



Open knowledge, stress management, and job performance: A Study of library and information science Professionals in Ugandan academic libraries

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Abstract

Background: Library and Information Science (LIS) professionals in Ugandan academic libraries experience increasing workplace stress caused by heavy workloads, limited institutional support, and rapid technological changes. These challenges negatively affect productivity, job satisfaction, and overall well-being. Open knowledge practices such as open access, open educational resources (OER), and open data have emerged as potential strategies for improving professional collaboration and reducing workplace stress.

Purpose: The study examined the relationship between open knowledge practices, stress management, and job performance among LIS professionals in Ugandan academic libraries. Specifically, it explored how stress affects job performance and how engagement in open knowledge practices can help mitigate workplace challenges.

Methodology: A quantitative descriptive survey design was adopted, involving 100 LIS professionals, with a 70% response rate. Data were collected using a self-administered semi-structured online questionnaire and analyzed using SPSS.

Results: The findings revealed that workplace stress significantly reduces job performance and contributes to burnout among LIS professionals. However, participation in open knowledge practices enhanced collaboration, strengthened professional confidence, improved coping mechanisms, and increased productivity and job satisfaction.

Conclusion: The study concluded that open knowledge practices and stress management are closely interconnected in influencing employee performance in academic libraries. Strengthening engagement in open knowledge initiatives can support both staff well-being and professional effectiveness.

Implications: The study recommends that academic library management invest in open access infrastructure, continuous professional development, supportive leadership, and mental health support services, to enhance staff well-being, retention, and service delivery in Ugandan academic libraries.

Keywords: *Stress management, academic librarians, job performance, LIS Professionals, open knowledge.*

Introduction

Academic libraries are increasingly under pressure to deliver high-quality services in an environment of rapid technological change, evolving user expectations, and constrained resources. Library and Information Science (LIS) professionals find themselves navigating not only service delivery but also issues related to open knowledge practices, workplace stress, and performance expectations. This study

examines the relationship between open knowledge practices, stress management, and job performance among LIS professionals in Ugandan academic libraries.

This study investigates the impact of open knowledge practices and stress management strategies on the job performance of Library and Information Science (LIS) professionals in academic libraries in Uganda. The rapid evolution of information landscapes necessitates continuous professional development and



effective coping mechanisms for workplace stressors. This research aims to identify the current state of open knowledge adoption, assess prevalent stressors, and determine their collective influence on LIS professionals' performance.

Problem Statement

Academic libraries in Uganda are undergoing significant transformations driven by technological advancements, evolving user expectations, and the proliferation of digital information. To cope with the changes, LIS professionals require continuous skills development and adaptability. Open knowledge, encompassing open access, open educational resources (OER), and open data, presents a powerful avenue for professional growth and enhanced service delivery, yet its systematic integration and utilization within Ugandan academic libraries remain under-explored. A study of academic employees at Makerere University demonstrated that heavy workload, strict time demands, and pressure from supervisors contribute to job stress, which in turn adversely affects job performance (James et al, 2024).

Concurrently, the demanding nature of library work, coupled with resource constraints and rapid technological shifts, often leads to significant workplace stress among LIS professionals. Unmanaged stress can result in decreased job satisfaction, burnout, and ultimately, diminished job performance. Despite the critical roles LIS professionals play in supporting academic functions, there is a paucity of research specifically examining the combined influence of open knowledge engagement and stress management on their job performance within the Ugandan context. This gap in knowledge hinders the development of targeted interventions to optimize their effectiveness and well-being.

Literature Review

To gain a comprehensive understanding of the problem under consideration, the researchers conducted multiple reviews of the current literature on stress and job pressure among LIS professionals in Uganda. The concept of open knowledge encompasses open access (OA), open educational resources (OER), open data, open science, and institutional repositories. Awareness refers to knowledge of these concepts, whereas adoption refers to practices and institutionalized use.

In Uganda, the Consortium of Uganda University Libraries (CUUL) and EIFL have supported advocacy workshops, repository development, and policy adoption (EIFL, 2023). However, adoption is patchy. A study of academic libraries in Sub-Saharan Africa, including Uganda, found that while institutional repositories exist, usage remains modest and constrained by infrastructure, skills, and policy (Siyao et al., 2017). According to a recent survey, Ugandan librarians have a favorable opinion of linked open data, but they are not institutionally prepared (Namubiru et al., 2023).

According to Dina (2016), stress at work is one of the main psychological reactions people have when they perceive dangers to their well-being that they are powerless to counter. As per Casey (2013), stress is the reaction of an individual to situations that frighten, enrage, confuse, or thrill them. Job stress is the state in which an employee's psychological state is altered by circumstances related to their work, forcing them to stray from their routine (Ozioko, Uwakwe, & Asadu, 2014). According to Ikonne (2015), stress is an important psychological concept that can negatively affect health, well-being, and job performance. It is regarded as a force that pushes a physical or psychological factor beyond its range of stability, producing a strain on the individual. Hence, job stress is the state in which an employee's psychological state is altered by job-related

circumstances, forcing them to stray from their regular functioning patterns (Ozioko, Uwakwe, and Asadu 2014).

Numerous research investigations conducted in libraries worldwide have identified the variables and causes that put a strain on information workers today. African context studies are more valuable and identify shifting user expectations, staffing levels, document types, library environments, technology advancements, and physical facility types (Vij, 2017). There are several sources of stress in the workplace. According to Okiki and Durodolu (2018), LIS professionals face several stressors, such as a heavy workload, insufficient staffing, resource limitations, role ambiguity, emotional labor, and technological change. Continuous professional development (CPD) is still uneven in Uganda; librarians who don't receive it experience stress as they try to keep up with evolving standards (Nakaziba & Ngulube, 2023). Organizational, technical, workload, interpersonal, and change-related stressors can all be categorized.

Poor performance at work, illness, and a lack of enthusiasm are all signs of workplace stress (Farler & Broady-Preston, 2012). Additionally, it is said that clients, particularly students, can bring both happiness and tension. Several observers have also recognized that job stress is partly caused by the "increasingly routinized" and repetitive character of certain components of library work (Shaughnessy, 2006, and Saddiq and Burke, 2006). According to Saddiq and Burke (2006) and Topper (2007), another factor contributing to stress is a feeling of not having control. Lack of support from co-workers and superiors, inadequate job design, bad management, inadequate working environment, and poor work organization can all contribute to work-related stress (WHO, 2020). The two categories of work context and work content comprise stress-related contributing elements or hazards at work.

a) Work content: involves workload and pace (having too much or too little to do, working

under time pressure, etc.), job content (monotony, underutilization, pointless duties, lack of variation), and the working hours (tight or rigid, lengthy and isolating, erratic, poorly planned shift systems); and the participation and control (absence of involvement in decision-making, absence of control over work procedures, pace, hours, techniques, and work environment).

b) Work context: includes career development, status, and compensation (job insecurity, lack of opportunities for promotion, under- or over-promotion, low-value work, unclear or unfair performance evaluation systems, being over- or under-skilled for the job); interpersonal relationships (poor supervision, poor relationships with co-workers, solitary work, lack of behavioral guidelines, unclear organizational objectives, poor leadership, lack of support for domestic issues at work, lack of support for issues at home, etc.)

Jamadin et al (2015) opine that stress levels among librarians were rising due to lack of personnel, job conflict, and ambiguity. The scholars further alluded that headaches, sleep disturbances, difficulties concentrating, a bad temper, stomach problems, and low morale are some of the ways that stress can appear. Further research associates acts of hostility or aggression, hypertension, thermal issues, placing blame for stress and absence on others, or the administration as signs and symptoms of stress. In order to deal with stress at work, Jawanjal, (2022) reports that professionals in libraries are dealing with more stress than ever before, which lowers their energy levels. The scholar opines that stress prevention at work calls for collaboration to preserve emotional reserves, and employees at all levels of the organization may have to participate in the effort to prevent and reduce stress at work. Jawanjal further argues that coping mechanisms like incorporating new skills, communicating effectively, paying close attention to one's physical health, learning new technological skills to boost competence and confidence, regular

exercise and meditation, and giving close attention to physical well-being can all help reduce work-related stress.

To understand stress management for library professionals at the workplace and how open knowledge may have an impact on LIS professionals, Jawanjal (2022) argues that enhancing job performance through open knowledge and stress management requires open communication. The scholar suggests that such open knowledge sharing should be between employees and managers, encourages teamwork, and concludes that this guarantees organizational performance. Academic libraries should, therefore, encourage their own staff to gain this kind of knowledge through workshops and seminars. This helps LIS professionals to assess their level of knowledge, assess sources, and the level of stress in their own lives. The observation of Ilo, (2016) points out the lack of adequate knowledge of information sources or technology as a cause of stress in the LIS workplace.

Knowledge management (KM) through open approaches is a discipline that should be taught in universities and practiced in the community and industry (Pun & Yiu, 2017). Institutions, therefore, work closely with universities and other research bodies so as to get new ideas and remain competitive (Raza & Shah, 2018). Kiwelu, et al (2020) assert that a university library operates within a university setting to support university efforts of knowledge generation and transfer. For a university library to be able to fulfil its mandate, it should also manage its own knowledge transfer processes effectively. Kiwelu, et al (2020) reveal that an organization's knowledge equals its net worth; therefore, business continuity and sustainability of organizational processes and proper knowledge transfer practices, are necessary to reduce employee turnover and manage stress, and increase organizational performance. The scholars allude that top management and library administration should support internal and

external knowledge sharing efforts in libraries. Library workers should be motivated, and workshops, seminars, and ad hoc sharing of knowledge among LIS institutions and professionals will assist the university library in managing its knowledge and enhancing performance.

Knowledge management process at the university library may be realized through an institutionalized written knowledge management policy. Such a policy should have leadership will from the institution. Open knowledge that targets stress management in academic libraries should have provision for feedback mechanisms and reward systems in place (Sirorei & Fombad, 2019). Performance management is a process of ongoing communication and feedback, between a library supervisor and employees (Lyaka & Ngulube, 2025). Both scholars put emphasis on communication and feedback as open knowledge sharing mechanisms among LIS professionals in academic libraries. Both formal and informal coping strategies are employed by LIS professionals. Peer support, time management, and personal resilience are examples of informal strategies. CPD, workload modifications, and flexible scheduling are examples of organizational supports (Nakaziba & Ngulube, 2023). Perceived effectiveness varies: systemic problems like inadequate infrastructure or lack of recognition go unaddressed, even though CPD lowers stress by improving competence (Echem, 2022).

Kio et al. (2015); Lemu (2007) observe that stress can be managed through mechanisms such as healthy living (healthy diet, exercise, adequate sleep, taking a deep breath and relaxing), self-awareness (capacity to spot your stress indicators, i.e. thoughts, feelings, and behaviors); learn about your body changes to respond appropriately to the signals, coping strategies (effective relaxing, positive thinking, boundary setting, prioritizing tasks, and developing sense of humor; acknowledging people and things as they are, and work-life

balance, consuming a healthy, balanced diet, watching TV, meditating, listening to music, and praying to God); seeking support (discuss your worries with friends, family, co-workers, and supervisors, professional counselling, build a support system from dependable and compassionate co-workers, and use it). This is due to the fact that everyone requires a trusted confidant with whom they may share stressful issues without fear of being rejected.

However, what remains unclear is the correlation between open knowledge and job performance, as well as stress management and job performance. Theoretical literature suggests that using open knowledge improves performance reviews by increasing librarians' effectiveness and institutional visibility. According to research conducted in Uganda, librarians anticipate better service delivery when linked open data is implemented (Namubiru et al., 2023). According to Nigerian research, job performance was highly predicted by capacity building (Echem, 2022). Therefore, burnout is decreased, and satisfaction is increased through effective stress management. According to the Job Demands-Resources (JD-R) model, performance is sufficiently supported and improved. Empirical evidence shows that training and CPD improve competence and job performance (Okiki & Durodolu, 2018; Emmanuel, 2025).

This study, therefore, aims to bridge the gap between open knowledge practices, stress management strategies, and the job performance by examining how the interplay between open knowledge engagement and stress management influences job performance within the Ugandan academic libraries.

Purpose of the study

The purpose of this study was to explore the relationship between open knowledge practices, stress management strategies, and the job performance of LIS professionals in Ugandan academic libraries.

Objectives of the study

The study was guided by the following specific objectives:

1. To assess the current level of awareness, adoption, and barriers to open knowledge practices among LIS professionals in Ugandan academic libraries.
2. To identify the primary sources and types of workplace stress and pressure experienced by LIS professionals in academic libraries.
3. To examine the influence of stress and work pressure on the job performance of LIS professionals.
4. To suggest possible recommendations and strategies for enhancing open knowledge adoption and stress management interventions to improve the job performance of LIS professionals in Academic libraries.

Theoretical framework

This study applies the Job Demands–Resources (JD-R) model by Arnold B. Bakker and Evangelia Demerouti (2001) that examines how OK engagement (a job resource) and stress management strategies (personal/organizational resources) influence the job performance of LIS professionals in Ugandan academic libraries. The JD-R model is a framework used in organizational psychology, that explains how job characteristics impact employee well-being, motivation, and performance. Scholars De Beer, Pienaar, & Rothmann (2013) applied the Job Demands–Resources (JD-R) model to show that job resources such as colleague and supervisor support, can safeguard the negative effects of burnout and stress on employee engagement and performance outcomes over time.

Conceptual framework

This study looked at the connections between job performance (JP), stress management (SM), and open knowledge (OK) among LIS

professionals working in academic libraries in Uganda. The study suggests a conceptual framework to show how OK and SM, possibly impacted by job demands and resources, predict JP using the Job Demands-Resources (JD-R) model. According to the JD-R hypothesis, SM is both a personal resource and a mediating process that shapes JP, and OK is a crucial job resource. The framework seeks to elucidate theoretical foundations and direct the analytical exploration of these postulated

relationships. The two primary paths highlighted by this paradigm are (1) high demands and inadequate SM that result in stress and decreased JP, and (2) strong OK and SM resources that improve engagement and, consequently, Job Performance. Therefore, increasing job resources and reducing job demands, which leads to lower workplace stress, greater employee engagement, and superior performance.

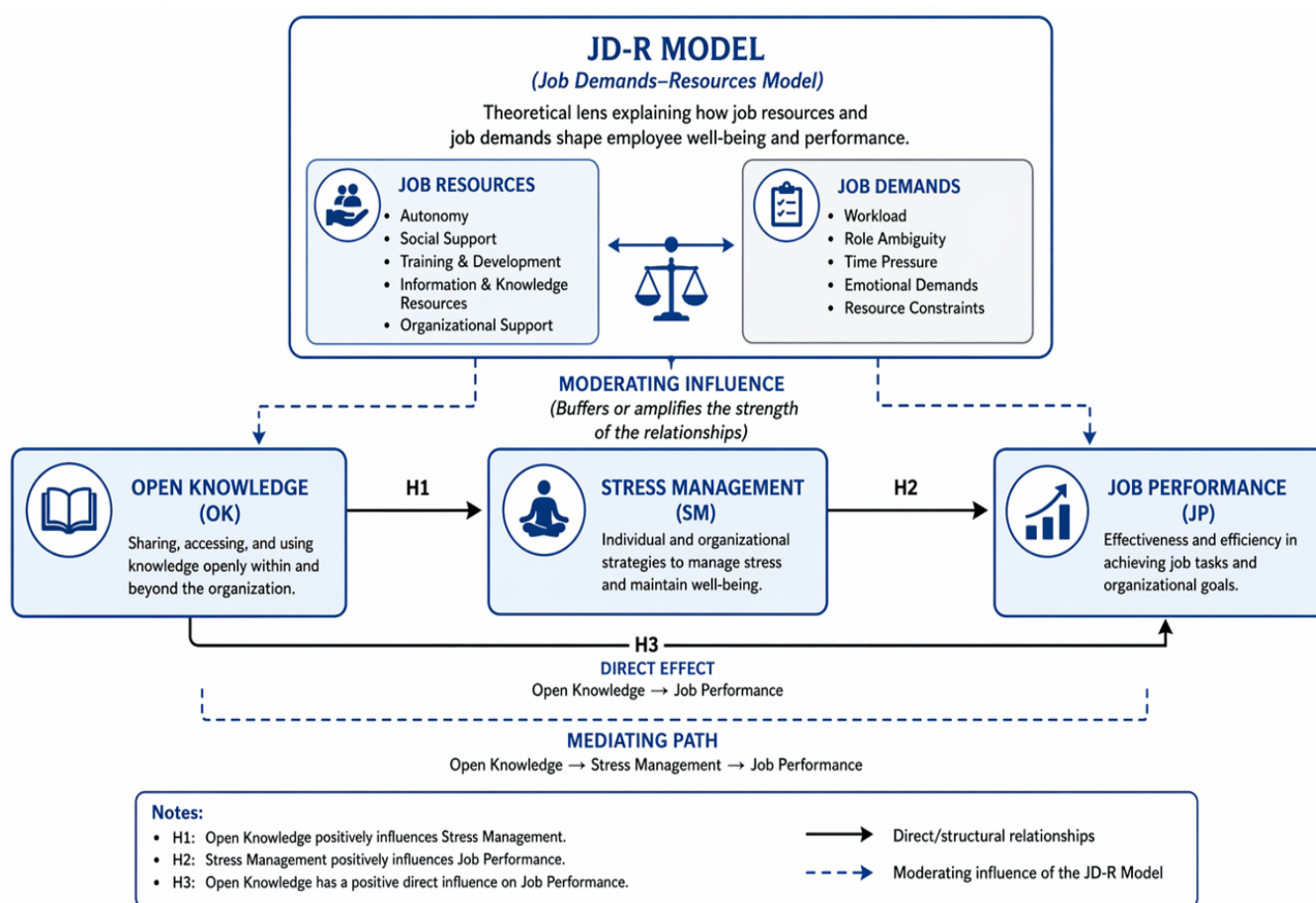


Figure 1: Relationships between open knowledge (OK), Stress Management (SM), and Job Performance (JP) among LIS Professionals.

Source: (Researchers, 2026), with ideas from Demerouti, E., et al, 2001).

Methodology

This study employed a quantitative descriptive survey design to examine the relationship between open knowledge practices, stress

management, and job performance among Library and Information Science (LIS) professionals in Ugandan academic libraries. The quantitative approach was considered appropriate because the study primarily focused

on collecting numerical data to describe trends, compare respondent characteristics, and examine relationships among study variables using statistical analysis. The study was conducted among LIS professionals from selected academic and training institutions in Uganda, including Bishop Barham University College Kabale, Bishop Stuart University, Busitema University, Busoga University, Gulu University, Health Tutors' College Mulago, Kabale University, Kampala International University, Kyambogo University, Uganda Martyrs Vocational Institution Soroti, Uganda Martyrs University, Uganda Management Institute, UCC Soroti, UCC Aduku, Uganda Christian University (UCU), Soroti University, Makerere University Business School, and Muni University.

The target population comprised librarians, assistant librarians, library assistants, and other LIS professionals who had worked in their respective institutions for at least one year. A mixed sampling approach involving purposive, systematic, and simple random sampling techniques was employed to ensure representation from both public and private institutions, as well as rural and urban settings. Purposive sampling was used to identify institutions with established library and information services, while simple random and systematic sampling techniques were used to select respondents within the institutions.

The study targeted 100 respondents based on the diversity and specialized nature of the LIS workforce across the selected institutions, as well as the need to obtain sufficient data for subgroup comparisons by gender, staff cadre, and institution type. Out of the 100 targeted respondents, 70 completed and returned the questionnaire, representing a response rate of 70%, which is considered acceptable for survey research and adequate for descriptive and correlational analysis. The response rate reduced the likelihood of non-response bias and provided sufficient representation of the study population. The study utilized a structured

questionnaire comprising both closed-ended and Likert-scale items.

To ensure the instrument's validity, it was subjected to expert review by specialists in Library and Information Science as well as research methodology. Their feedback was used to assess and improve the face and content validity of the instrument, ensuring that the questionnaire adequately measured the intended study variables. Reliability was established through a pilot test, and the internal consistency of the questionnaire was assessed using Cronbach's Alpha coefficient. The analysis yielded a Cronbach's Alpha value of 0.786, indicating an acceptable level of reliability and demonstrating that the instrument was sufficiently consistent for use in the main study (Cronbach, 1951; Taber, 2018). Quantitative data were coded, cleaned, and analysed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics, including frequencies, percentages, means, and charts, were used to summarize respondent characteristics, and study variables were applied to examine the relationships between open knowledge practices, stress management, and job performance among LIS professionals. Figures referenced in the findings section were included to support the interpretation and presentation of results.

AI Use Declaration: Grammarly as an Artificial Intelligence (AI) tool was partially used to edit the writing in this study project. However, the authors are completely responsible for the final work on the documents, including editing, proofreading, and content alignment of the research document.

Scope and Limitations

The researchers intended to recruit 100 highly engaged respondents because of the logistical viability, the specialized nature of the target population, and the analytical requirements. However, at least 70 responses were received from both junior and senior staff, who have worked as LIS professionals for more than a

year in both government and private institutions. This response rate demonstrated low sampling error, no response bias, and high credibility. It also demonstrated high confidence in the representativeness of the findings, given the large amount of data on important trends in LIS professional practices in Uganda.

The Results

The quantitative findings presented herein were analyzed using four main stages, identified as data preparation, data coding, statistical analysis, and interpretation of results.

Table 1: Characteristics of the respondents

Variable	Category	Frequency (n=70)	Percentage (%)
Gender	Male	39	55.71
	Female	31	44.29
Institution type	Public Institutions	24	34.29
	Private Institutions	16	22.86
	Other institutions	30	42.86
Work Professionals	Senior librarian	08	11.43
	Librarian	22	31.43
	Assistant librarian	14	20.00
	Other	26	37.14
Qualification	PhD	06	08.57
	Masters	27	38.57
	Postgraduate Diploma	03	04.29
	Bachelor's degree	28	40.00
	Diploma and below	06	08.57
Years of service	0 – 5 years	36	51.43
	6 – 10 years	17	24.29
	11 – 15 years	09	12.86
	16 years and above	08	11.43

Source: (Primary source, 2025)

The study underscores the growing importance of The study respondents were composed of 39 (55.71%) males and 31 (44.29%) females. The targeted institutions for this study were both public and private. The public institutions were 24 (34.29%), the private institutions 16 (22.86%), and the other institutions represented by 30 (42.86%), respectively. Among the work professionals sampled for this study were 8 (11.43%) senior librarians, 22 (31.43%), assistant librarians, 14 (20%), and others were

26 (37.14%). The level of qualifications of the study stakeholders was of interest. Table 1 shows that among those sampled, the PhD holders were 6 (8.57%), the Master's holders were 27 (38.57%), the Postgraduate Diploma holders were 3 (04.29%), the Bachelor's degree holders were the highest number, represented by 28 (40%), while diploma and below qualifications consisted of 06 (08.57%).

As far as the respondents' work experience is concerned, those who worked for a period of five years were 36 (51.43%), those who worked for six to ten years were 17 (24.29%), and those who worked for eleven to fifteen years were 9 (12.86%), while those who had 16 years of experience were 8 (11.43%).

The qualitative and quantitative findings presented herein are based on both thematic and content analysis, with four main stages identified: de-contextualization, re-contextualization, categorization, and compilation.

Awareness, adoption, and barriers to open knowledge practices

Table 2: Characteristics of the respondents

Variable	Category	Frequency (n=70)	Percentage (%)
Awareness Level of Open knowledge practices	Very High	18	25.7
	Moderate	30	42.9
	Very Low	14	20.0
	None	8	11.4
Adoption open knowledge Practices	Use of Open Access Journals	42	60
	Contribution to Institutional Repositories	25	35.7
	Use of Open Educational Resources (OERs)	22	31.4
	Participation in Open Data Initiatives	15	21.4
	Advocacy Training for Open Access	18	25.7
Barriers to open knowledge Practices	Lack of ICT Infrastructure	40	57.1
	Limited Training/Skills	34	48.6
	Inadequate Institutional Policies	28	40
	Low Funding	25	35.7
	Lack of awareness among library users	20	28.6

Source: (Primary source, 2025)

The data in Table 2 above indicate that awareness of open knowledge practices among LIS professionals in Ugandan academic libraries is encouraging, with 68.6% of the respondents reporting a moderate to very high level of awareness. However, 11.4% of the respondents report that they are unaware, hence pointing to a persistent knowledge gap.

On the adoption of open knowledge (OK) practices, the respondent acknowledged that this is a widely practiced activity through the use

of open access journals, with 60%, followed by contribution to institutional repositories with 35.7%, and use of OERs with 31.4%. The other practices, like participation in open data initiatives, remain relatively low at 21.4%, hence reflecting a limited engagement in advanced OK practices as indicated in Table 2 above.

The major barriers hindering the adoption of OK include a lack of ICT infrastructure with 57.1%, limited training opportunities with 48.6%, and inadequate institutional policies with 40%, as

indicated in Table 2 above. The findings of this study do align with the previous studies by Okello-Obura (2010); Namubiru et al., (2023); Siyao et al., (2017), which similarly reported a gap between awareness and practical adoption in African academic libraries.

Overall, Ugandan LIS professionals show growing awareness of OK, but adoption is uneven. Stress arises from multiple sources, with limited institutional mechanisms to address

it. Evidence suggests that both OK practices and stress management positively affect job performance, but empirical data in Uganda is scarce. Recommendations include: (1) strengthening open access and open science policies, (2) investing in ICT infrastructure, (3) targeted CPD, (4) formal stress management interventions, and (5) robust evaluation and research frameworks

Table 3: Sources and types of workplace stress and pressure experienced by LIS Professionals

Variable	Indicators	Frequency (n=70)	Percentages (%)
Work-related causes of stress affecting the job performance of LIS Professionals	Poor management	24	34.3
	Insufficient office equipment	16	22.4
	Heavy workload due to inadequate staffing	8	11.9
	Bureaucratic leadership	3	4.5
	Inadequate funding and delayed payments	12	16.4
	Lack of promotion	2	3
	Unrealistic set targets	3	4.5
	Being unrecognized	2	3

Source: (Primary source, 2025)

Regarding work causes of stress affecting the job performance of LIS professionals in Uganda, majority of the respondents indicated that the major institutional causes of stress and work pressure were poor management by the administrators and supervisors, represented by 24 (34.3%), insufficient office equipment, rated second with 16 (22.4%) and other causes, including inadequate funding and delayed payments, represented by 12 (16.4%). Heavy workload due to inadequate staffing was seen as a fourth factor causing stress and work pressure, with 8 (11.9%), whereas factors such as unrealistic set targets and bureaucratic leadership were represented by 3 (4.5%). Lack

of promotion and being unrecognized as represented by 2 (3%), were also cited among the perceived work causes of stress affecting the job performance of LIS professionals in Uganda.

From Table 4, the perceived influences of stress and work pressure on the job performance of LIS professionals in Uganda are impacted by low morale at work, represented by 19 (26.6%), and low productivity of work, represented by 15 (21.9%) of the respondents. Similarly, fatigue and loss of interest in working 11 (15.6%) as an impact of stress on employees, diminished attention to detail as indicated by 9 (12.5%) and motivation of employees to work harder 8

(10.9%), as well as failure to achieve set targets by employees, which was represented by 6 (9.4%). It should be noted that an increase in employee absenteeism is the lowest factor influencing stress and work pressure represented by 2 (3.1%), which may not a significant effects on employees' job performance.

Table 4: Influence of stress and work pressure on the job performance of LIS Professionals

Variable	Indicators	Frequency (n=70)	Percentages (%)
Influence of stress and work pressure on the job performance of LIS professionals	Low morale at work	19	26.6
	Diminished attention to detail	9	12.5
	Failure to achieve set targets	6	9.4
	Fatigue and loss of interest	11	15.6
	Low productivity of work	15	21.9
	Increased absenteeism	2	3.1
	Motivated him/her to work harder	8	10.9

Source: (Primary source, 2025)

As shown above, stress and work pressure often have a serious impact on the lives of employees in any organization. For LIS professionals in Uganda, stress and work pressure have a much more negative impact on employee performance, resulting in low morale at work, reported by 19 (26.6%) of the respondents in this study, and low productivity at work, reported by 15 (21.9%) of the respondents. These are coupled with fatigue, loss of interest, and diminished attention to detail among employees, as indicated by 11 (15.6%) and 9 (12.5%) of the respondents in this study. This, therefore, means that the impact of stress and work pressure on LIS employees in an organization should not be underrated if LIS institutions are to perform well and guarantee productivity.

Reflection and comparisons of Stress Levels among respondent categories

The findings indicate variations in stress levels and job performance among LIS professionals based on gender, institutional affiliation, and staff cadre within Ugandan academic libraries. Male respondents constituted the majority of participants (55.71%) compared to female respondents (44.29%), suggesting that male professionals remain more represented in the LIS workforce within the surveyed institutions. The results further reveal that stress and job performance are influenced by institutional context, with respondents from "other institutions" forming the largest category (42.86%), followed by public institutions (34.29%) and private institutions (22.86%). This distribution suggests that institutional environments differ in terms of workload, organizational support, technological resources, and opportunities for promotions, professional and career development, all of which shape the experiences of stress and performance among LIS professionals. Institutions with inadequate

staffing, weak ICT infrastructure, and limited open knowledge support systems are more likely to expose professionals to increased work

pressure and reduced effectiveness. This is likely to cause a high turnover among government institutions.

Comparison of Stress Levels Among Stakeholder Categories

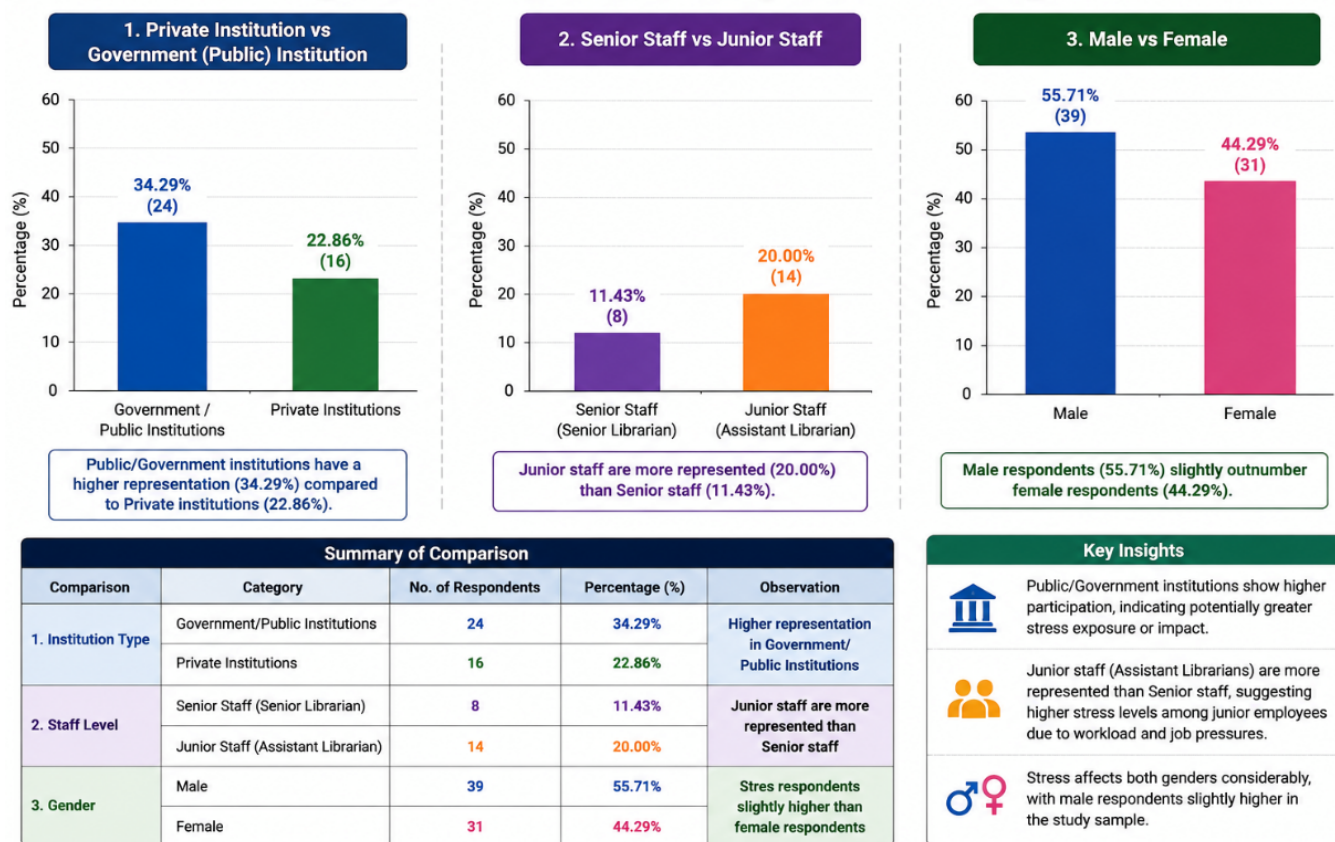


Figure 2: Reflection and comparisons of Stress Levels among respondent categories

The comparison across staff cadres also demonstrates that stress and performance experiences vary according to professional responsibility and role expectations. Librarians represented the largest professional category (31.43%), followed by assistant librarians (20.00%), senior librarians (11.43%), and other categories of staff (37.14%). The relatively lower proportion of senior librarians may indicate limited leadership positions, which can increase workload pressure among available supervisors

and managers. At the same time, librarians and assistant librarians often perform routine technical and user-support tasks that expose them to continuous interaction with users, technological demands, and resource constraints. Such responsibilities may contribute to occupational stress, particularly in environments where open knowledge systems, digital repositories, and institutional support mechanisms are insufficiently developed. The findings therefore suggest that stress levels are

closely linked to job roles and organizational expectations, which in turn affect the ability of LIS professionals to perform effectively.

The study further interprets these findings within the broader context of open knowledge utilization and stress management in academic libraries. Differences in stress levels by gender, institution type, and staff cadre imply that workplace experiences are not uniform and, therefore, require targeted interventions. Female professionals, junior staff, and employees in under-resourced institutions may face additional pressures related to balancing professional responsibilities, technological adaptation, and limited career progression opportunities.

However, the findings also imply that effective stress management strategies and increased engagement with open knowledge practices can enhance resilience, competence, and job performance across all categories of LIS professionals. Institutions that invest in continuous professional development, supportive leadership, ICT infrastructure, and open knowledge initiatives are more likely to cultivate motivated and productive staff. Consequently, the integration of stress management programs with open knowledge adoption remains essential for improving both employee well-being and organizational performance in Ugandan academic libraries

Table 5: Recommendations & strategies for enhancing OK adoption & stress management interventions among LIS Professionals

Variable	Indicators	Frequency (n=70)	Percentages (%)
Recommendations & strategies for enhancing OK adoption & stress management interventions among LIS Professionals	Continuous training of employees on stress management	17	24.6
	Offering all forms of motivation to employees	23	32.3
	Engaging in recreational activities	9	12.3
	Institutions provide the necessary office equipment and materials	10	13.8
	Open-door policies that encourage teamwork	11	16.9

Source: (Primary source, 2025)

In Table 5 above, the discussion was about the possible options that could be availed as strategies for managing stress and work pressure among LIS professionals. Motivation was recorded as the best strategy, with the largest scale of 23 (32.3%), followed by continuous training of employees on stress management, as reported by 17 (24.6%) of the respondents. Nevertheless, the use of open-door policies that encourage teamwork was also recorded by 11 (16.9%) and the need for the employers to provide the necessary office equipment and materials for work 10 (13.8%)

was perceived to be among the top strategies, as well as engaging employees in recreational activities 9 (12.3%), as strategies for managing work stress and work pressure among the LIS professionals. Open knowledge-sharing mechanisms through open communications and feedback in academic libraries among LIS professionals are very crucial for better performance. Open-door policies and open communication, as well as continuous training of employees on stress management, offer avenues of open knowledge sharing for LIS professionals.

In other words, academic libraries should foster a culture where faculty and staff feel comfortable to approach colleagues for any help, advice, counsel, and opinion with trust, as a knowledge-sharing platform. Therefore, stress and work pressure among LIS professionals can be controlled if the strategies discussed above are embraced and adopted fully by the institutions that employ LIS professionals in Uganda.

Study Implications

Theoretical Implications

This study contributes to the existing body of literature by providing empirical evidence on the combined impact of open knowledge and stress management on job performance, specifically within the under-researched context of Ugandan academic libraries. It highlights the interconnectedness of professional development (through open knowledge) and employee well-being (through stress management) as critical determinants of performance. The findings can inform theoretical models of job performance in information-intensive environments, particularly in developing countries.

Practical Implications

The practical implications are significant for academic library administrators, LIS educators, and policymakers in Uganda. By implementing the recommendations, libraries can:

- Improving service quality: LIS professionals equipped with open knowledge and managing stress effectively can offer more innovative and responsive services to their patrons.
- Enhancing professional development: Fostering open knowledge engagement can lead to a more skilled and adaptable workforce.
- Boosting employee well-being and retention: Effective stress management programs can reduce burnout, increase job

satisfaction, and improve staff retention rates.

- Optimizing resource utilization: A more productive and engaged workforce can lead to more efficient use of existing library resources.

Policy Implications

Policymakers in the education sector and library associations in Uganda should consider developing national guidelines and frameworks that promote open knowledge initiatives and mandate institutional support for LIS professional development and well-being. This could include funding for open access infrastructure, OER development, and mental health support services for library staff across the country.

Conclusion

This study emphasizes the increasing significance of stress management and open knowledge practices in enhancing the work performance of Library and Information Science (LIS) professionals in academic libraries in Uganda. Despite the fact that academic libraries are adopting open knowledge initiatives like open access, open educational resources, and open data more frequently, adoption is still uneven because of poor institutional policies, inadequate infrastructure, a lack of technical expertise, and a lack of organizational support. However, severe workloads, a lack of resources, rapid technological development, position ambiguity, job insecurity, and broader social and economic constraints continue to cause LIS professionals a great deal of stress at work. In addition to significantly impacting their psychological and physical health through anxiety, sadness, burnout, and decreased motivation, these pressures also have a detrimental effect on their productivity and efficacy in assisting academic teaching, learning, and research.

The results further show that LIS professionals' job performance, professional confidence,

teamwork, and service delivery are all positively impacted by the efficient use of open knowledge resources, in conjunction with good stress management techniques. Librarianship has developed beyond traditional methods in the quickly evolving information world, necessitating ongoing learning, flexibility, and resilience in the face of changing user expectations and technology advancements. As a result, academic libraries and university administrations need to make strategic investments in open knowledge infrastructure, institutional support systems, capacity building, and comprehensive stress management programs that support staff well-being and professional growth. In addition to developing a strong, driven, and productive LIS personnel, strengthening these areas will increase academic libraries' overall contribution to knowledge generation, access, innovation, and academic excellence in Uganda.

Suggested Recommendations

Stress is dangerous to both oneself and the institution, and collaboration is necessary for stress prevention so as to maintain emotional reserves at work. Therefore, the following recommendations should be considered:

- Given that 48.6% of respondents identified limited training and skills as a barrier to open knowledge adoption, and 24.6% recommended continuous training on stress management, academic libraries should organize regular workshops on open access, Open Educational Resources (OER), open data, and stress management techniques such as mindfulness, resilience, and time management. Such training will enhance professional competencies, while equipping LIS professionals with effective coping strategies.
- Since 40% of respondents cited inadequate institutional policies as a barrier to open knowledge practices, libraries and universities should develop and implement policies that recognize open knowledge contributions, support continuous professional development, and integrate occupational health and safety measures. These policies would promote both open knowledge adoption and employee well-being.
- Considering that 16.9% of respondents recommended open-door policies that encourage teamwork, academic libraries should strengthen inter-departmental and inter-institutional collaborations, professional networks, and knowledge-sharing platforms. Such initiatives can facilitate peer learning, reduce professional isolation, and provide social support for stress management.
- Given that 57.1% of respondents identified a lack of ICT infrastructure as the leading barrier to open knowledge adoption, while 22.4% reported insufficient office equipment as a major source of workplace stress, institutions should invest in modern ICT infrastructure, library systems, office equipment, and adequate staffing. Improved resources will reduce workload pressures and enhance access to open knowledge resources.
- Since 34.3% of respondents identified poor management as the primary cause of workplace stress, library managers and supervisors should receive leadership training that emphasizes supportive supervision, fair workload distribution, staff recognition, and open communication. Such leadership practices can improve employee morale and reduce workplace stress.
- Given that 32.3% of respondents identified employee motivation as the most important strategy for managing stress, and 26.6% reported low morale as the major effect of stress on job performance, institutions should promote work-life balance through leave opportunities, recreational activities, wellness programs, counselling services, and both monetary and non-monetary

incentives. These interventions can improve morale, job satisfaction, and productivity.

- Considering that 21.4% of respondents reported participation in open data initiatives, indicating relatively low engagement with advanced open knowledge practices, and that 12.5% reported diminished attention to detail due to stress, institutions should provide LIS professionals with emerging technologies and continuous digital skills training. This will enhance competence, reduce role ambiguity, build confidence, and ultimately improve job performance.

Ethical considerations

Ethical concerns and standards were followed throughout this study, although ethical clearance was not obtained. This is because this study involved adult Library and Information Science (LIS) professionals and posed minimal risk, as it did not involve clinical procedures, vulnerable populations, or the collection of highly sensitive personal information, except for generic information.

Informed consent was obtained electronically from all respondents before participation in the online survey. Participants were provided with a clear explanation of the study purpose, procedures, expected duration, and the voluntary nature of participation. They were informed of their right to decline participation or withdraw from the study at any stage without any penalty or consequences. Only respondents who indicated consent proceeded to complete the questionnaire.

To ensure confidentiality and anonymity, no personally identifiable information, such as names or telephone numbers, was collected in the questionnaire. Although institutions were identified for purposes of describing the study setting, responses were aggregated during analysis and reporting to minimize the possibility of identifying individual participants, particularly from institutions with small staff numbers. All

collected data were securely stored in password-protected digital files accessible only to the researchers and were used strictly for academic and research purposes.

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Future studies

Future studies could examine the relationship between open knowledge practices and job performance among Library and Information Science professionals in Ugandan academic libraries, in relation to technological tools, organizational culture, demographic factors, and long-term stress management interventions.

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