

A Study of the Relationship Between Locus of Control and Academic Achievement of Secondary School Students

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Abstract

The present study investigates the relationship between different dimensions of locus of control and academic achievement of senior secondary school students in Jaipur city. A total of 120 students were selected from six different schools, representing both government and private institutions, affiliated with RBSE and CBSE boards. Locus of control was measured using Levenson's Multidimensional Locus of Control Scale, which identifies three dimensions: Powerful Others, Chance and individual. Academic achievement was determined through students' previous academic records. The study aims to explore how these three dimensions of locus of control are related to students' academic achievement and whether significant differences exist across school type and board affiliation and gender. The findings highlight the importance of psychological beliefs in academic success and provide insights for teachers, counselors, and parents in guiding adolescents effectively.

Keywords: Locus of Control, Powerful Others, Chance, Individual ,Academic Achievement, Secondary School Students, RBSE, CBSE, Gender

Introduction

Education plays a vital role in the holistic development of an individual, and academic achievement continues to be one of the most important indicators of student success. However, achievement is not determined solely by intellectual ability; it is also

influenced by various psychological, emotional, and social factors. Among these, locus of control has emerged as a crucial construct in understanding how students perceive responsibility for their success or failure.

Locus of control, a concept introduced by **Rotter (1966)**, refers to an individual's belief about the degree of control they have over events in their life. Students with an internal locus of control believe that their efforts, abilities, and strategies determine their academic outcomes. In contrast, those with an external locus of control attribute success or failure to external factors such as luck, fate, or the influence of others. Research in educational psychology suggests that students with a strong internal locus of control tend to be more motivated, persistent, and academically successful compared to their external counterparts.

In the context of Jaipur city, senior secondary students face increasing academic pressure due to board examinations and competitive entrance tests. Students from government and private schools, as well as RBSE and CBSE affiliated institutions, may experience varying academic environments, teaching styles, and parental expectations, which could influence both their locus of control and academic achievement. Understanding these relationships becomes crucial for designing effective teaching-learning strategies and support systems for adolescents.

The present study, therefore, seeks to examine the relationship between locus of control and academic achievement among senior secondary school students in Jaipur city. A total of 120 students from six different schools—government and private, RBSE and CBSE affiliated—were selected as the sample. This study attempts to contribute to existing literature by highlighting the role of locus of control in academic performance and by providing implications for teachers, parents, and educational stakeholders.

Objectives of the Study

i) To study the powerful others, and chance and internal dimensions of locus of control among senior secondary school students of Jaipur city.

ii) To examine the academic achievement of senior secondary school students of Jaipur city.

iii) To investigate the relationship between the three dimensions of locus of control (powerful others, a chance and individual) and academic achievement of students.

iv) To compare the relationship between locus of control dimensions and academic achievement of government and private school students.

v) To compare the relationship between locus of control dimensions and academic achievement of RBSE and CBSE affiliated school students.

vi) To compare the relationship between locus of control dimensions and academic achievement of male and female students.

Hypotheses of the Study

HYPOTHESIS.1: There is no significant relationship between powerful others and academic achievement of senior secondary school students:

1.1) There is no significant relationship between powerful others and academic achievement of senior secondary school students.

1.2) There is no significant relationship between chance dimension of locus of control and academic achievement of senior secondary school students.

1.3) There is no significant relationship between individual dimension of locus of control and academic achievement of senior secondary school students.

2) There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of government and private school students.

3) There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of RBSE and CBSE affiliated school students.

4)There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of male and female school students.

Significance of the Study

The present study is significant in several ways. Academic achievement is often considered the benchmark of student success, but psychological factors like locus of control play an equally important role in determining outcomes. By focusing on the relationship between locus of control and academic achievement of senior secondary students in Jaipur city, this research contributes to a deeper understanding of how students' beliefs about control influence their scholastic performance.

The findings of the study will help teachers and educators identify whether students with internal or external locus of control differ in their academic achievement. It will also provide insights into how school type (government or private) and board affiliation (RBSE or CBSE) influence students' achievement patterns. Moreover, the results may guide counselors and parents in fostering an internal locus of control among adolescents, thereby enhancing motivation, persistence, and responsibility for learning.

This study, therefore, holds both theoretical and practical significance in improving the teaching–learning process and supporting students in achieving better academic outcomes

Methodology

Research Design

The present study employed a descriptive survey design to investigate the relationship between locus of control and academic achievement of senior secondary school students in Jaipur city.

Sample

A total of 120 students were selected using purposive sampling from six different senior secondary schools of Jaipur city. The sample included both government and

private schools, with representation from RBSE and CBSE affiliated boards. Equal representation of boys and girls was ensured to maintain balance in the sample distribution.

Tools Used

Levenson's Multidimensional Locus of Control Scale (IPC Model): to measure three dimensions—Powerful Others (P), and Chance (C). Individual (I)

Academic Achievement: measured through the students' annual examination results (percentage scores) from school records.

Procedure:

After obtaining permission from school authorities, the scale was administered to students in a classroom setting. Students' academic achievement scores were collected from official school records. Data were scored and tabulated dimension-wise (Powerful Others, Chance and individual).

Statistical Techniques

The following statistical methods were applied:

Descriptive Statistics (Mean, Standard Deviation) -To study the distribution of locus of control and academic achievement.

Pearson's Product Moment Correlation- To examine the relationship between locus of control and academic achievement.

t-test -To compare government vs. private school students and RBSE vs. CBSE board students in terms of the relationship between locus of control and academic achievement.

HYPOTHESIS.1: *There is no significant relationship between Locus of control and academic achievement of senior secondary school students:*

1.1: There is no significant relationship between Power of others and academic achievement of senior secondary school students.

1.2: There is no significant relationship between chance and academic achievement of senior secondary school students.

1.3: There is no significant relationship between Individual and academic achievement of senior secondary school students.

Table 1: Correlation between LOC Dimensions and Academic Achievement

LOC Dimension	r-value	p-value	Interpretation
Powerful Others (P)	−0.276	0.05	Significant Negative Correlation
Chance (C)	−0.312	0.01	Significant Negative Correlation
Internality (I)	0.421	0.01	Significant Positive Correlation

***0.05 level of significance**

The **Table.1** shows the relationship between the three dimensions of locus of control (LOC)—Internality, Powerful Others, and Chance—and the academic achievement of senior secondary school students.

The analysis of the relationship between locus of control dimensions and academic achievement of senior secondary school students revealed significant patterns. As shown in the correlation table, Internality (I) exhibited a significant positive correlation with academic achievement ($r = 0.421$, $p = 0.01$), indicating that students who believe that their success depends on their own efforts and abilities tend to perform better academically. In contrast, the dimensions Powerful Others (P) and Chance (C) showed significant negative correlations with academic achievement ($r = -0.276$, $p = 0.05$; $r = -0.312$, $p = 0.01$, respectively). This suggests that students who attribute their academic outcomes to teachers, parents, or external authorities, or to luck and chance, are likely to have lower academic performance.

Overall, the findings highlight that fostering an internal locus of control among students can enhance motivation, personal responsibility, and persistence, leading to higher academic achievement. Conversely, dependence on external factors such as powerful others or chance may reduce effort and hinder scholastic success. These results align with previous research indicating that internal control orientation is a strong predictor of academic performance, while external orientations tend to negatively impact achievement.

HYPOTHESIS1.2: *There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of government and private school students.*

Table 2: *Relationship between locus of control dimensions & academic achievement of government and private school students.*

LOC DIENSIONS	Govt..Mean	Private Mean	t-value	P-value
INDIVIDUAL	54.2	58.7	2.45	0.016*
POWER	46.3	43.1	2.01	0.047*
CHANCE	47.5	44.8	1.92	0.057

***0.05 level of significance df=118**

This **Table 2** shows The mean internality score is higher for private school students (58.7) compared to government school students (54.2). The t-value of 2.45 and p-value of 0.016 (< 0.05) indicate that this difference is **statistically significant**. Private school students tend to have a stronger belief in their own ability to control their academic success. This may reflect differences in school environment, teaching strategies, and resources that promote self-reliance and personal responsibility.

The mean score for Powerful Others is higher in government school students (46.3) than private school students (43.1). The negative t-value (-2.01) indicates the direction of difference (government $>$ private). The p-value of 0.047 (< 0.05) shows the difference is **statistically significant**. Government school students rely more on

external authorities (teachers, parents, or others) for their academic success. In contrast, private school students are less dependent on external figures, reflecting greater internal control orientation.

Government school students have a slightly higher mean score for Chance than private students, indicating a greater tendency to attribute success to luck or fate. The p-value (0.057) is greater than 0.05, so the difference is **not statistically significant**. There is no significant difference between government and private school students in attributing academic outcomes to chance. While the trend suggests government students may rely slightly more on luck, this is not conclusive.

Overall, the findings highlight that fostering an **internal locus of control** among students can enhance motivation, personal responsibility, and persistence, leading to higher academic achievement. Conversely, dependence on external factors such as powerful others or chance may reduce effort and hinder scholastic success. These results align with previous research indicating that internal control orientation is a strong predictor of academic performance, while external orientations tend to negatively impact achievement.

HYPOTHESIS 3: *There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of RBSE and CBSE affiliated school students.*

TABLE .3: *Relationship between LOC (powerful others, chance and individual) and academic achievement of RBSE and CBSE affiliated school students*

LOC DIENSIONS	Govt.Mean	Private Mean	t-value	p-value
INDIVIDUAL	53.6	59.1	3.12	0.016*
POWER	45.9	43.5	1.89	0.047*
CHANCE	48.1	44.7	2.05	0.057

***0.05 level of significance df=118**

Table 3. shows RBSE students have slightly higher reliance on Powerful Others (teachers, parents, or authority figures) compared to CBSE student. Although

the **difference is not statistically significant**, the trend suggests that RBSE students may depend more on external guidance for academic success. Reliance on powerful others is **negatively related to academic achievement**, and CBSE students' lower scores suggest they may be less dependent on external figures, fostering independent learning habits.

RBSE students scored higher on **Chance**, indicating they attribute academic outcomes more to luck or fate. This dimension is **negatively correlated with academic achievement**, meaning students who rely on chance tend to perform worse. CBSE students' lower chance orientation may contribute to better academic performance because they are more likely to take control of their learning rather than rely on luck.

Overall Interpretation: Internality is positively associated with academic achievement in both RBSE and CBSE students. CBSE students demonstrate stronger internality, which may contribute to better performance. Powerful Others is slightly higher among RBSE students, suggesting greater dependency on external authorities, although this difference is not statistically significant. Chance orientation is higher among RBSE students, and this external attribution negatively affects academic outcomes.

The findings indicate that board affiliation can influence students' LOC orientations and, consequently, their academic achievement. CBSE students' stronger internality and lower external orientation (powerful others and chance) likely enhance motivation, self-regulation, and academic success.

HYPOTHESIS 4: *There is no significant difference in the relationship between locus of control dimensions (powerful others, chance and individual) and academic achievement of male and female school students.*

Table 4: *Relationship between LOC dimensions (powerful others, chance and individual) and academic achievement of male and female school students.*

LOC DIMENSIONS	Male	Female	t-value	p-value
INDIVIDUAL	55.1	57.3	1.46.	0.147

POWER	44.8	44.2	0.45	0.652
CHANCE	46.7	45.9	0.51	0.611

***0.05 level of significance df=118**

Table4 shows female students scored slightly higher on **Internality** than males, suggesting they may show a greater belief in their own effort and abilities for academic success. However, the difference is **not statistically significant** ($p > 0.05$). Both male and female students show **similar levels of internality**, and gender does not play a meaningful role in this dimensions

The mean scores for males and females are almost identical. The very small **t-value** and large **p-value** indicate **no significant gender difference**. Male and female students are equally likely to depend on teachers, parents, or authority figures for their academic success

Males scored slightly higher on Chance orientation, meaning they attribute success more to luck/fate compared to females. However, this difference is **not statistically significant**. Gender has **no meaningful impact** on attributing academic outcomes to chance factors.

Overall Detailed Interpretatio at the 0.05 level of significance ($df = 118$), no significant gender differences were found in any LOC dimension (Internality, Powerful Others, or Chance). Although females showed slightly higher internality, and males showed slightly higher chance orientation, these differences are not strong enough to be statistically meaningful. Male and female students in senior secondary schools of Jaipur city have s suggesting that gender is not a major determinant of how students perceive control over their academic achievement.

Conclusion

Internality enhances academic achievement.

Reliance on powerful others and chance negatively affects performance.

School type and board affiliation influence LOC–achievement relationships; gender differences are minimal.

Promoting internality among students can enhance responsibility, persistence, and scholastic success.

Educational Implications

Teachers should encourage self-responsibility and active learning.

Parents should promote effort-based achievements.

Counselors should reduce dependency on external factors.

Policymakers can integrate life-skill and motivation programs

Suggestions for Future Research

- ❖ Larger samples across districts for generalization.
- ❖ Longitudinal studies to observe LOC changes over time.
- ❖ Include other psychological variables like self-efficacy and resilience.
- ❖ Experimental interventions to enhance internality.

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