

THE ROLE OF UNIVERSITY LIBRARIES IN RESEARCH ETHICS AND INSTITUTIONAL REPUTATION

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Abstract: The study examines how university libraries have become important players in the research ecosystem since the late 2010s. They help make sure that scholarly work is of high quality, follow research and publication ethics, and improve the reputation of the institution. Global literature is showing us some exciting new things in research support library services! First, we see a great shift toward digital specialization, with services like data curation and scientometric analysis becoming more popular. Libraries are also working to promote ethical publishing and keep people safe from predatory journals. Also, using scientometric services to help universities make decisions is helping them move up in the world rankings. These trends are great examples of how libraries are changing to help research and protect academic integrity! All three of these things make sure that the scientific work done at universities stays visible, credible, reproducible, and preserved in a way that lasts. The paper also gives examples and suggestions for building the right library framework.

Key Words: research support, university rankings, institutional reputation, publication ethics, research integrity, predatory journals

1. INTRODUCTION

Higher education institutions' academic standing and place in global rankings are now determined mainly by the visibility and credibility of their scientific performance. The number of publications is no longer sufficient on its own due to increased demands for quality, research integrity, and publication ethics. University libraries have progressively transformed from document service providers to strategic partners in research management since the 2010s. They now manage research data, design data and publication workflows, provide scientometric analyses, and actively engage in preventing publication risks like plagiarism, predatory journals, and ethical transgressions. [1–4]

University libraries increasingly provide research support services that directly address university ranking systems and the increasing demand for genuine academic achievement. Research shows that the traditional library duties of providing information and managing collections are giving way to more specialised activities like scientometrics, managing research data, open access programs, and teaching and training scholarly communication. [2]

Research conducted in Australia indicates that the emergence of scientometric and digital repository services is associated with national evaluation frameworks, including the Excellence in Research for Australia (ERA) and the Research Excellence Framework (REF). [5] Research undertaken in North America and Europe correlates these advancements with enhanced visibility in global rankings, including the Times Higher Education (THE) and Quacquarelli Symonds (QS) rankings.

2. UNIVERSITY LIBRARIES IN RESEARCH SUPPORT

The research support portfolio of academic libraries has evolved along two well-defined trajectories: on the one hand, through the emergence of specialized professional roles (data curator, research support librarian, scientometric analyst, scholarly communication officer); and on the other, through the development of end-to-end service chains that accompany the entire lifecycle of a manuscript—from planning to preservation. [2][6-8]

Surveys conducted at research-intensive universities in Canada show that expanding staff expertise in areas such as data management, licensing, altmetrics, and open data policy has become an institution-wide competitive advantage. [2] In Australia and New Zealand, the evidence-based library practice approach emphasizes service development grounded in user needs assessments, performance indicators, and pilot projects, enabling faster adaptation and measurable impact. [5]

From the researchers' perspective, the most in-demand service modules include journal selection advice, open access and copyright guidance, researcher profile management (ORCID, Scopus Author ID, ResearcherID), and the preparation of bibliometric and scientometric reports. [6][9] Altogether, this positions the library as a key actor in institutional research risk management.

The institutional embedding of scientometrics extends far beyond numerical performance reporting. Complex systems such as the Research Impact Measurement Service (RIMS) at UNSW provide real-time or near-real-time integration across WoS/Scopus/Dimensions data sources, enable author and institutional disambiguation, and supply

benchmarking inputs for decision-making at faculty and departmental levels [9].

In this setting, library workers help in two ways: they make sure the data is correct by standardizing affiliations, getting rid of duplicates, and fixing wrong attributions; and they turn numbers into meaningful stories for academic leaders by showing them things like strengths, weaknesses, collaboration networks, and visibility gaps. [7][10-11] Additionally, mediators help institutions understand the impact of their research outputs and identify areas for improvement. Finally, mediators can offer recommendations to enhance the institution's overall research strategy. By providing this valuable insight, library workers and mediators play a crucial role in guiding academic institutions towards maximizing their research impact and potential. Their expertise in data analysis and strategic planning can ultimately lead to greater success and recognition within the academic community.

Moreover, library workers and mediators can assist academic institutions in navigating the ever-evolving landscape of scholarly communication and open access initiatives. They can help institutions stay up to date with new publishing trends and emerging technologies that enhance the dissemination of research outputs. By staying informed and proactive in these areas, institutions can ensure that their research reaches a broader audience and has a greater impact on the academic community. Additionally, library workers and mediators can collaborate with researchers and faculty to develop innovative strategies to promote their work and increase its visibility globally.

3. PREDATORY JOURNALS AND PUBLICATION ETHICS

The core values and normative framework of scholarly activity are defined by research and publishing ethics. Ethical research practices are not just a sign of high-quality science but also a crucial component of social responsibility in higher education institutions. Publication ethics serve to maintain the integrity of the peer-review process, ensure author accountability, promote transparency in scholarly communication, and uphold appropriate citation standards.

Plagiarism, data fabrication, intellectual property infringement, and duplicate publication are common research ethics infractions that erode public confidence in science. However, the issue of predatory publications has gained greater attention over the last 10 years, raising additional moral and reputational concerns. These publishers pose as respectable academic publications, but they prioritise collecting publication fees over academic quality and do not offer actual peer review. [4][12-15]

Rapid publication, phoney peer review, and phoney indexing are all components of predatory publishers' business models that directly jeopardise institutions' reputations. The literature suggests that effective library interventions function on three levels. Libraries enhance researchers' critical thinking skills at the preventive level by providing training, policy guidelines, and checklists (such as Think. Check. Submit.). At the detection level, libraries offer pre-submission consulting and validate target journals (JCR, SJR, DOAJ, publisher's code of ethics, peer review openness, APC policy, and editorial board traceability). The library is incorporated into institutional promotion and research ethics protocols at the sanctioning/preventive level. Publications in predatory journals are not accepted as legitimate academic outputs and may result in notifications to research integrity committees. [12-13]

Empirical evidence substantiates the efficacy of these therapies. Frandsen et al. demonstrated that during a university reform in Ghana that integrated library consultation into promotion criteria, the incidence of predatory publications markedly decreased over a brief period [16]. A comparison analysis by Buitrago-Ciro and Bowker revealed that library reactions in the United States and Canada are systematic. However, in Latin America they are erratic, resulting in increased institutional exposure [1]. Thematic disciplinary risk is significant; in biological and technical domains, the allure of "rapid publication" can be particularly enticing, therefore necessitating proactive library screening.

In addition to predatory exposure, hazards associated with AI-generated publications, such as machine-generated text and graphics, have emerged. Libraries are essential for advancing AI ethics by enforcing declaration standards, labelling generated content, facilitating the open and repeatable sharing of data and code, and distributing detection tools and professional protocols. This is not a policing action but rather a development of competence: the objective is methodological transparency, not technological restriction.[17]

Ethical compliance in research extends beyond plagiarism prevention; appropriate management of research data is equally critical. The library serves as the venue where the FAIR principles (Findable, Accessible, Interoperable, Reusable) are implemented in practice: facilitating data management plans (DMPs), offering data repositories and metadata standards (Dublin Core, DataCite), administering licenses (CC-BY, ODC-BY), and managing persistent identifiers (DOI, Handle, ORCID).

Libraries undertake digital legacy management at the preservation level through bit-level preservation, format migration, redundant storage, and regulated access. These initiatives enable the library to maintain the interconnection and citability of publications, related datasets, and code as a unified entity, hence augmenting citation impact and ranking performance through data and software citations. The framework of data and code citations (DataCite DOIs, software citation) now signifies a novel domain of research visibility, with the library serving as a methodological gatekeeper.

4. UNIVERSITY RANKINGS AND PRESTIGE

International university rankings, such as the Shanghai (ARWU) ranking, the Times Higher Education (THE) ranking, and the QS World University Rankings, have emerged as important benchmarks for evaluating academic achievement and global competitiveness. In addition to assessing research and educational quality, these assessments also examine institutional visibility, citation impact, global collaboration, and overall reputation. The university library influences these characteristics through many direct and indirect means.

The library provides access to prominent scientific databases (Scopus, Web of Science, InCites, SciVal). It assists researchers through training and consultations to facilitate the publication of their work in high-prestige, Q1–Q2 journals. For institutions, the Citations per Faculty and Research Impact indicators hold particular significance in the THE and QS rankings, similar to the importance of the h-index in evaluating individual researchers. [18-19] The library immediately improves these metrics by helping researchers enhance the visibility and quality of their academic output. The library supports institutional leadership and data reporting for ranking purposes through scientometric analyses, data validation, and publication statistics. Ensuring precise researcher profiles guarantees that the university's research performance is accurately and reliably represented in international data repositories. This ensures that institutional data are appropriately represented in ranking databases (Scopus, Clarivate), hence minimising the dangers of underreporting or misattributed affiliations.

A prevalent characteristic of the QS, THE, and ARWU rankings is the significant emphasis on publication and citation metrics. [20–22] The library exerts influence through three principal mechanisms:

- **Data integrity** (precise identification of authors and institutions, elimination of duplicates);
- **Visibility** (enhancing open access proportion, repository submission, researcher profile administration);
- **Reputation safeguarding** (evaluating predatory journals, averting publication ethics violations).

In the Australia–New Zealand region, the evidence-based library service development paradigm has resulted in quantifiable enhancements in research funding success rates and international partnerships (co-authorship, interdisciplinarity). [5][23] In North America, library participation in promotion and tenure processes—such as maintaining verified journal lists and barring illegitimate publishers—has enhanced the quality of publication portfolios in the near term and boosted reputation metrics in the long run. Conversely, publishing in predatory journals statistically undermines institutional performance indicators, particularly when these papers are indexed in prominent sources despite their inferior quality. [12]

Consequently, the university library functions not just as a supportive service entity but also as a guarantor of research visibility, legitimacy, and sustainability. The dependability of published research data, the preservation of a predatory-free publishing landscape, and the practical application of Open Access and FAIR principles collectively enhance the university's standing in global rankings while bolstering its scientific and societal reputation over time.

5. RESULTS

The literature review and best practices indicate that libraries play three interrelated roles in promoting institutional competitiveness: scientometric decision support and ranking data management; protection against predatory journals and unethical publishing practices; and specialised research support. These collectively serve as the cornerstone of a "publication safety" framework, which is made up of the following interrelated components:

- **Preparation and prescreening.** Compulsory verification of journal credibility prior to submission (JCR/SJR/DOAJ/publisher ethics); prompt detection of plagiarism and hazards associated with AI-generated content; guidance on copyright and licensing. Compulsory utilisation of ORCID and standardised institutional affiliation formats.
- **Assistance with submissions.** Optimisation of abstracts and keywords; citations for data and code repositories; templates for data citation (DataCite DOI); and examples of ethical statements.
- **Dissemination and conservation.** Automatic deposit into the institutional repository; utilisation of open access alternatives and transformative agreements; incorporation of persistent identifiers (DOI, ORCID).
- **Post-publication assessment.** Bibliometric analysis (citations, altmetrics, collaborative networks); preliminary assessment of ranking data; anomaly identification (predatory behaviours, self-citation cycles).
- **Institutional amalgamation.** By integrating library protocols with the institutional research ethics code and career progression policy, the library has voting membership on the Research Integrity Board.

This checklist outlines the principal library intervention points for the primary stages of the manuscript lifecycle.

Table 1 - Library intervention points and expected outputs

Phase	Library Activity	Tool / Criterion	Expected Output
Topic and journal selection	Preliminary qualification of target journals; assessment of ethical and quality risks	JCR / SJR; DOAJ; Publisher's Code of Ethics; <i>Think.Check.Submit</i>	Reliable target journal list; identified risk indicators
Manuscript preparation	Prescreening for plagiarism and AI-generated content; copyright and open access advisory	Plagiarism detection software; AI declaration; Creative Commons licences	Clean text; appropriate licence and ethical statements
Research data management	DMP (Data Management Plan) support; data repository and DOI registration; metadata compliance	FAIR principles; DataCite; CrossRef; ORCID; MTMT	Data and code package with DOI and searchable metadata
Submission	Standardization of institutional affiliations; linking author identifiers	ORCID / Scopus Author ID / ResearcherID; MTMT profile	Correct institutional attribution; traceable authorship
Publication	Deposit in institutional repository; application of open access options	Publisher collaborations; Read & Publish agreements; institutional funding schemes	Full text and/or accepted manuscript available in open access
Post-publication	Bibliometric feedback; altmetric monitoring; anomaly detection	Scopus / Web of Science; Altmetrics; network analysis	Reports; risk alerts; increased visibility
Institutional integration	Alignment with research ethics and academic promotion policies	Research Ethics Code; Promotion Regulations	Exclusion of predatory publishing; quality-assured research portfolio

6. SUMMARY

The framework's core idea is that the library serves as a proactive gatekeeper rather than a reactive "firefighter." The university library has been a part of the publication process from the start, incorporating ethical and professional precautions. The library concurrently manages a data infrastructure that links research outputs to their corresponding data, thereby improving reproducibility and visibility. By doing this, the library takes centre stage in the ecosystem of scholarly communication security and plays a significant role in the long-term growth of the institution's reputation.

The implementation of this framework supports the advancement of researchers' careers, reduces the risk of research ethics violations, improves ranking indicators and results, provides the university with a suitable publication support environment, and supports the achievement of science communication objectives. All things considered, the system not only improves publication security within the organisation but also guarantees the best possible use of possibilities and resources, enhancing the university's standing.

A more advanced version of the framework might entail developing a semi-automated web platform that would allow researchers, professors, and PhD candidates to independently access these features, requiring human participation only at specific, warranted points in the procedure.

ACKNOWLEDGMENTS

Supported by the 2024-2.1.1 University Research Scholarship Program of the Ministry for Culture and Innovation from the source of the National Research, Development and Innovation Fund.

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