

Research Paper

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

Dr. Priyanka Bose (Das) ^{1*}

ABSTRACT

The relationship between locus of control and educational outcomes has significant implications for Open Distance Learning (ODL) systems, particularly in countries with diverse literacy rates. Individuals with an internal locus of control tend to attribute their successes and failures to their own efforts, which can enhance motivation and self-directed learning in ODL settings. Conversely, those with an external locus of control may rely more heavily on external factors, such as instructor guidance. Understanding the locus of control among secondary-level students can help educators tailor instructional strategies to meet the needs of learners in both formal and ODL modes, ultimately contributing to achieving educational goals.

Keywords: *Formal and Distance mode of education, Locus of control, Locus of control Scale, Open learning, secondary level school students*

The interplay between locus of control and educational outcomes holds profound implications for Open Distance Learning (ODL) systems, especially in nations grappling with varying literacy rates. Students with an internal locus of control tend to ascribe their academic successes and setbacks to their own diligence and persistence, fostering a robust sense of agency and self-motivation that can significantly enhance their performance in self-directed ODL environments. In contrast, learners with an external locus of control often attribute their outcomes to external factors, such as teacher support or luck, which can influence their reliance on structured guidance and feedback. By understanding the locus of control among secondary-level students, educators can tailor instructional strategies to cater to the diverse needs of learners in both formal and ODL settings. This insight can inform the development of personalized learning plans, adaptive assessments, and targeted interventions, ultimately contributing to the attainment of educational objectives and bridging the literacy gap.

Locus of control is the framework of Rotter's (1954) social learning theory of personality according to which people learn new behavior through observational learning of the social factors in their environment. Rotter's social learning theory emphasizes the significance of expectancy and reinforcement in shaping behavior. According to this framework, an individual's locus of control plays a crucial role in determining their motivation and

¹ Assistant Professor Department of Education Budge Budge College, 7 Deshbandhu Chittaranjan Road Kolkata-700137 pbd4141@gmail.com

*Corresponding Author

Received: January 8, 2026; Revision Received: March 10, 2026; Accepted: March 20, 2026

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

behavior. Those with an internal locus of control tend to believe that their actions directly influence outcomes, leading to increased motivation and self-efficacy. In contrast, individuals with an external locus of control may feel that outcomes are beyond their control, resulting in decreased motivation and a sense of powerlessness. Understanding the relationship between locus of control and behavior can provide valuable insights into human motivation and learning.

Locus of control is a term in psychology that refers to a person's belief about what causes the good or bad results in his life, either in general or in a specific area such as health or academics. Understanding of the concept was developed by Julian B. Rotter in 1954, and has since become an important aspect of personality studies. Julian Rotter's original (1966) locus of control formulation classified generalized beliefs concerning who or what influences things along a bipolar dimension from internal to external control: "Internal control" is the term used to describe the belief that control of future outcomes resides primarily in oneself while "external control" refers to the expectancy that control is outside of oneself, either in the hands of powerful other people or due to fate/chance. It is an important consideration when helping students in higher education environments perform better academically. More frequent successful academic performance will result as thoughts and belief in the need for personal effort toward the academic task is rewarded. As successful experiences increase in frequency, the student usually incorporates the confidence that hard work often can be rewarded with positive academic outcomes.

The development of locus of control is associated with family style and resources, cultural stability and experiences with effort leading to reward. Many internals have grown up with families that modeled typical internal beliefs. These families emphasized effort, education, responsibility and thinking. Parents typically gave their children rewards they had promised them. In contrast, externals are typically associated with lower socioeconomic status. The research of Schneewind (1995; cited in Schultz & Schultz, 2005) suggests that "children in large single parent families headed by women are more likely to develop an external locus of control" (Schultz & Schultz, 2005, p439). Schultz and Schultz also point out that children who develop an internal locus tend to come from families where parents have been supportive and consistent in self-discipline.

RESEARCH HAS FOUND THE FOLLOWING TRENDS:

- Men may have a greater internal locus for questions related to academic achievement (Strickland & Haley, 1980; cited in Schultz & Schultz, 2005).
- Longitudinal data collected by Gatz and Karel (cited in Johnson et al., 2004[citation needed]) imply that internality may increase up to middle age, and thereafter decrease.
- People higher up in organizational structures tend to be more internal (Mamlin, Harris, & Case, 2001)
- Japanese people tend to be more external in locus of control orientation than people in the U.S., whereas differences in locus of control between different countries within Europe, and between the U.S. and Europe, tend to be small (Berry, Poortinga, Segall & Dasen, 1992).

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

Studies on Locus of Control done by Kothari (1993), Mwamwenda (1999) Rowe, Jennifer L; Montgomery, Guy H (2005), Harris, Sharn B. (2005) looked into various aspects and their relationship with LOC yielding diversified results.

The present study aims to find does locus of control determine a student's choice of mode of instruction at secondary level or not. We all know The formal education system with all its constrains of age, space, attendance etc is unable to achieve Millennium Development Goals of achieving Education for All by 2015 in this country where literacy rate is 66% (NSS Report 2004-2005). Open Distance Learning system has a vital role to play role in this connection. The Open Distance Learning (ODL) system's flexibility and accessibility make it an ideal solution for addressing the shortcomings of traditional education. By providing opportunities for self-paced learning, ODL can cater to diverse learner needs, including those of working professionals, homemakers, and individuals in remote areas. Moreover, ODL's ability to transcend geographical and temporal barriers can help bridge the educational divide, promoting inclusivity and equity in education. As a complementary or alternative mode of education, ODL can play a pivotal role in achieving the goal of Education for All, particularly in countries with significant literacy challenges.

Distance mode of education is defined as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. It is that branch of Open System where there is qualification restriction, i.e., everybody with any qualification level cannot get admission to any course. There is provision (but no compulsion) for teacher taught interaction. **Open Learning** refers to the process of making learning available to learners no matter who they are or where or when they wish to study. There is provision for teacher taught interaction which is compulsory for the students.

On the other hand **formal education** means practice with predetermined purpose and goal of distinctive age group through organized institution belonging to a system of education, consciously founded by the society, maintained and conducted under specific rules and regulation by a specialized body of educators and administrators.

Rabindra Mukta Bidyalaya is the state open school set up in 1997 and named so in 1998. According to West Bengal Council for Higher Secondary Education the pass outs of this institute are eligible for admission in to affiliated schools and colleges in West Bengal. In spite of this glory the achievement of these learners is usually looked down on account of its low quality for some reason or the other. So these two parallel forms of Secondary Education have been taken for research purpose.

Objectives:

The objective of this study is to find can locus of control determine the mode of instruction of the students at secondary level.

Delimitation:

The sample of the research was limited within secondary level.

The study has been limited only to two variables, namely, mode of instruction and locus of control.

METHODOLOGY:

Variables: The independent variable of the study is locus of control and the dependent variable is mode of instruction.

Sample: 400 students from the secondary education level were selected of which 200 were from distance mode and 200 were from formal mode of education.

Tools: 1) Personal information sheet

2) Locus of Control scale: Standardized International Test by Julian Rotter (The most famous questionnaire to measure locus of control is the 13-item forced choice scale of Rotter (1966), In 1966, Jullian Rotter developed a scale to measure personal perceived responsibility in events for one's behavior. It is called locus of control and is a continuum serving one end as internal and the other end as external. Those whose score higher on the internal side would feel a stronger personal responsibility for events in their life. Those scoring higher on external side tend to believe that forces beyond their control, such as fate determine event's outcome. (Phares, Ritchie and Davis, 1968).

Hypothesis of the study:

The present study intends to test the following hypotheses.

Ho1: There is no significant difference between the students from distant mode and formal system in respect of their locus of control.

Ho2: Gender difference has no effect on student's locus of control.

ANALYSIS:

Qualitative Data Analysis: For the qualitative analysis purpose non parametric test Chi-square had been done to test whether there is any significant difference between the students of two modes regarding their locus of control or not.

The **Chi-square** value is found to be 12.96 (sig. 0.01). **Wilcoxon Signed Ranks Test** which is considered a more efficient and powerful non-parametric test was also used to find the difference between the two related groups of students of two different modes in the scores of locus of control.

Table 1: Table showing chi square value using Wilcoxon Signed Ranks Test

	MODE - Locus of control
Z	2.305
Asymp. Sig. (2-tailed)	.021

The **Z-value** i.e. 2.305 is significant at 0.05 levels.

So we can reject the first null hypothesis (Ho1) and can say there is significant difference between the students of formal mode and distance mode in respect of their locus of control.

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

Based on type of locus of control, students from the 2 modes can be classified as in Table below.

Table 2 : Table showing distribution of students according to their Locus of Control.

	Internal Locus of Control		External Locus of Control		Total
	Boys	Girls	Boys	Girls	
Distance Mode	38 (59%)	102 (59%)	17 (30%)	43 (40%)	200
Formal Mode	26 (41%)	70 (40%)	40 (70%)	64 (60%)	200
Total	64	172	57	107	400

Table 3 : Table showing distribution of students according to their Locus of Control and gender.

	Internal Locus of Control		External Locus of Control		Total
Boys	64	(53%)	57	(47%)	121
Girls	172	(62%)	107	(38%)	279
Total	236	(59.25%)	164	(41%)	400

From the above table we can also say gender difference has an effect on student's locus of control so the second null hypothesis (Ho2) is also rejected. It is found

1. There is no difference between percentage of boys and girls having internal locus of control studying through distance mode of education.
2. Percentage of girls with external locus of control is greater than percentage of boys studying through distance mode of education.
3. There is no difference between percentage of boys and girls having external locus of control studying through formal mode of education.
4. Percentage of boys with external locus of control is greater than percentage of girls studying through formal mode of education.

As Schultz and Schultz (2005) point out, significant differences in locus of control have not been found for adults in a U.S. population. However, these authors also note that there may be specific sex-based differences for specific categories of item to assess locus of control - for example, they cite evidence that men may have a greater internal locus for questions related to academic achievement (Strickland & Haley, 1980; cited in Schultz & Schultz, 2005).

It has been found that males tend to be more internal than females in many studies. (De Man, Simpson, Curtis 1985). That means there is a difference between genders in this regard, with males more likely to possess the prized internal locus of control and women dependent on the seemingly less developed external style locus of control.

But from table 3 above it can be said girls have more internal locus of control in comparison to boys at secondary level of education. 70% boys having external locus of control are going for

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

formal mode of education and not for distance mode which needs much more self motivation for success.

Limitations:

While selecting the sample the schools under NOS were not included only the State Open School was taken.

The sample does not have equal number of boys and girls.

Scope for Further Studies:

Quality of academic achievement of distance education students may be compared with those in the formal mode.

REFERENCES:

- De Man, A., Simpson-Housley, P. & Curtis, F. (1985) Assignment of responsibility and flood hazard in Catahoula county. Louisiana. *Environment and Behaviour*, 17, 371-386.
- Kothari, S. (1993) Effects of Locus of Control on Anxiety and Achievement Motivation. *Indian Journal of Psychometry and Education*, Vol- 24(2), P- 103-108.
- Levenson, H. (1973). Multidimensional locus of control in psychiatric patients. *Journal of Consulting and CLinical Psychology*, 41, 397-404.
- Mamlin, N., Harris, K. R., Case, L. P. (2001). A Methodological Analysis of Research on Locus of Control and Learning Disabilities: Rethinking a Common Assumption. *Journal of Special Education*, Winter
- Mishra, K.M. (1991). Management Patterns, Cost and Academic Effectiveness of Distance Education in Indian Universities, Doctoral Dissertation, Kurukshetra: Kurukshetra University.
- MwamWenda, T.S. (1999), South African graduate students' Locus of control, general differences and academic performances. *Psychological Report*, October 1999, Volume 77, 629- 631
- Rotter, J.B. (1966). Generalized expectancies of internal versus external control of reinforcements. *Psychological Monographs*, 80 (whole no. 609).
- Rotter, J. B. (1945). *Social Learning and Clinical Psychology*. Prentice-Hall.
- Rai, Amar Nath (2000), *Distance Education*, Authors Press.
- Schultz, D.P. & Schultz, S.E. (2005). *Theories of Personality* (Eight Edition). Wadsworth: Thomson. I.S.B.N.: 0-534-62403-2

Acknowledgement

Authors of Love Addiction Self-Assessment (LASA) and Nomophobia Questionnaire (NMP-Q) are duly acknowledged. The authors of the present study acknowledge the respondents for their active participation.

Conflict of Interest

The author(s) declared no conflict of interest.

Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students

How to cite this article: Bose, P. (2026). Locus of Control as a Predictor of Instructional Mode Choice among Secondary Students. *International Journal of Indian Psychology*, 14(1), 148-154. DIP:18.01.S17.20261401, DOI:10.25215/1304.S17