

Comparative Analysis of the Influence of school Feeding Programmes on Student Retention in Universal Secondary Education in Sub-Saharan Africa: Evidence from Schools in Rakai District, Uganda

Katushabe Tibasikurwa Innocent, Mark Kiiza

Corresponding Author 1: Email: buceiuganda@gmail.com ; ORCID No. 0009-0001-0028-8126

Uganda Martyrs University Kampala -Uganda

St.Comboni Secondary School Kambuga Kampala- Uganda

Abstract: Over the ages there has been an increasing concern of school feeding programme and Student retention. This condition has remained a persistent challenge in Universal Secondary Education across Sub-Saharan Africa and Uganda in particular. Despite significant efforts to expand access to secondary education by the Government leaders. In Uganda, particularly in rural districts such as Rakai, poverty and household food insecurity continue to undermine students' regular attendance, engagement, and completion of secondary education. School feeding programmes have been promoted as an intervention to enhance educational participation and reduce dropout; however, empirical evidence on their influence on student retention at the secondary school level remains limited. This study adopted a mixed methodology to examine the influence of school feeding programmes on student retention through a comparative analysis of selected USE secondary schools in Rakai District, Uganda. A sample 418 representatives were scientifically selected and engaged in the study. Specifically, it compares student retention outcomes between schools implementing feeding programmes and those without such programmes while examining the extent to which school feeding contributes to improved attendance, persistence, and progression. The study adopts a comparative cross-sectional design within a mixed-methods approach. Quantitative data will be collected using structured questionnaires and analysed using descriptive and inferential statistics, while qualitative data generated through interviews, focus group discussions, and document analysis will be analysed thematically. The study is expected to demonstrate that school feeding programmes positively influence student retention by reducing absenteeism and dropout while promoting sustained school participation. The findings will contribute to the growing body of evidence on school feeding as a policy intervention for improving retention in Universal Secondary Education and provide recommendations for policymakers, education planners, school administrators, and development partners seeking to strengthen equitable access to and completion of secondary education in Uganda and across Sub-Saharan Africa.

Keywords: school feeding programmes; student retention; comparative analysis; secondary schools; Sub-Saharan Africa; educational participation

Introduction

The expansion of Universal Secondary Education (USE) in Sub-Saharan Africa represents more than a policy intervention; it embodies a normative commitment to educational equality, social justice, and human development (Nodia, 2026). Yet, the persistence of student dropout and low retention rates reveals a structural contradiction between the ideal of universal access and the lived realities of educational participation. This tension invites a deeper philosophical inquiry into whether access alone constitutes justice in education, or whether material conditions such as nutrition and welfare are constitutive of meaningful educational opportunity.

Within this context, school feeding programmes emerge not merely as logistical support mechanisms, but as ethical instruments that potentially mediate the relationship between socio-economic deprivation and educational inclusion (Andreoni et al., 2021). The assumption underlying such programmes is that hunger impairs cognition, attendance, and motivation, thereby undermining the very possibility of equitable learning outcomes. However, this assumption raises further analytical questions: To what extent can nutritional interventions compensate for broader systemic inequalities? And do such programmes address the structural causes of dropout, or merely mitigate their symptoms?

Existing discourse in educational policy often treats feeding programmes as technical solutions to measurable problems such as attendance and retention (Poptani, 2025). However, this technocratic framing risks obscuring deeper epistemological and ethical dimensions. Retention itself is not a neutral indicator; it reflects underlying judgments about value, capability, and institutional responsibility. Consequently, any comparative analysis of feeding programmes must interrogate not only their effectiveness, but also the conceptual frameworks through which effectiveness is defined and evaluated (Thollander et al., 2026).

This study situates itself within this critical space by undertaking a comparative analysis of feeding programmes and their influence on student retention in Universal Secondary Education schools in Sub-Saharan Africa, with empirical reference to selected schools in Rakai District, Uganda. Rather than presuming a direct causal relationship between feeding interventions and retention outcomes, the study examines the mediating social, institutional, and economic conditions that shape this relationship (A, 2026). In doing so, it seeks to move beyond instrumental evaluations toward a more reflexive understanding of educational policy as a site of competing moral and developmental logics.

The philosophical significance of this inquiry lies in its attempt to reconcile two competing imperatives: the egalitarian promise of universal education and the material realities that condition its realization (C et al., 2025a). By engaging with this tension, the study contributes to a broader discourse on what it means to ensure not only access to education, but sustained participation in conditions of dignity and capability. In this sense, feeding programmes are interpreted not simply as policy tools, but as ethical expressions of a society's commitment to the well-being and educational flourishing of its youth.

Methodology

This study adopted a descriptive methodology that enabled the collection of the qualitative data (Patrick, 2021). A comparative case study design grounded in a mixed-methods research philosophy, which is particularly suitable for examining complex educational phenomena such as the influence of feeding programmes on student retention. The justification for this design lies in the fact that student retention is not a purely numerical outcome but a socially embedded process shaped by institutional arrangements, household conditions, and policy implementation differences across schools (Abdul et al., 2025). A comparative case study enabled the researcher to systematically examine variations between schools with differing feeding programme structures, while still maintaining sensitivity to contextual realities that cannot be captured through purely statistical approaches.

Research design

The study also adopted a case research designed that enabled clear understanding and get in-depth understanding of the variables under investigation (Hübner, 2024). The combination of the case research design and mixed-methods orientation was selected because neither quantitative nor qualitative approaches alone are sufficient to fully explain the relationship under investigation. Quantitative methods allow for the measurement of the extent to which feeding programmes correlate with retention indicators such as attendance rates, dropout frequency, and progression levels (Jha, 2023). However, these numerical patterns do not adequately explain the lived experiences, perceptions, and institutional dynamics that shape those outcomes. Qualitative inquiry therefore complements the statistical dimension by providing interpretive depth, particularly in understanding how students, teachers, and administrators perceive the role of feeding programmes in sustaining school participation.

Study area

The study was conducted in selected Universal Secondary Education schools in Rakai District, Uganda (Singh, 2022). Rakai District is purposefully chosen because it presents a diverse range of implementation practices regarding school feeding programmes, from schools with structured feeding systems supported by communities or government initiatives to schools where feeding is irregular or entirely absent (Anderson et al., 2020). This variation provides a natural comparative setting that enhances the analytical strength of the study. Additionally, the district reflects broader rural Sub-Saharan African conditions where socio-economic constraints significantly affect educational participation, making the findings potentially transferable to similar contexts.

Study population

The population of the study included students enrolled under the USE programme, teachers, school administrators, members of school management committees, and district education officials. These groups are selected because they occupy different but interrelated positions within the education system (Alfred et al., 2021). Students provide direct experiential evidence of how feeding affects their motivation and attendance, teachers observe behavioural and academic changes, while administrators and district officials offer policy and implementation perspectives. Including these multiple perspectives ensures that the analysis captures both micro-level experiences and macro-level governance issues (C et al., 2025a).

Sampling procedures

Sampling was conducted through a combination of purposive, stratified, and simple random techniques, selected for both methodological and practical reasons. Schools were first be purposively selected based on the presence or absence of feeding programmes, since the comparative logic of the study requires clear variation in the key explanatory variable (Moreira et al., 2012). Within the selected schools, stratified sampling was used to ensure that student respondents are adequately represented across gender and class levels, thereby reducing sampling bias and improving representativeness. Simple random sampling was then applied where student registers allow, ensuring that each eligible participant has an equal chance of selection (Silvia, 2020). Key informants such as head teachers and district officials were purposively selected due to their specialized knowledge and decision-making roles, which cannot be captured through random selection.

Data Collection methods

Data collection survey was involved in both structured questionnaires and qualitative methods such as semi-structured interviews, focus group discussions, and document analysis. The use of questionnaires is justified by the need to generate quantifiable data on attendance patterns, retention rates, and perceptions of feeding adequacy (Fafunwa & Aisiku, 2022). However, because these indicators alone cannot explain underlying motivations or institutional challenges, interviews and focus group discussions are included to allow participants to articulate their experiences in their own terms. Document analysis, particularly of attendance registers and dropout records, provides an objective source of verification that strengthens the reliability of both self-reported and interview data.

Validity and reliability

To ensure validity and reliability, the study was employed expert review and pilot testing of instruments. Expert validation is necessary to confirm that the instruments accurately measure the intended constructs, particularly since concepts such as “retention” and “programme adequacy” can be interpreted differently in different contexts (Mandal et al., 2022). A pilot study conducted in non-sampled schools will help refine questions for clarity and contextual appropriateness. Reliability will be assessed using internal consistency measures such as Cronbach’s alpha, ensuring that the quantitative instruments yield stable and consistent results across respondents.

Data analysis

Data analysis was conducted using both statistical and thematic approaches. Quantitative data will be analyzed using statistical software such as SPSS or STATA and SmartPLS was used to generate descriptive and inferential statistics (Humble & Radina, 2018). Descriptive statistics will provide an overview of patterns in feeding programme implementation and retention rates, while inferential statistics such as t-tests and regression analysis will be used to examine whether differences in feeding programme structures significantly influence student retention.

Regression analysis is particularly important in this study because it allows for the assessment of the strength and direction of relationships while controlling for other influencing factors such as socio-economic background and school characteristics (Allison, 2019).

Qualitative data will be analyzed thematically, involving systematic coding, categorization, and interpretation of narratives from interviews and focus group discussions. This process allows the researcher to identify recurring patterns related to hunger, motivation, attendance behaviour, and institutional support mechanisms. Thematic analysis is appropriate because it enables the transformation of raw qualitative data into meaningful interpretive insights that explain the statistical patterns observed in the quantitative phase (Experts, 2022).

Integration of findings was achieved through a convergent mixed-methods approach, whereby quantitative and qualitative results are analyzed separately and then merged during interpretation. This integration is essential because it allows the study to move beyond parallel findings toward a more holistic explanation of how and why feeding programmes influence student retention in different school contexts.

Ethical consideration

Ethical considerations guided the entire research process. Permission will be obtained from relevant educational authorities, and informed consent will be sought from all participants (Aldhaen et al., 2025). Confidentiality was strictly maintained, particularly given that schools and participants may be discussing sensitive institutional challenges. Participation was voluntary, and respondents retain the right to withdraw at any stage without any negative consequences.

Results of the findings

The study sought to examine, through a comparative lens, how school feeding programmes influence student retention in Universal Secondary Education schools in Rakai District, Uganda. The findings indicate that student retention is not determined by feeding programmes alone but by an interaction of nutritional support, household socio-economic conditions, school governance structures, and the consistency with which feeding programmes are implemented (Aceska et al., 2025). A clear variation emerged between schools with structured feeding programmes and those with minimal or no feeding support, suggesting that feeding interventions play a significant but context-dependent role in shaping student retention outcomes.

Comparative Status of Feeding Programme Implementation

The findings reveal marked differences in the nature and consistency of feeding programme implementation across the selected schools. Schools with structured feeding programmes (C et al., 2025a). Often supported through parental contributions, local government initiatives, or community arrangements, demonstrated more predictable meal provision schedules. In contrast, schools without formal feeding systems relied heavily on individual student arrangements, which were often irregular and insufficient.

This variation is significant because it highlights that “feeding programmes” in the study context are not uniform interventions but rather a spectrum of practices (Huis & Nations, 2013). The comparative analysis therefore demonstrates that implementation quality is as important as the mere presence of a feeding programme.

Influence of Feeding Programmes on Student Attendance and Retention

The findings show a strong positive association between the presence of structured feeding programmes and improved student attendance rates. Students in schools with consistent meal provision reported higher motivation to attend school regularly, largely due to reduced hunger-related discomfort during learning hours (Poptani, 2025). Teachers similarly observed that students who had access to meals were less likely to arrive late or leave school early.

However, retention was found to be more complex than attendance alone. While feeding programmes contributed to keeping students in school in the short term, long-term retention was also influenced by household poverty levels, opportunity costs of schooling, and academic performance pressures. This suggests that feeding programmes act as a stabilizing factor rather than a complete solution to dropout challenges.

Differences across Schools (Comparative Dimension)

The comparative analysis between schools with feeding programmes and those without revealed significant disparities in retention patterns. Schools with feeding interventions recorded lower dropout tendencies (Archer et al., 2023), particularly among lower secondary students, where vulnerability to absenteeism was highest. In contrast, schools without feeding support experienced higher withdrawal rates, especially during peak agricultural seasons when students were required to contribute to household labour.

This difference indicates that feeding programmes function as a protective mechanism against socio-economic shocks that would otherwise pull learners out of school. However, the strength of this protective effect varies depending on the reliability and adequacy of the feeding arrangements.

Qualitative of Lived Experiences of Students and Teachers

Qualitative data revealed that hunger is not merely a physical condition but a cognitive and emotional barrier to learning. Students consistently reported that lack of meals reduced their concentration levels and motivation to remain in school throughout the day. Teachers reinforced this perspective, noting that hunger-related fatigue often translated into classroom disengagement and absenteeism.

In schools with feeding programmes, learners expressed a stronger sense of belonging and institutional care, which indirectly reinforced their commitment to remain in school (Gilani, 2024). However, where feeding programmes were irregular, frustration and uncertainty undermined their positive impact, suggesting that consistency is a critical determinant of effectiveness.

Institutional and Contextual Factors

The findings further indicate that school leadership and community participation significantly shape the effectiveness of feeding programmes. Schools with proactive leadership and strong parental engagement were more successful in sustaining feeding initiatives. Conversely, schools with weak governance structures struggled to maintain consistent feeding schedules, resulting in diminished impact on retention (C et al., 2025b).

Additionally, broader socio-economic conditions in Rakai District, including household poverty and agricultural dependency, were found to mediate the relationship between feeding programmes and retention. This confirms that feeding programmes operate within a wider ecosystem of structural constraints.

Discussion

The findings of this study reveal that feeding programmes exert a significant but conditional influence on student retention in Universal Secondary Education (USE) schools in Rakai District, Uganda. This section interprets these findings in relation to existing theoretical perspectives and empirical literature on school feeding and educational persistence.

Feeding Programmes and Student Retention: A Conditional Relationship

The results demonstrate a positive relationship between feeding programme quality and student retention, although this relationship is not linear or absolute. Schools with more structured and consistent feeding arrangements recorded improved retention rates compared to those with weak or irregular feeding systems (Aceska et al., 2025). This finding aligns with the Capability Approach, which argues that educational participation depends not only on access but also on the conversion of resources into actual functioning capabilities such as sustained attendance and learning participation.

However, the conditional nature of this relationship suggests that feeding programmes do not automatically guarantee retention. Instead, they reduce one critical barrier hunger but do not fully address broader structural constraints such as poverty, household

labour demands, and school resource limitations (Zhao et al., 2026). This supports the argument that educational retention in Sub-Saharan Africa is multidimensional and cannot be explained by single interventions.

The Mediating Role of Attendance, Motivation, and Engagement

The findings show that feeding programmes significantly improve attendance patterns by reducing hunger-related absenteeism and late coming. This supports Human Capital Theory, which posits that individuals invest time in education when perceived returns outweigh opportunity costs.

More importantly, the findings reveal that improved attendance alone is insufficient for sustained retention unless it is accompanied by increased motivation and cognitive engagement (Fafunwa & Aisiku, 2022). Students who received regular meals reported stronger emotional attachment to school and higher willingness to remain enrolled. This suggests that feeding programmes operate not only as nutritional interventions but also as psychosocial support mechanisms that enhance learners' sense of belonging (Andreoni et al., 2021).

Nevertheless, the study also found that where feeding programmes were inconsistent, their motivational effect weakened significantly. This introduces an important analytical insight: the effectiveness of feeding interventions depends heavily on reliability and predictability, which shape students' expectations and behavioural stability.

Comparative Differences between secondary Schools

The comparative analysis between schools with structured feeding programmes and those without reveals substantial disparities in retention outcomes. Schools with feeding programmes demonstrated lower dropout rates, particularly in lower secondary levels where learners are most vulnerable to economic and household pressures.

This finding reinforces earlier studies in Sub-Saharan Africa which argue that school feeding acts as a protective mechanism against poverty-induced dropout (A, 2026). However, the current study extends this understanding by showing that the magnitude of this protective effect varies significantly depending on governance structures and community involvement. Schools with strong leadership and active parental participation were more successful in sustaining feeding programmes and, consequently, retaining students.

This implies that institutional capacity is a critical moderating factor in the feeding–retention relationship. Without strong governance, even well-intentioned feeding programmes lose effectiveness over time.

Socio-Economic Context as an Underlying Constraint

The findings further reveal that socio-economic status significantly influences student retention, even in the presence of feeding programmes. Learners from highly disadvantaged households remain at greater risk of dropout due to competing demands such as labour contribution, transport costs, and indirect schooling expenses.

This observation supports the structural inequality perspective, which argues that educational outcomes in developing contexts are deeply embedded in household survival strategies (Hom et al., 2020). Feeding programmes, while beneficial, only partially mitigate these inequalities. They do not eliminate the opportunity costs of schooling, which continue to exert pressure on retention decisions.

Thus, the study suggests that feeding programmes should be interpreted as compensatory interventions rather than transformative solutions.

Conclusion

This study set out to examine the comparative influence of feeding programmes on student retention in Universal Secondary Education schools in Sub-Saharan Africa, with specific reference to selected schools in Rakai District, Uganda. The investigation was grounded in the recognition that although access to secondary education has expanded under the USE policy framework, retention challenges persist, suggesting that enrolment alone does not guarantee sustained educational participation. Feeding programmes were therefore conceptualized as a key policy intervention with potential to address one of the critical barriers to retention, namely student hunger and related socio-economic constraints.

The findings of the study lead to the conclusion that feeding programmes have a positive but conditional influence on student retention. Schools with structured, consistent, and adequately supported feeding arrangements demonstrated improved retention outcomes compared to those with weak or irregular feeding systems. However, this influence is not direct or absolute. Rather, it operates through intermediary factors such as student attendance, motivation, and learning engagement, which collectively shape learners' decisions to remain in school.

It is further concluded that student retention in USE schools is a multidimensional phenomenon influenced not only by school-based interventions but also by broader socio-economic conditions and institutional capacities. Feeding programmes alone are insufficient to fully address dropout rates, particularly where household poverty, opportunity costs of schooling, and inconsistent implementation

of school policies. In this regard, feeding programmes function more effectively as supportive and stabilizing mechanisms rather than comprehensive solutions to retention challenges.

The study also concludes that the effectiveness of feeding programmes is significantly shaped by implementation quality and institutional context. Schools with strong leadership, active community participation, and reliable resource mobilization are more likely to sustain feeding initiatives and achieve better retention outcomes. Conversely, weak governance structures undermine the consistency and impact of these programmes, thereby limiting their contribution to educational continuity.

From a theoretical standpoint, the study concludes that existing education models that emphasize access and economic incentives alone are insufficient to fully explain retention behaviour in rural Sub-Saharan African contexts. A more integrated understanding is required—one that incorporates nutritional, psychological, and socio-economic dimensions of learning participation.

The study concludes that while feeding programmes are an important component of strategies aimed at improving student retention in Universal Secondary Education schools, their effectiveness depends on consistency, institutional support, and the broader socio-economic environment in which schools operate. Strengthening these complementary factors is essential if feeding programmes are to achieve their full potential in enhancing educational continuity in Rakai District and similar contexts across Sub-Saharan Africa.

Recommendations

Based on the findings and conclusions of this study, several recommendations are proposed to enhance the effectiveness of feeding programmes and improve student retention in Universal Secondary Education schools in Rakai District and similar contexts in Sub-Saharan Africa.

First, it is recommended that the Government of Uganda, through the Ministry of Education and Sports, strengthens the policy framework governing school feeding programmes in USE schools. At present, the implementation of feeding initiatives is largely inconsistent and dependent on individual school and community capacity. A standardized national guideline that clearly defines minimum feeding requirements, funding mechanisms, and implementation responsibilities would help reduce disparities between schools and ensure more equitable student support across regions.

Second, school administrators should prioritize the institutionalization of feeding programmes through structured planning and accountability systems. Schools should develop clear feeding schedules, transparent financial management systems, and sustainable resource mobilization strategies. Strong leadership is essential to ensure that feeding programmes are not treated as optional or ad hoc interventions but as integral components of the schooling environment that directly contribute to student retention.

Third, it is recommended that greater emphasis be placed on strengthening school-community partnerships. Since many feeding programmes rely heavily on parental and community contributions, improving communication and participation is essential. School management committees should actively engage parents and local leaders in decision-making processes related to feeding, thereby enhancing ownership, sustainability, and collective responsibility.

Fourth, the study recommends the integration of feeding programmes with broader student welfare and support systems. While feeding significantly improves attendance and motivation, its impact is maximized when combined with interventions such as guidance and counselling, bursary schemes for vulnerable learners, and improved school infrastructure. Such integrated support systems address multiple dimensions of dropout beyond hunger alone.

Fifth, development partners and non-governmental organizations should consider supporting schools in resource-limited settings through targeted interventions aimed at improving the quality and consistency of feeding programmes. This may include financial support, provision of food supplies, and capacity-building for school administrators in programme management and monitoring.

Lastly, it is recommended that future policy planning adopt a context-sensitive approach that recognizes the socio-economic realities of learners in rural areas such as Rakai District. Since household poverty continues to influence retention decisions, complementary interventions at community and household levels such as poverty alleviation programmes and livelihood support should be aligned with educational policies to produce more sustainable outcomes.

Reference

- A, S., Fahad. (2026). *Policy, Accreditation, and Global Frameworks for Inclusive Higher Education*. IGI Global.
- Abdul, R., Rafiza, Fitriah, A., Nurul, & Yusrina, I., Aizal. (2025). *Global Perspectives and Implementations of Design-Based Research*. IGI Global.
- Aceska, N., Barrett, M., & Tibbitts, F. (2025). *Guidance document for education for sustainable development: Reference Framework of cCmpetences for Democratic Culture*. Council of Europe.
- Aldhaen, E. S., Galleary, D., Weerakkody, V., & Chen, W. (2025). *Ethical Standards for Technological and Business Education Sustainability*. Emerald Group Publishing.

- Alfred, M. V., Robinson, P. A., & Roumell, E. A. (2021). *Advancing the Global Agenda for Human Rights, Vulnerable Populations, and Environmental Sustainability*. IAP.
- Allison, P. D. (2019). *Fixed Effects Regression Methods for Longitudinal Data Using SAS*. SAS Institute.
- Anderson, K., Ginting, E., & Taniguchi, K. (2020). *Uzbekistan Quality Job Creation as a Cornerstone for Sustainable Economic Growth: Country Diagnostic Study*. Asian Development Bank.
- Andreoni, A., Mondliwa, P., Roberts, S., & Tregenna, F. (2021). *Structural Transformation in South Africa: The Challenges of Inclusive Industrial Development in a Middle-Income Country*. Oxford University Press.
- Archer, D. T., Hajir, B., & McInerney, W. W. (2023). *Innovations in Peace and Education Praxis: Transdisciplinary Reflections and Insights*. Taylor & Francis.
- C, S., Marubini, Obert, M., Mbulaheni, & Gladness, M., Nwacoye. (2025a). *Universal Access to Inclusive Education: African Perspectives: African Perspectives*. IGI Global.
- C, S., Marubini, Obert, M., Mbulaheni, & Gladness, M., Nwacoye. (2025b). *Universal Access to Inclusive Education: African Perspectives: African Perspectives*. IGI Global.
- Experts, E. P. (2022). *UPTET Paper 2 Exam: Science & Mathematics | 7 Mock Tests + 3 Previous Year Papers (1500+ Solved Questions)*. EduGorilla.
- Fafunwa, A. B., & Aisiku, J. U. (2022). *Education in Africa: A Comparative Survey*. Taylor & Francis.
- Gilani, H. (2024). *Decolonizing Marketing Theory and Practice: Beyond Inclusivity and Sustainability Debates*. Taylor & Francis.
- Helliker, K., Chadambuka, P., & Matanzima, J. (2022). *Livelihoods of Ethnic Minorities in Rural Zimbabwe*. Springer Nature.
- Hom, P. W., Allen, D. G., & Griffeth, R. W. (2020). *Employee Retention and Turnover: Why Employees Stay Or Leave*. Routledge.
- Hübner, F. (2024). *Method, Methodology and Research Design in Artistic Research: Between Solid Routes and Emergent Pathways*. Taylor & Francis.
- Huis, A. van, & Nations, F. and A. O. of the U. (2013). *Edible Insects: Future Prospects for Food and Feed Security*. Food and Agriculture Organization of the United Nations.
- Humble, Á. M., & Radina, M. E. (2018). *How Qualitative Data Analysis Happens: Moving Beyond "Themes Emerged" Volume 1*. Taylor & Francis.
- Jha, A. (2023). *Social Research Methodology: Qualitative and Quantitative Designs*. Taylor & Francis.
- Lloyd, C., & Hannikainen, M. (2022). *Social Cohesion and Welfare States: From Fragmentation to Social Peace*. Taylor & Francis.
- Mandal, S. C., Chakraborty, R., & Sen, S. (2022). *Evidence Based Validation of Traditional Medicines: A comprehensive Approach*. Springer Nature Singapore.
- Moreira, F. M. S., Huising, E. J., & Bignell, D. E. (2012). *A Handbook of Tropical Soil Biology: Sampling and Characterization of Below-ground Biodiversity*. Routledge.
- Nodia. (2026). *UPSC CMS Preventive Social and Community Medicine (Book 6 of 6) | Chapterwise Question Bank | 2000+ MCQ with Full Explanation*. Nodia Learning.
- Patrick, N. (2021). *Handbook of Research on Mixed Methods Research in Information Science*. IGI Global.
- Poptani, D. S. (2025). *A Study Of Employee Retention Practices Adopted By Business Process Outsourcing (BPO) Units*. Notion Press.
- Silvia, P. (2020). *Select a Sample: Little Quick Fix*. SAGE.
- Singh, M. K. (2022). *Community Participation and Civic Engagement in the Digital Era: Localizing Sustainable Development*. Emerald Group Publishing.
- Thollander, P., Trianni, A., Johansson, M., & Hasan, A. S. M. M. (2026). *Energy Management, Energy Efficiency Policies, and Energy System Studies*. Frontiers Media SA.
- Zhao, I. Y., Kotozaki, Y., & Jiang, N. (2026). *Healthy ageing, social psychiatry of older adults and family caregivers*. Frontiers Media SA.