievement motivation and anxiety among secondary school students. Specifically, it sought to compare achievement motivation and anxiety levels among English and Marathi medium school students. The hypotheses stated that the two groups would have no significant differences in achievement motivation and anxiety. A total of 100 secondary school students (10th grade) from Jalgaon District, Maharashtra, were selected using a non-probability random sampling method. The sample comprised 50 students from English medium schools and 50 from Marathi medium schools. The participants' ages ranged from 12 to 16 years ($M = 13.87$, $SD = 2.92$). The Achievement Motivation Scale (n-Ach) by Deo and Mohan (2011) was used to measure achievement motivation, while Sinha's Comprehensive Anxiety Test (SCAT) assessed anxiety levels. The t-test was applied for statistical analysis. The findings revealed that English medium students had significantly higher achievement motivation, while Marathi medium students exhibited significantly higher anxiety levels. These results suggest that the medium of instruction influences students' motivation and emotional well-being. Addressing these differences through targeted interventions can help improve secondary school students' academic performance and mental health outcomes.

Keywords:- Anxiety, Achievement Motivation, Marathi Medium, English Medium and Secondary School Students.



Introduction:

Education is a process that nurtures an individual's abilities and potential, preparing them for success within their society and culture. From this perspective, education primarily serves as a means of personal development. It begins at birth and continues throughout life, making it a continuous and evolving journey. Formal education generally starts between the ages of four and six when children enter structured learning environments to acquire skills and knowledge deemed essential by society. In the past, formal education was often considered complete after primary and secondary schooling. However, in today's rapidly evolving information age, learning has become a lifelong process, with adults frequently engaging in informal education throughout their careers and even into retirement.

Motivation plays a crucial role in the learning process, yet it varies significantly among individuals. A learner may feel motivated in a particular situation, while another may not, and even the same learner may respond differently depending on external circumstances. Several factors influence motivation, including socio-economic conditions, prior experiences, age, and the social climate of the classroom. Psychologists have developed various strategies that teachers can use to enhance student motivation, helping them stay engaged and achieve academic success.

Academic Anxiety and Achievement Motivation

Academic anxiety is a natural response to challenges in an educational setting, signaling that a situation requires attention. It involves biochemical changes in the brain and body, such as increased adrenaline, which raises heart rate, and decreased dopamine, a neurotransmitter associated with pleasure and pain regulation. These physiological changes create a heightened state of awareness, often triggering the fight-or-flight response in high-stress situations.

Several studies have explored the relationship between achievement motivation and academic performance. Habibahelias and Atan Bin Longa (1984) conducted a correlation study on achievement motivation and student performance in the Standard Five Assessment Examination in Selangor. Their study examined multiple variables, including socio-economic status, intelligence, residential background, school environment, and parental encouragement. A sample of 90 students from 40 primary schools participated in the research, representing Chinese, Malay, and Indian communities. The findings revealed



a strong correlation between achievement motivation and academic performance, with additional factors such as socio-economic status, intelligence, school environment, and parental support also significantly influencing outcomes.

Similarly, Allen Slade and Michael C. Rush (1991) investigated the dynamics of achievement motivation in task difficulty selection among undergraduate students. Their study involved 126 participants, divided into positively and negatively motivated groups. While both groups initially chose similar levels of task difficulty, those with higher achievement motivation gradually selected more challenging tasks over time. The study also noted that periodic interruptions reduced differences in task difficulty preferences between the groups, and gender played a role in overall task selection, though it did not significantly interact with achievement motivation.

Further, Vijayakumari (2010) explored the relationship between academic anxiety, achievement motivation, and academic success among 400 ninth-grade students in Kerala. The study found that academic achievement was negatively correlated with anxiety but positively related to achievement motivation. It also highlighted the significant effects of academic anxiety, motivation, and gender on student performance, with notable interaction effects between anxiety and gender, as well as motivation and gender.

Overall, these studies emphasize that academic success is shaped by a combination of factors, including motivation, anxiety, socio-economic conditions, school environment, and parental involvement. Understanding these relationships can help educators develop targeted strategies to enhance student motivation, manage anxiety, and foster a more supportive learning environment.

Objective of the study:

- 1) To search for achievement motivation among English and Marathi medium secondary school students.
- 2) To examine Anxiety among English and Marathi medium Secondary School Students.

Hypotheses:

- 1) There will be no significant difference in achievement motivation between English-medium secondary school students and Marathi-medium Secondary School Students.
- 2) There will be no significant difference in anxiety between English and Marathi-medium Secondary School Students.



Samples:-

In the present study, 100 secondary school students from Jalgaon District, Maharashtra, were selected, with an equal distribution of 50 students from English-medium schools and 50 from Marathi-medium schools. The participants' ages ranged from 12 to 16, with a mean age of 13.87 and a standard deviation of 2.92. A non-probability random sampling method was employed for the selection.

Variable:-

Independents Variables:

1) Learning Medium

- 1) English
- 2) Marathi

Dependent Variables

- 1) Achievement Motivation
- 2) Anxiety

Research Tools

1) Achievement Motivation Scale (n-Ach) (Deo and Mohan, 2011)

Dr. Pratibha Deo and Dr. Asha Mohan (2011) constructed the achievement motivation (n-Ach) scale. The scale was developed to measure students' achievement motivation, a variable used in many studies and is quite useful. To form the present scale, an effort was made to study the factor suitable for measuring students' achievement.

2) Sinha's Comprehensive Anxiety Test (SCAT)

Sinha's Comprehensive Anxiety Test (SCAT) was developed by A.K.P. Sinha and L.N.K. Sinha in 1995. Reliability: The SCAT consists of 90 items, with significance at the 0.01 level. The scoring involves summing the total scores to determine the level of anxiety—higher scores indicate higher anxiety levels. The coefficient of reliability, determined using the Product Moment Correlation, is 0.85, while using the Spearman-Brown Formula, it is 0.92. Both values indicate a high reliability of the test. Validity: The validity coefficient is 0.62, which is significant at the 0.01 confidence level.

Statistical Analysis:

“t” value Statistics is used for the present study.

Statistical Interpretation and Discussion

Mean, standard deviation, and values of achievement motivation and anxiety among secondary school students in English and Marathi mediums.

Table No-1

Factors	English Medium		Marathi Medium			
	Mean	SD	Mean	SD	df	t
Achievement Motivation	122.36	5.10	113.74	4.85	98	8.66**
Anxiety	41.35	3.02	48.69	4.75	98	10.47**

*Significant at 0.01** = 2.62, 0.05* =*

1.98

The statistical analysis of achievement motivation and anxiety among secondary school students from English and Marathi medium schools was conducted using the t-test. The results, as presented in Table No-1, indicate significant differences in both psychological attributes between the two groups.

For achievement motivation, English medium students had a higher mean score ($M = 122.36$, $SD = 5.10$) compared to Marathi medium students ($M = 113.74$, $SD = 4.85$). The computed t-value of 8.66 is statistically significant at $p < 0.01$, suggesting that English medium students exhibit significantly greater achievement motivation than their Marathi medium counterparts. This may be attributed to differences in the academic environment, teaching methodologies, and expectations set by English medium schools.

Regarding anxiety levels, Marathi medium students recorded a higher mean score ($M = 48.69$, $SD = 4.75$) than English medium students ($M = 41.35$, $SD = 3.02$). The t-value of 10.47 is also statistically significant at $p < 0.01$, indicating that Marathi medium students experience significantly higher anxiety. This could be due to academic pressures, socio-economic factors, or differences in access to resources.

Conclusion:-

- 1) Students in English-medium secondary Schools showed significantly higher achievement motivation than students in Marathi-medium secondary Schools. In contrast, students in Marathi-medium secondary Schools experienced significantly higher anxiety than their English-medium counterparts.



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