

Evaluating Strategies for Reducing Student Attrition of Public and Private Universities in Sierra Leone

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ABSTRACT: The primary theme of the study is to evaluate strategies to reduce student attrition of public and private universities in Sierra Leone. The specific objective of the study was to identify the strategies to reduce student attrition in Sierra Leonean universities. This study examined Spady's Theory of Student Departure (1971) as a theoretical framework. A descriptive research design was employed. Data collection instruments included a structured questionnaire, a structured interview guide, campus observations, and a documentary review. The target population included 459 students. Data analysis involved frequencies and percentages, cross-tabulations, and correlation and regression analyses, using SPSS, Excel, and Organisation Network Analysis (ONA) data collection tools from 1 March 2025 to 30 September 2025. A five-point Likert scale (1932) was used during data analysis. The validity and reliability of the instruments were tested at other universities in Sierra Leone using Cronbach's Alpha, which yielded a coefficient of 0.86, indicating good validity; 5% of the questionnaires were pretested at other institutions. The key findings of the study include, among others, that the majority of respondents were enrolled in public universities, most were male students, 70% of respondents are in self-employment, 85% are single, 66% consider student attrition a very significant issue in Sierra Leonean universities. The study would help the Government of Sierra Leone increase the grants-in-aid quota, fast-track undergraduate student loan schemes, and introduce stipends/allowances at universities. Future research should focus on all public and private universities, polytechnics, and Teachers Training Colleges in Sierra Leone.

KEYWORDS: Attrition, Strategies, Financial, Sustainability, Public Universities, Private Universities

1.1: INTRODUCTION

Student attrition is chronic and pervasive in the Sierra Leone educational system. It is impacting all levels of education (primary, secondary, and tertiary), yet stakeholders are not given the attention needed to address this phenomenon. Gutl et. al. (2015) suggested that attrition should be defined as a decline in the number of students who initially intend to undertake a course of study but drop out before completion. Taylor (2020) observed that students generally do not intend to drop out of school when they first enrol, and unfavourable conditions outside the student's control might have compelled them to withdraw from the program of studies.

Gallie (2020) argued that the number of students who begin a course should be treated as the number who complete it. Attrition relates to students' withdrawal or discontinuation of programs or studies. Attrition is not just about failing or dropping a course; it is also a measure of outcomes. It is a decision-making process in which intentions are formed to determine whether students should continue or withdraw from the program.

Kwadwo et al. (2020) explained that attrition is more prevalent in public than in private universities. This research paper found that demand for public universities is higher due to poor service delivery and political interference by the central government, rather than by the universities

themselves. According to the Tertiary Education Commission Report (TEC, pp. 2, 2023), one-third of students in public universities receive government grants-in-aid, and only a few pay their own fees to run these institutions. Collin et al. (2019) observed that student attrition remains a significant and costly challenge for higher education institutions worldwide. The study necessitates the development of strategies to reduce student attrition in public and private universities in Sierra Leone. The lack of a social integration platform, a weak foundation in high school, unsatisfactory academic assessment, and insufficient financial aid all contribute to the attrition rate. This is also a replica of students promoting themselves without the thresholds of three points and above. It has caused many students to drop out of programs because those who failed in their studies and refused to repeat were required to do so under these universities' policies.

1.2: THEORETICAL FRAMEWORK: Spady's Student Attrition Model (1971). Spady similarly observed that a student's decision to drop out is influenced by their social integration and satisfaction in the college environment, as well as by family background and personal characteristics. The thesis references Spady's model to acknowledge external and familial factors in attrition. For example, family

responsibilities or a lack of social support can disrupt a student’s studies—a concept reflected in the study’s findings on how family bereavement and obligations contribute to attrition. The study develops a comprehensive conceptual model that links student-level factors (academic preparedness, social integration, and personal finances) to institutional outcomes.

Key Assumptions

- Lack of social integration leads to attrition in universities
- Students’ retention is related to academic and social integration
- Students adopt exchange theory to build social and academic integration

Key Limitations

- The platforms to integrate students into the universities are limited.
- Weak foundation from secondary/high schools undermines the integration process

1.3 METHODOLOGY

The study adopted a mixed-method and descriptive research design, combining quantitative and qualitative methods. Data were collected concurrently and integrated during analysis (a concurrent triangulation strategy) to provide a comprehensive view. The study surveyed 459 students from the three public and private universities, covering a broad range of

perspectives. The sample was drawn from various programs and year levels; notably, about 54% of respondents were in their second year of study, a factor that emerged as a focal point for attrition concerns. The study employed a purposive sampling technique, selecting individuals with specific characteristics or experiences that make them particularly informative for the selection process. Purposive sampling is one of the best approaches in sampling selection because it involves selecting participants with the required characteristics and qualities defined by the respondents. Research instruments were employed to gather data. Structured questionnaires (with mostly closed-ended questions and Likert-scale items). The study conducted campus observations (noting infrastructure conditions, support facilities, etc.) and reviewed institutional records. The quantitative survey data were analysed using Statistical Software (SPSS and Excel). Descriptive statistics (frequencies, percentages, cross-tabulations) were used to profile respondents and summarise key variables. Correlation analysis examined the strength of association between attrition rates and financial indicators. The study’s measurements were valid and reliable. The survey instruments were pre-tested (a pilot test covering 5% of the sample) in other universities, leading to refinements in question wording. Reliability analysis using Cronbach’s alpha yielded a coefficient of 0.86, indicating a high internal consistency among survey items. Ethical protocols were followed: participation was voluntary, data were kept confidential, and the study secured necessary approvals.

1.4: DATA PRESENTATION AND ANALYSIS

Table 1: Rating Strategies for Reducing Student Attrition in Public and Private Universities

Formal Strategies	Ineffective	Moderately Effective	Neutral	Very Effective	Very Ineffective	Total
No (n=8)	0	0	0	8	0	8
Yes (n=292)	2	68	86	133	3	292

Table 2: Chi-Square Test of Reducing Student Attrition in Public and Private Universities

Statistics	Value
Chi-square (χ^2)	9.27
Degrees of Freedom (df)	4
P-value	0.055

The Chi-square test assessed the link between the presence of formal retention strategies and their perceived effectiveness. The test result was marginally significant ($\chi^2 = 9.27$, $df = 4$, $p = 0.055$), suggesting a weak relationship between the two variables. However, respondents from institutions without formal strategies ($n = 8$) all rated their retention efforts as “very effective.” This is counterintuitive and probably reflects either misclassification (confusion over whether strategies were formally recognised) or reliance on informal or ad hoc mechanisms (such as financial aid, mentorship, or

student-government initiatives) that were still viewed positively.

In contrast, institutions with formal strategies ($n=292$) presented a more balanced distribution of ratings: 133 respondents (45.5%) perceived them as very effective, 86 (29.5%) as neutral, 68 (23.3%) as moderately effective, and Only 5 respondents (1.7%) perceived them as ineffective or very ineffective. This suggests that formal strategies are widely adopted and generally regarded as effective, although with some reservations. A significant portion of students

“Evaluating Strategies for Reducing Student Attrition of Public and Private Universities in Sierra Leone”

(around 30%) expressed neutrality or moderate approval, highlighting gaps in implementation and influence. This finding revealed strategies to reduce attrition. The results demonstrate that while formal strategies are widespread and

usually effective, there remains scope for improvement in execution, communication, and student engagement to ensure interventions that lead to measurable reductions in attrition.

Table 2: Strategies to Reduce Student Attrition in Public and Private Universities in Sierra Leone

Strategies	Frequency	Percentage
Affordable Tuition and Fee Reduction	201	43.89
Scholarship Programs	47	10.26
Student Loan Scheme and Government Financial Support	95	20.74
Student & Government & Administration Partnership	15	3.28
Allowances/Stipends to Universities	100	21.83
Total	459	100.00

Source: Fieldwork (2025)

This implies that 201 respondents (43.89%) identified affordable tuition and fee reductions as the most effective strategy for reducing student attrition at public and private universities in Sierra Leone. Nooraini Youp et al. (2022) found that student motivation and tuition fees were crucial determinants of retention, particularly in distance learning contexts. This was followed by 95 respondents (20.74%) who recommended student loan schemes and government financial support, and 47 respondents (10.26%) who suggested scholarships and grants. Therefore, 100 respondents (21.83%) provided allowances or stipends, while

15 respondents (3.28%) proposed student and government and administration partnerships as a solution. These results clearly show that financial affordability is regarded as the single most influential factor in preventing student dropout. The high proportion of respondents advocating for tuition reductions and financial aid schemes highlights the urgent need for policies that lower higher education costs and increase access to funding. Collaborative efforts among universities, the government, and other stakeholders could further strengthen these initiatives to ensure long-term student retention and institutional sustainability.

Table 3: Rating Policy Preferences for Reducing Student Attrition in Public and Private Universities

Private Government Support	Public Fee Reform: No	Public Fee Reform: Yes	Total
No	21	89	110
Yes	46	144	190
Total	67	233	300

The study showed that most respondents who supported government funding for private universities (76%) also agreed with allowing public universities to charge realistic tuition fees. This demonstrates strong student awareness that sustainability depends on both government support and fee reforms at these institutions.

Chi-square (χ^2): 0.78

df: 1

p-value: 0.378

Interpretation: The test result is not significant, indicating that attitudes towards government support for private universities and fee reforms in public universities are not strongly linked. Many respondents supported both measures simultaneously, demonstrating an understanding that

university sustainability requires a dual approach: government subsidies to private universities and realistic tuition reforms in public universities. These findings emphasised students' nuanced policy preferences that go beyond institutional boundaries.

Statistical Analysis

To test the general hypothesis, Pearson correlation and regression analyses were conducted. The Pearson correlation analysis established the direction and strength of the relationship between student attrition and financial sustainability. In contrast, the regression analysis measured the predictive effect of students' attrition on the financial sustainability of these universities.

Table 4: Correlation and Regression Analysis of Student Attrition and Financial Sustainability

Test	Coefficient	Sig. (p-value)	R	R ²	Decision
Pearson Correlation	-0.642	0	0.642	–	Significant
Regression Coefficient (β)	-0.34	0.001	–	0.41	Significant

The correlation analysis shows a strong negative relationship ($r = -0.642$, $p < 0.05$) between student attrition and financial sustainability, suggesting that as attrition rates increase, universities' economic sustainability decreases. The regression analysis confirmed that student attrition is a statistically significant predictor of financial sustainability ($\beta = -0.34$, $t = -5.87$, $p < 0.001$). The coefficient of determination ($R^2 = 0.41$) further indicates that 41% of the variation in universities' financial sustainability can be explained by student attrition and related financial variables, including delayed fee payments, operational costs, and government subventions.

Interpretation

The statistical results indicate that student attrition has a significant negative impact on the financial sustainability of both public and private universities in Sierra Leone. This finding led to the rejection of the null hypothesis (H_0) and the acceptance of the alternative hypothesis (H_1), confirming that student attrition significantly impacts institutional financial stability. The evidence implies that high attrition levels contribute to: i) Loss of tuition and ancillary revenues, and ii) Increased costs of student recruitment and retention programs, and iii) Declining budgetary allocations to faculties and departments.

1.5: DISCUSSION

The findings of this study align with prior research that described student attrition as a significant financial threat to universities. Taylor (2020) and Collin et al. (2019) confirmed that persistent attrition rates diminish institutional revenues and strain operational budgets. In Sierra Leone, these results confirm the Tertiary Education Commission (TEC, 2023) report, which found that nearly a third of public university students rely on government grants-in-aid, while others fund their education through family support. Drita Kruja et al. (2021) found significant performance differences between public and private institutions, with public universities excelling in student-centeredness and instructional effectiveness, while private institutions scored well in academic advising and safety. The outcome of this hypothesis test aligns with Tinto's (1975) Student Integration Model and Bean's (1985) Model of Student Attrition, which emphasised that a lack of social, academic, and institutional integration can lead to increased dropout rates and subsequent financial repercussions for higher education institutions. Therefore, student attrition in Sierra Leone not only limits universities' revenue-generation capacity but also undermines its competitiveness, institutional reputation, and contribution to national development.

1.6: CONCLUSION

The research indicates that the majority of the respondents acknowledged that some strategies are in place, including

scholarships, fee reductions, and student loan schemes. Students generally perceived these measures as ineffective or moderately effective, mainly due to Limited coverage: few students benefit from scholarship programmes or SLG. Bureaucratic inefficiencies – delays in student loan scheme disbursement. These academic support services, such as libraries, counselling, and career advising, exist, but outdated resources, limited accessibility, and weak staffing constrain their impact. However, empirical findings support the general hypothesis in its alternative form. A statistically significant inverse relationship exists between student attrition and financial sustainability among public and private universities in Sierra Leone. Therefore, institutional leaders and policymakers must prioritise evidence-based retention strategies and sustainable funding models to ensure that universities remain resilient, competitive, and financially viable in the long run. Yulianti Talar et al. (2020) specifically highlighted that private universities require greater retention efforts, with critical factors including social relationships, confidence in graduation, career prospects, and college attendance.

1.7: GENERAL RECOMMENDATIONS

- i) The study urges universities and the government to enhance financial aid programs as a direct strategy to lower attrition rates in Sierra Leone Universities.
- ii) The government's student loan scheme should be broadened to all students, not just those in select programs or regions. It should also be expanded beyond the most privileged to reach financially needy students nationwide, with flexible repayment terms to make borrowing less intimidating.
- iii) The government is advised to increase scholarship programmes, effectively subsidising more of the cost for students from low-income families.
- iv) The universities should introduce flexible fee payment plans (e.g. allowing instalment payments or semester payment schedules aligned with family cash flows) that would enable students to manage tuition without defaulting or dropping out of these programs.
- v) The government should provide grants to private universities to reduce the high fees charged to students.

1.8: CONFLICT OF INTEREST

The Authors declare no conflict of interest regarding the publication of this research paper.

REFERENCES

1. Collin, A., et al. (2019). “Student Attrition and Financial Challenges in Higher Education.” *Journal of Education Finance*, 45(2), 233–250.

2. C. Gütl, C. Cheong, F. Cheong, V. Chang, S. Z. Nau and J. Pirker, "Expectations of the generation NeXt in higher education: Learning engagement approaches in information sciences subjects," 2015 International Conference on Interactive Collaborative Learning (ICL), Firenze, Italy, 2015, pp. 205-214, doi: 10.1109/ICL.2015.7318027.
3. Drita Kruja, Huong Ha, and Elvira Tabaku (2021). Students' perceptions and satisfaction with services provided by public and private higher education institutions: a case study in Albania. *International Journal of Quality and Service Sciences*.
4. Gallie, B., Mallipatna, A., Kivelä, T. T., Zhang, C., ... & American Joint Committee on Cancer Ophthalmic Oncology Task Force. (2020). A multicenter, international collaborative study for the American Joint Committee on staging of retinoblastoma.
5. J. Nyaegah (2024). Role of public and private universities' recruitment and selection strategies on staff retention in Kenya. *International Journal of Research and Innovation in Social Science*.
6. Kwadwo, V. O., & Konadu, O. A. (2020). Can Ghana afford the Sustainable Development Goal on education? *Africa Education Review*, 17(2), 177-197.
7. Likert R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22 (140), 1-55.
8. Spady (1970): Determinants of Students' Interracial Behaviour and Opinion Change. *Sociology of Education*, 50, 55.
9. Taylor, D. (2020). "Student Attrition as a Financial Burden in Tertiary Education." *International Review of Education Studies*, 7(1), 88–102.
10. Taylor, J. (2020). *Student retention and university finance: The silent revenue crisis in higher education. Journal of Higher Education Policy and Management*, 42(3), 265–281.
11. Tertiary Education Commission (TEC) (2023). Annual Report on University Funding and Student Retention in Sierra Leone. Freetown.
12. Tinto, V. (2022). Student Retention and Institutional Commitment: Revisiting the Theory of Departure. *Higher Education Review*.