

Factors Influencing Students' Attrition on the Financial Sustainability of Public and Private Universities in Sierra Leone

Dr Abu Kai Kamara¹, Dr Sualiho Sheriff²

¹Fourah Bay College-USL

²Head of Department-Njala University

ABSTRACT: The study identified the factors influencing student attrition and its impact on the financial sustainability of public and private universities in Sierra Leone. The study examined the Tinto's theory of student departure (1975) and employed a descriptive research design. The instruments employed during data collection included a structured questionnaire, interview guide and campus observation. The study's target population was selected from different programmes at three public and three private universities in Sierra Leone. The study sampled 300 respondents. The study converted data into percentages, cross-tabulation, and regression analyses using SPSS, excel, and Organisational Network Analysis (ONA) data collection tools, from January 1, 2026, to March 31 2026. A five-point Likert scale (1932) was employed to analyse data. The validity and reliability of the instruments were tested at other universities in Sierra Leone using Cronbach's alpha; the coefficient was 0.86, indicating good internal consistency, (5%) of the valid questionnaires were pretested. (77%) of respondents considered student attrition a very significant issue in Sierra Leone's public and private universities. Ethical protocols were considered during data collection. The study will guide policymakers in the education sector in reviewing and developing new policies to mitigate students' dropouts of public and private universities in Sierra Leone.

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

1.1 BACKGROUND CONTEXT

Student attrition is a generic issue that undermines the financial stability of academic institutions in Sierra Leone. After independence in 1961, the country was renowned for its advancement in higher education, culminating into the Athens of West Africa. This accolade was short-lived as the country slipped into a civil conflict that decimated lives and properties for over a decade (1991–2002). The educational infrastructures were severely impacted, as evidenced by low success rates at the internal and external examinations. Not all universities were exempt from the downward trend in academic performance, the rise in student dropout rates, and the financial challenges these institutions faced.

Public and Private Universities in Sierra Leone are regulated by the 2021 Universities Act, which governs their operations through ordinances, statutes, and a code of conduct that governs academic and financial administration. Student attrition is a troubling issue for educational institutions worldwide, and educational institutions in Sierra Leone are not immune to student dropout rates, which negatively impact their finances. Public and private universities are not financially viable in meeting their current obligations by non-payments of extra-allowances to staff, delays to repay students loan scheme, political interferences and the rate of corruption around the universities finances.

There have been instances of ongoing strike action, financial investigations due to mismanagement of funds, the removal of finance directors, financial improprieties, and political interference, which have led those found wanting to seek refuge in other institutions. In 2018, Sierra Leone experienced sporadic changes in the education sector, with the central government placing greater emphasis on the Human Capital Development Programmes by developing policies, implementing student loan schemes, and providing Sierra Leone Grants-in-Aid for university students. Despite these provisions, student attrition remains a significant crisis affecting schools and universities worldwide, with little attention from the central government to address the rapid dropout rate in our public and private universities. **Narmadifa Sari et.al. (2023)** identified the main factors influencing student's attrition in higher educational institutions are personal economics satisfaction, academic performance, and family economics. This implies that individuals with weak university foundations are likely to drop out of programs. Political interferences during the admission of fresh candidates who might not have met the general and departmental entry requirements but are influenced politically to access the university, and these issues adversely undermined the university standards because these categories of students are admitted into the universities without the basic foundation from high schools to shape their

career paths, but forced their way through political connotations to access universities across Sierra Leone.

1.2: THEORETICAL REVIEW: Tinto's Theory of Student Departure (1975)

Tinto's model (1975) opined that student retention is related to academic and social integration into the institution. Lack of integration can lead to higher attrition rates, with financial repercussions for the university. This theory emphasises that the organisational perspective focuses on the effects of various organisational attributes on unattended students. The theory further explains the permanence process in higher education as a function of the degree of adjustment between the student and the institution, as reflected in the integration of academic and social experiences.

Key Limitations

- The platforms to integrate students into the university are limited
- Weak foundation from high schools undermines the integration process
- Political Connotations undermine the academic and social integration process in universities
- Lack of financial support hinders the academic and social integration process

1.3: REVIEW OF RELATED WORK

Student attrition is the phenomenon of students discontinuing their studies before completing their degrees, posing a significant challenge for universities worldwide. The factors contributing to students attrition are multifaceted and have been the subject of numerous studies in recent years. Several studies indicate that when students perceive the academic workload as overwhelming or feel unprepared for the challenges of university work, they are more likely to drop out.

Milan et.al. (2018) identified that the key factors influencing student's attrition are pressure of study, financial problems, academic preparedness, course design, and the availability of support services, such as tutoring and academic counselling, have been highlighted as critical factors influencing students' decisions to persist or withdraw from their studies. **Jones et al. (2021)** suggest that fostering a welcoming and inclusive social environment is as important as academic support, while financial difficulties are a prevalent reason for student attrition in universities. **Hossler, D., Ziskin, M., & Gross, J., 2021** opined that public universities, which often serve a

larger population of economically disadvantaged students, report higher attrition rates due to financial barriers.

Financial challenges are identified as a primary driver of student withdrawal, with students from lower-income families disproportionately affected by limited access to scholarships. Grants and financial aid programmes play a crucial role in mitigating this issue. However, the research shows that many students who qualify for aid are unaware of available resources or face bureaucratic barriers. Public and private universities must, therefore, ensure that financial support systems are transparent, accessible, and adequate to prevent attrition due to economic hardship. The personal and psychological factors, such as mental health issues, family responsibilities, and stress, also contribute significantly to student attrition in universities. **Collin et al. (2019)** examined the idea that student attrition is better understood as a wicked problem that cannot be strategically addressed using traditional and problem-solving approaches, but rather through radical-based policies that negatively impact reputation and revenue generation. Previous studies by **Hossler et. al., 2020**, showed that students who feel isolated or unsupported by peers and faculty are at greater risk of attrition. A recent study on student attrition in the UK found that first-year students are particularly vulnerable due to the social adjustments required during the transition from high school to university.

1.4: RESEARCH METHODS AND DESIGN

The study employed a descriptive research design to identify the factors influencing students' attrition on the financial sustainability of three public and three private universities in Sierra Leone. The target population included the academic staff, administrative staff, parents and students from these universities using a random sampling selection technique. The study employed questionnaire administration, campus observation and documentary review with a six-point Likert scale (Likert 1932). The quantitative data were analysed using SPSS, excel and qualitative data on policy documents of these universities. Descriptive statistics such as percentages, cross-tabulation, chi-square test and regression analysis described the study's analyses. The reliability analysis using Cronbach's alpha yielded a coefficient of 0.86, indicating high internal consistency of the research instruments. A standard ethical protocol was followed strictly, participation was voluntary, data were kept confidential, and the study secured all necessary approvals.

1.5: RESULTS

The rating of student attrition in public and private universities is presented in the table below:

Table 1: Significance of Student Attrition in Public and Private Universities of Sierra Leone

Type	Insignificant	Neutral	Significant	Very Insignificant	Very Significant	Total	Percent
Private	3	5	44	0	26	78	33%
Public	10	7	32	1	172	222	77%
Total	13	12	76	1	198	300	100%

Source: Fieldwork 2026

The study from table 1 indicates that most respondents in public and private universities rated attrition as very significant. However, **public universities** had a higher share of “very significant” responses (**77%**) than **private universities** (**33%**), whose responses were more evenly distributed.

This suggests student attrition is seen as a greater crisis in public universities in Sierra Leone.

Chi-square (χ^2): 59.17 df: 4, p-value: < 0.001

This implies that the test is highly significant, indicating that the perceived seriousness of attrition differs significantly between public and private universities. For public universities, **over (77%)** rated attrition as “very significant” while private universities' ratings were more spread out, with many in the “significant” and “neutral” categories. This confirms that attrition is perceived as a systemic crisis in public universities, reflecting their large enrolments and

greater exposure to financial and administrative challenges. In contrast, private institutions view attrition more narrowly, often as a tuition-payment issue. However, independent samples t-test: Outcome: Mean “Attrition Impact” score (mapped 1–5) & Universities: Public vs Private universities, Public (n = 222): M = 4.64 & Private (n = 78): M = 4.19, **Levene’s test (equal variances): p = 0.778** → assume equal variances, t (298) = 4.41, p < .001, **Cohen’s d = 0.58 (moderate effect)**

This implies that Students in public universities rate the impact of attrition significantly higher than those in private universities. The moderate effect size indicates a practically meaningful difference, aligning with your chi-square results, which show that public institutions perceive attrition as a more acute, system-wide issue due to (enrolments, funding bottlenecks, and administrative constraints).

Table 2: Regression Analysis of Students' Attrition in Public and Private Universities

Predictor	Odds Ratio (Exp(B))	p-value	Interpretation
Institution Type	2.15	0.012	Public universities are 2.15 times as likely as private universities to report a high risk of attrition.
Financial Hardship	3.8	<0.001	Students citing financial hardship are 3.8 times more likely to face a high risk of attrition.
Family Stress	1.42	0.118	Family and personal issues increase the risk of attrition, but the effect is not statistically significant.
Academic Support	0.62	0.041	Students with accessible support services are 38% less likely to face a high risk of attrition.

Source: Fieldwork 2026

The study from table 2 implies that **Model Fit: χ^2 (4) = 46.7, p < .001** → the Model is statistically significant. Nagelkerke $R^2 = 0.36$ → Predictors explain ~36% of the variance in attrition risk. Financial hardship (**OR = 3.8, p < .001**). This confirms that affordability is the primary determinant of dropout risk. Public universities are significantly more vulnerable to attrition pressures compared to private universities. This suggests that financial hardship is nearly 4

times more likely to lead students to drop out. Public universities are particularly vulnerable, while academic support services notably decrease the risk of student attrition in these universities. These findings collectively highlight that addressing financial barriers and enhancing support services are the most effective strategies for improving students’ retention in these universities.

Table 3: Cross-tabulation of Factors Influencing Students' Attrition on Public and Private Universities in Sierra Leone

Institution	Key Factors	Notable Patterns
Public Universities	Financial hardship, poverty, weak academic foundation, policy compliance, administrative bottlenecks, poor teaching methods, extortion, and peer pressure	More diverse and systemic causes of dropout, covering financial, academic, administrative, and social dimensions
Private Universities	Fees payment, financial hardship, self-promotion, personal/family-related reasons	More concentrated around financial issues, especially tuition payment and self-related factors

Source: Fieldwork 2026

The study from table 3 above, reported that public universities have a broader, more diverse range of drivers of students’ attrition, including financial hardship, poverty, weak academic foundations, poor teaching methods, administrative bottlenecks, and institutional policy-related challenges. This suggests that attrition in public universities is a multi-dimensional issue, reflecting both economic pressures and systemic weaknesses.

Private universities reported fewer categories of causes of attrition, with responses heavily concentrated on financial challenges such as tuition payment difficulties and limited access to financial aid programmes. This finding is consistent

with the structural reality that private universities exclusively rely on fee-paying students, making tuition affordability the primary determinant of persistence. The analysis confirms that while financial hardship remains the dominant factor for both public and private universities, the breadth of drivers of attrition is far greater in public institutions, where structural and administrative inefficiencies compound financial stress. These findings align with Tinto’s (1975) theory of student departure, which emphasises the combined influence of financial, academic, and institutional integration on student retention in these universities.

Table 4: Chi-Square Test between Public and Private Universities in Sierra Leone

Statistics	Value
Chi-square (χ^2)	201.23
Degrees of Freedom (df)	108
P-value	< 0.001

Source: Fieldwork 2026

The study from table 4 above discussed that the Chi-square test was employed to examine whether the reasons for attrition differ significantly between public and private universities in Sierra Leone. The results were statistically significant ($\chi^2 = 201.23$, $df = 108$, $p < 0.001$), indicating that the distribution of reasons for student attrition varies by institution type.

1.6: DISCUSSIONS

The study discussed that financial hardship is the single most significant determinant of student attrition in Sierra Leonean universities. According to Annie (2018) also observed that student attrition is a widespread issue that affects both private and public institutions. A majority of students (70.8%) rely heavily on family income as their primary source of funding, with only a very small proportion accessing scholarships, grants, and the Student Loan Scheme. This dependence on family financing renders students extremely vulnerable to shocks such as delayed remittances, bereavement, or household economic crises and the lack of robust student financing schemes reinforces financial hardship as the principal push factor for dropout in these universities.

1.6.1: Multi-Dimensional Nature of Students' Attrition in Public and Private Universities: The study confirms that attrition is a multidimensional phenomenon as most students repeatedly cited academic challenges, including poor teaching methods, inadequate feedback, and weak foundations in secondary education. Infrastructure deficits—such as overcrowded classrooms, inadequate hostel facilities, insufficient laboratories, and limited ICT infrastructure—were also highlighted. Administrative bottlenecks—such as delayed registration processes, excessive bureaucracy and poor communication—further exacerbate the issue. These findings resonate with Tinto’s theory of student departure (1975), which emphasises that attrition arises not only from economic strain but also from weak academic and social integration. In Sierra Leone, the combination of financial, academic, and institutional barriers results in widespread and systemic attrition across public and private universities.

1.6.2: Student Attrition Resulting in Academic and Financial Crisis of Universities

The study's evidence clearly demonstrates that student attrition is not just a social or academic issue, but a significant financial challenge for universities in Sierra Leone. **Collin et al. (2019)** examined that student attrition should be understood as a wicked problem that cannot be strategically addressed using traditional problem-solving approaches, but rather through radical-based policies that negatively impact reputation and revenue generation. Student attrition hampers student success by disrupting academic progress, lowering completion rates, and weakening the nation's intellectual pipeline. Student attrition undermines universities' income streams, which are the primary source of funding. Losing even a small percentage of enrolled students results in significant declines in tuition revenue, which already underpins university finances. This dual impact demonstrates that attrition poses both an educational and financial crisis, threatening the overall sustainability of the higher education system. **Jones et al. (2021)** suggest that fostering a welcoming and inclusive social environment is as important as academic support, while financial difficulties are a prevalent reason for student attrition in public universities, particularly in economically diverse regions.

1.7: CONCLUSION

The study concludes that student attrition in Sierra Leonean universities is a complex, multidimensional problem that poses a significant threat to the financial sustainability of higher education institutions. A single factor does not drive attrition; rather, the interaction of financial, academic, infrastructural, family-related, and administrative barriers, each reinforcing the others, creates conditions that push students out of the system. Financial hardship emerged as the most critical factor, with students consistently reporting that tuition fees were unaffordable, and many relying heavily on family support while having minimal access to scholarship programs, student loan schemes, and government grants. The study revealed academic and institutional weaknesses as key contributors to student's attrition.

1.8: RECOMMENDATIONS

The research paper offers the key recommendations:

- i) The study recommends improving students' financial support programs and diversifying university income streams to enhance the financial sustainability of Sierra Leone universities.
- ii) The study also recommends that expanding government scholarship programs, student loan scheme for undergraduate programmes, and flexible fee payment plans to alleviate the financial burdens on students in Sierra Leone universities.

1.9: FUTURE RESEARCH

Future research should be focused on all public and private universities, polytechnics, and Teachers' Training Colleges in Sierra Leone.

1.10: CONFLICT OF INTEREST

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

REFERENCES

1. Annie (2018): Factors affecting students attrition and financial sustainability. Principles and practices of students' attrition and financial sustainability of public and private universities, *Managerial Auditing Journal*, 2015;19(1):131-133.
2. Collin, A., et al. (2019). "Student Attrition and Financial Challenges in Higher Education." *Journal of Education Finance*, 45(2), 233–250.
3. Hossler, D., Ziskin, M., & Gross, J. (2020). *The financial and institutional implications of student attrition: Evidence from higher education institutions. Research in Higher Education*, 61(7), 915–938.
4. Jones & Braxton (2021). A search for common ground: conversations about the most challenging questions in K-12 education. *Journal of Education Policy*, 37, 858–860.
5. Likert R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22 (140), 1–55.
6. Sierra Leone's Universities Act (2021), Supplement to the Sierra Leone Gazette Volume. CXLXII No. 53
7. Tinto, V. (1975). Student Retention and Institutional Commitment: Revisiting the Theory of Departure. *Higher Education Review*.
8. Milan et.al. (2018): The relationship between audit committee and decision makers within an organization, *Audit Financials-2014*; 16(5):137
9. Narmadifa Sari et.al. (2023): *Advanced Journal of Social Sciences and Law*, Volume 5.