



Examining the Relationship Between Locus of Control and Scholastic Adjustment Among Students with Visual Impairment in Public Tertiary Institutions in Rivers State, Nigeria

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Abstract

This study investigated the relationship between internal and external locus of control and scholastic adjustment among students with visual impairment enrolled in public tertiary institutions in Rivers State, Nigeria. Using a correlational design and a census of 23 students with visual impairment, two self-developed instruments—the Locus of Control Short Scale (LOCSS; Cronbach's $\alpha = .78$) and the Scholastic Adjustment Rating Scale (SARS; Cronbach's $\alpha = .71$)—were administered with the assistance of two trained research assistants, following informed consent and assurances of confidentiality. Of the 23 participants, 12 were male and 11 female. Most were aged 16–35, and the large majority were undergraduates living off campus. Pearson product-moment correlation analysis revealed a moderate positive relationship between internal locus of control and scholastic adjustment ($r = .59$, $p = .003$), thereby rejecting the null hypothesis of no significant relationship. Conversely, the correlation between external locus of control and scholastic adjustment was weakly negative and non-significant ($r = -.23$, $p = .286$), thus retaining the null hypothesis for that relationship. The findings carry practical implications for inclusive practice, student counselling and institutional support within tertiary education settings.

Keywords: Locus of Control, Scholastic Adjustment, Visual Impairment, Tertiary Students, Inclusion

Introduction

Adjustment to tertiary education is a pivotal concern for students, particularly those with visual impairments, who may face additional environmental, pedagogical and social challenges (Zegeye, 2022). Scholastic adjustment refers to the extent to which students successfully navigate academic demands, relationships with peers and lecturers, campus life and the institutional environment (Amin et al., 2021; Baker & Siryk, 1989; von Keyserlingk et al., 2024). Consequently, psychological factors that shape how students perceive, interpret and respond to these demands have attracted considerable attention from educational psychologists, inclusive education practitioners and higher education institutions (Auliya et al., 2023; Xu & Chai, 2025). In contexts where structural and institutional barriers remain prevalent, such psychological factors may become even more critical in shaping educational experiences and outcomes. One psychological construct that has received sustained scholarly attention is locus of control (LOC), originally conceptualised by Rotter (1966) within the framework of social learning theory. Locus of control refers to the degree to which individuals perceive outcomes as contingent on their own actions and behaviours (internal locus of control) or on external forces such as luck, fate or powerful others (external locus of control). Within educational settings, an internal locus of control is generally associated with proactive behaviour, persistence in the face of challenges and improved academic outcomes, whereas an external locus of control has been linked to learned helplessness, lower levels of engagement and weaker academic performance (Schunk, 2012).

Research has consistently shown that an internal locus of control is positively associated with academic achievement and educational adjustment. For example, Mamah et al. (2022) found that an internal locus of control significantly predicted academic achievement among secondary school students in Enugu State. Similarly, Okere (2025) reported

a moderate positive correlation ($r = .517, p < .05$) between locus of control and school adjustment among secondary school students in Etche Local Government Area of Rivers State. These findings collectively suggest that personal agency plays an important role in how students manage academic demands and educational challenges. Although much of the existing literature has focused on academic achievement, there is growing recognition that scholastic adjustment encompasses a broader range of outcomes than examination performance or grades alone. It includes students' ability to manage coursework, interact effectively with peers and academic staff, and successfully negotiate institutional systems and expectations. In this regard, Nonyelum (2024) reported that an internal locus of control was significantly related to scholastic adjustment among undergraduates in Rivers State, highlighting the relevance of control beliefs to broader educational adaptation. In Nigeria, interest in locus of control as a determinant of educational outcomes has continued to grow. Animba et al. (2022), for instance, found a significant relationship between locus of control and academic performance among secondary school students in Enugu State. Likewise, Nonyelum (2024) reported that locus of control and adversity intelligence were significantly associated with scholastic adjustment among undergraduates in Rivers State. While these studies provide important insights into the role of control beliefs in educational success, they have largely focused on the general student population and offer limited understanding of how locus of control functions among students with disabilities, particularly those with visual impairment.

Students with visual impairment often face distinct educational and psychosocial challenges, including limited access to instructional materials, constraints on the availability and use of assistive technologies, greater dependence on institutional and peer support, and the risk of social isolation (Emore, 2024). These realities may shape perceptions of personal control and the ability to adjust successfully to tertiary education. Evidence suggests that adjustment to visual impairment itself may influence locus of control orientations. Jondani (2021), for example, found that college students with visual impairment who demonstrated greater adaptation to their impairment tended to exhibit a stronger internal locus of control. Similarly, Chronopoulou et al. (2024) observed distinct psychosocial dynamics, including variations in self-esteem and locus of control, among individuals with visual impairment. These findings suggest that locus of control may operate somewhat differently among people with visual impairment, as external constraints and accessibility barriers may influence how individuals perceive responsibility, agency and control. Consequently, the relationship between locus of control and scholastic adjustment within this population warrants dedicated empirical attention. The present study is further informed by Attribution Theory (Weiner, 2010) and Social Cognitive Theory (Bandura, 1997). Attribution Theory proposes that individuals' interpretations of the causes of events, particularly whether they attribute outcomes to internal or external factors, influence motivation, cognition and subsequent behaviour. Individuals who attribute success to internal factors such as effort are more likely to persist when confronted with challenges and to engage in adaptive behaviours. Social Cognitive Theory complements this perspective by emphasising the role of self-efficacy and personal agency in human functioning. According to Bandura (1997), individuals who believe they can influence outcomes through their own actions are more likely to engage actively in learning, problem-solving and adaptation. Applied to students with visual impairment, these theoretical perspectives suggest that those with a stronger internal locus of control may be more inclined to seek assistive resources, request academic support, plan and organise their studies, and adopt other behaviours that facilitate successful scholastic adjustment. Conversely, a predominantly external locus of control may inhibit such proactive responses, particularly in environments characterised by significant accessibility challenges.

Despite the growing body of literature on locus of control and educational outcomes, important gaps remain. There is a dearth of research specifically examining students with visual impairment in tertiary institutions and the relationship between their locus of control orientations and scholastic adjustment, particularly within Rivers State, Nigeria (Sukubo, 2025). Moreover, much of the existing literature focuses primarily on academic achievement rather than on the broader concept of scholastic adjustment, which encompasses the academic, social and institutional dimensions of student adaptation (Sukubo, 2025). This gap is especially significant in light of the increasing national and international emphasis on inclusive education and equitable educational outcomes for learners with disabilities (Global Education Monitoring Report Team, 2020). Given these concerns, there is a clear need for empirical evidence to inform policy, practice and support services for students with visual impairment in higher education. Accordingly, this study examined the relationship between internal and external locus of control and scholastic adjustment among students with visual impairment in public tertiary institutions in Rivers State, Nigeria. Specifically, the study seeks to determine the relationships between internal locus of control and scholastic adjustment, and between external locus of control and scholastic adjustment, among students with visual impairment.

Methodology

A correlational research design was adopted. The population comprised all 23 students with visual impairments registered with the community of students with disabilities at the public tertiary institutions in Rivers State at the time of study. Given the small size, a complete enumeration (census) approach was used, incorporating all 23 respondents. Instruments. Data were collected using two researcher-developed instruments: Locus of Control Short Scale (LOCSS), which measures internal and external locus of control. Internal consistency (Cronbach's α) was established at .78. Validation was obtained via expert opinion from three professionals: a measurement and evaluation specialist, an educational psychologist, and a special needs education expert. Scholastic Adjustment Rating Scale (SARS), which measures students' adjustment to academic demands, interactions with peers/lecturers, and campus accommodation. Cronbach's α was .71. Validation followed the same expert-opinion procedure as above. After the purpose of the study was explained to respondents, informed consent was secured. Respondents were assured of confidentiality and their right to refuse participation, and were administered the questionnaires via direct delivery and retrieval by two trained research assistants. All 23 students elected freely to participate and returned their completed questionnaires. Demographic data were presented descriptively (frequencies and percentages). The Pearson product-moment correlation coefficient was used to test the two relationships: internal LOC versus scholastic adjustment, and external LOC versus scholastic adjustment. All tests were conducted at the 0.05 significance level.

Results

Demographic Profile of Respondents

Table 1 displays the demographic characteristics of the respondents.

Table 1: Presentation of Demographic Data of the Respondents

Variable	Category	Frequency	Percentage
Gender	Male	12	52.2
	Female	11	47.8
Age	Youthful (16–35 yrs)	19	82.6
	Mature (Above 35 yrs)	4	17.4
Educational level	Undergraduate	20	87.0
	Graduate	3	13.0
Marital status	Married	5	21.7
	Single	18	78.3
Residence	Off-campus	19	82.6
	On-campus	4	17.4
Total	—	23	100.00

Source: Data Analysis

The demographic profile indicates a majority of young (16–35 years), single, off-campus undergraduates, with a near-equal gender split. The predominance of young, single, off-campus undergraduates is broadly consistent with peak enrolment characteristics in many tertiary institutions; the high rate of off-campus residence may reflect limited on-campus accommodation, cost considerations, or a preference for independent living.

Relationship between Internal Locus of Control and Scholastic Adjustment.

Table 2: Relationship between Internal Locus of Control and Scholastic Adjustment of students with visual impairment

		Scholastic Adjustment	Internal Locus of Control
Scholastic Adjustment	Pearson Correlation	1	.59**
	Sig. (2-tailed)		0.003
	N	23	23
Internal Locus of Control	Pearson Correlation	.59**	1
	Sig. (2-tailed)	0.003	
	N	23	23

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Data Analysis

Table 2 shows a Pearson correlation coefficient (r) of .59 between internal LOC and scholastic adjustment ($p = .003$, two-tailed, $N = 23$). This indicates a moderate positive relationship, and because $p < .05$, the null hypothesis (that there is no significant relationship) was rejected. In practical terms, students who reported stronger internal control beliefs also tended to report better scholastic adjustment.

Table 3: Relationship between External Locus of Control and Scholastic Adjustment of students with visual impairment

		Scholastic Adjustment	External Locus of Control
Scholastic Adjustment	Pearson Correlation	1	-.23
	Sig. (2-tailed)		0.286
	N	23	23
External Locus of Control	Pearson Correlation	-.23	1
	Sig. (2-tailed)	0.286	
	N	23	23

Source: Data Analysis

Table 3 shows a Pearson correlation coefficient of $r = -.23$ ($p = .286$, two-tailed, $N = 23$) between external LOC and scholastic adjustment. This is a weak negative relationship and not statistically significant; consequently, the null hypothesis (that there is no significant relationship) is retained. Within this sample, therefore, external attributions did not appear to meaningfully influence levels of scholastic adjustment.

Discussion

It is noteworthy that a moderate, statistically significant positive relationship emerged between internal locus of control and scholastic adjustment, consistent with theoretical and empirical expectations. Students who believe that their efforts, actions and decisions influence their academic fate appear better equipped to adapt to the demands of tertiary education—despite the additional accessibility and social barriers they may face. This aligns with prior work in Nigeria linking internal LOC with academic achievement (Mamah et al., 2021; Okere, 2025) and, more specifically, with scholastic adjustment among undergraduates in Rivers State (Nonyelum, 2024). It may therefore be reasonable to argue that internal control beliefs function as a psychological resource for students navigating higher education, including those with visual impairment. For students with visual impairment, an internal LOC may manifest in behaviours such as seeking assistive technologies, proactively requesting accommodations, engaging with lecturers and peers, organising study routines and overcoming access barriers. The positive relationship suggests that interventions aimed at strengthening internal LOC—such as counselling, skills training, mentorship and peer-support programmes—may promote better adjustment and thereby improve educational outcomes for this population.

External Locus of Control and Scholastic Adjustment

The absence of statistical significance in this relationship warrants careful consideration. Although the correlation coefficient is negative ($r = -.23$) suggesting that higher external LOC may relate to lower scholastic adjustment, the non-significance ($p = .286$) implies that within this sample the effect is not robust. Several factors may account for this:

1. Small sample size and limited power: With only 23 participants, the study may have insufficient power to detect moderate or small effects, particularly for external LOC. This view aligns with prior studies like Button et al. (2013) and Lakens (2022). It is possible that a larger multi-institutional sample might reveal a clearer pattern.
2. Unique contextual factors for students with visual impairment: For students with visual impairment, external constraints (e.g., institutional accessibility, assistive technology, accommodation) are salient and real. Therefore, some degree of external attribution may be normative rather than maladaptive (Cimarolli & Boerner 2005; Papadopoulos et al., 2014; World Health Organisation, 2023). In other words, attributing some outcomes to institutional or accessibility barriers may reflect realism rather than helplessness—and so may not relate strongly to adjustment in the same way as external locus might in other populations.
3. Variation in coping/adaptive strategies: It is possible that students with visual impairment have developed coping mechanisms and support networks (peers, disability services) that mitigate the potentially negative impact of an external locus of control, making the relationship between external LOC and adjustment weaker. Given these nuances, the current finding suggests that external LOC may be less predictive of scholastic adjustment in this specific population under these conditions, though future research with larger samples would clarify this.

Implications for Inclusive Education and Student Support

From a practical standpoint, these findings speak directly to the support structures tertiary institutions should prioritise. Several implications follow from the study:

- Counselling and orientation programmes: Tertiary institutions and disability support units should include components to enhance internal LOC among students with visual impairment—such as workshops on personal agency, goal-setting, self-advocacy, resource-seeking and resilience.
- Structural/institutional support: While fostering internal LOC is beneficial, institutions must simultaneously address external barriers (e.g., accessibility of materials, assistive technology, accommodation, transportation, inclusive pedagogy). By reducing external constraints, institutions reinforce students' sense of personal control and ability to adjust, thus reinforcing internal LOC.
- Peer mentoring and assistive-technology training: Structured peer-mentoring programmes, particularly pairing more experienced students with visual impairment with newer cohorts, may strengthen internal locus through modelling and social support. Training on assistive technologies helps students exercise agency in managing their learning.
- Monitoring and screening: Given the demonstrated link between internal LOC and adjustment, institutions might integrate screening for LOC orientations and adjustment levels among students with visual impairment and provide targeted support for those showing lower internal LOC or adjustment difficulties.

Limitations and Future Research

This study is not without limitations. Several issues should therefore be borne in mind when interpreting these findings. Firstly, the small sample size ($N = 23$) limits generalisability even with the census design; statistical power may be insufficient to detect smaller effects (especially for external LOC). Secondly, although the self-developed instruments (LOCSS and SARS) demonstrate acceptable reliability ($\alpha = .78$ and $.71$, respectively) and expert validation, they would benefit from further psychometric validation (e.g., factor analysis, convergent/divergent validity) in future studies. Thirdly, the design is correlational and cross-sectional; hence, causal inferences cannot be drawn. As such, conclusions regarding directionality must remain tentative. It is possible that better adjustment fosters a stronger internal LOC, rather than the reverse—or that a third variable underlies both. Future research should adopt larger sample sizes across multiple tertiary institutions (including both public and private, in multiple states) and, ideally, longitudinal designs to examine how LOC orientations and adjustment evolve over time among students with visual impairment. Qualitative research could also illuminate how students interpret their locus of control and adjustment

experiences in context. Comparative studies between students with visual impairment and sighted peers would further clarify whether the relationships differ by disability status.

Conclusion

This study has demonstrated that among students with visual impairment in public tertiary institutions in Rivers State, Nigeria, a stronger internal locus of control is significantly associated with better scholastic adjustment. By contrast, external locus of control showed a weak, non-significant negative association. These findings highlight the importance of fostering personal agency and control beliefs alongside structural supports in inclusive tertiary education settings. As policy and practice increasingly emphasise inclusive education and improved outcomes for students with disabilities, interventions targeting locus of control alongside accessibility and support services are crucial.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Tertiary institutions should implement counselling and orientation programmes aimed at strengthening internal locus of control among students with visual impairment.
2. Disability support units should organise workshops on self-advocacy, goal-setting, resilience and resource utilisation to enhance students' sense of personal agency.
3. Institutions should improve accessibility by providing assistive technologies, accessible learning materials, inclusive teaching practices and adequate accommodation services.

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