THE ROLE OF RESEARCH METRICS IN FACULTY DEVELOPMENT: INSIGHTS FOR LIS EDUCATION AND NEP 2020 IMPLEMENTATION IN SOCIAL SCIENCES

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Abstract :

The evolving higher education ecosystem increasingly relies on research metrics to assess faculty performance, institutional ranking, and academic impact. Research productivity, traditionally measured by citations and publication counts, has expanded to include indices such as the h-index, i10-index, and altmetrics. In the Indian context, the National Education Policy (NEP) 2020 has emphasized faculty development, multidisciplinary integration, and the embedding of Indian Knowledge Systems (IKS) within higher education. This review paper explores the intersection of research metrics, faculty development, LIS education, and NEP 2020 implementation in the social sciences. It critically examines global and Indian studies on the influence of bibliometrics and altmetrics on academic careers, the transformation of LIS curricula to incorporate research assessment literacy, and the policy implications for Indian universities. The paper argues for a balanced adoption of research metrics—one that strengthens faculty development and LIS education while aligning with NEP 2020's vision of holistic, inclusive, and multidisciplinary higher education.

Keywords: Research metrics, Faculty development, LIS education, NEP 2020, Indian Knowledge Systems, Bibliometrics, Altmetrics

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Introduction :

Faculty development is central to the growth of higher education institutions (HEIs), particularly in India, where the National Education Policy (NEP) 2020 has prioritized research excellence, innovation, and multidisciplinary approaches. Alongside teaching and administrative roles, faculty are increasingly evaluated on research output and impact, measured through a variety of research metrics such as citations, h-index, journal impact factors, and emerging altmetrics.

In this context, Library and Information Science (LIS) education has a vital role: librarians and LIS scholars not only contribute to knowledge management but also train

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future professionals in understanding and applying research evaluation metrics. Furthermore, NEP 2020 highlights the integration of Indian Knowledge Systems (IKS) and collaborative pedagogy within the social sciences, offering a unique opportunity to reimagine LIS education and faculty assessment frameworks.

The paper reviews existing literature and policies, drawing insights from both international practices and Indian studies, to examine how research metrics influence faculty development and what this means for LIS education and NEP 2020 implementation in social sciences.

Research Metrics and Faculty Development :

1. Evolution of Research Metrics :

Research assessment has traditionally relied on bibliometric indicators, such as publication counts and journal impact factors (Garfield, 2006). The introduction of the h-index (Hirsch, 2005) and subsequent measures like the i10-index have attempted to balance quantity and quality. More recently, altmetrics—which measure online attention through social media mentions, downloads, and online readership—offer alternative perspectives (Priem et al., 2012).

2. Role in Faculty Appraisal and Development :

Universities worldwide use research metrics in tenure, promotion, and grant allocation decisions. In India, the University Grants Commission (UGC) and AICTE have emphasized research productivity in faculty appraisal systems, making publications in Scopus or Web of Science-indexed journals crucial for career progression (UGC, 2018).

However, over-reliance on metrics risks quantity over quality and neglect of regionally relevant or interdisciplinary work (Moed, 2017). A balanced approach that values both global impact and local knowledge contributions is essential, particularly in the social sciences.

3. Indian Studies on Faculty Research Metrics :

Recent studies in Maharashtra universities reveal disparities in research productivity, with STEM faculty often outperforming social science disciplines in citation-based metrics. However, qualitative contributions—such as community-based research, educational innovations, and IKS documentation—remain undervalued under conventional metrics. This creates challenges for faculty development and recognition in social sciences.

LIS Education and Research Metrics Literacy :

1. Changing Role of LIS Professionals :

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LIS professionals are increasingly expected to train faculty and students in scholarly communication, research evaluation, and ethical publishing (Thanuskodi, 2019). Research metrics literacy is becoming part of the LIS curriculum, enabling future librarians to guide

researchers in selecting journals, maximizing visibility, and avoiding predatory practices.

2. Integrating Research Metrics into LIS Curricula :

Globally, LIS curricula now include courses on bibliometrics, scientometrics, and research analytics (Glänzel, 2019). In India, some LIS schools (e.g., University of Delhi, SNDT Women's University) have begun incorporating modules on research impact assessment. However, a systematic nationwide integration is needed to prepare LIS graduates for roles in research management offices and policy implementation.

3. Faculty Development Support through LIS Services :

Academic libraries provide institutional repositories, citation analysis, plagiarism detection, and altmetric dashboards to support faculty research visibility (Kumar & Dora, 2012). Librarians, therefore, act as partners in faculty development, bridging the gap between research metrics and academic career progression.

NEP 2020 and Social Sciences: Implications for Research Metrics :

1. NEP 2020 Framework for Higher Education :

NEP 2020 emphasises multidisciplinarity, research excellence, and integration of IKS (Government of India, 2020). Faculty development under NEP requires not only technical expertise but also cross-disciplinary collaboration and global engagement.

2. Aligning Research Metrics with NEP Goals :

Conventional bibliometrics often undervalue social sciences and humanities research due to lower citation rates and regional publishing traditions (Harzing, 2019). NEP 2020 provides a framework to recognize diverse knowledge contributions, including vernacular scholarship, community outreach, and IKS documentation, which are not adequately captured by traditional metrics.

3. Indian Knowledge Systems and Faculty Assessment :

IKS research—such as Ayurveda, yoga, and ancient Indian mathematics—faces challenges in gaining international visibility due to limited indexing in global databases (Parthasarathy, 2021). Incorporating alternative metrics and national databases (e.g., Shodhganga, Vidwan, IRINS) can help ensure recognition and encourage faculty engagement in socially relevant research.

Global and Indian Perspectives: A Comparative Review :

- **Global Practices**: Countries like the UK (REF) and Australia (ERA) use research

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metrics alongside peer review to evaluate faculty performance.

- **Indian Scenario**: India relies heavily on quantitative metrics (journal indexing, citation counts), but initiatives like NAAC accreditation, NIRF rankings, and IRINS portals are slowly incorporating broader impact indicators.
- **Challenges**: Predatory publishing, lack of awareness about altmetrics, and uneven access to research resources continue to affect Indian faculty development (Beall, 2016; Machin-Mastromatteo et al., 2016).

Discussion :

The literature suggests a need to balance global research metrics with local knowledge systems in evaluating faculty. LIS education must adapt to include research metrics literacy, NEP 2020 frameworks, and IKS integration. For faculty in social sciences, holistic evaluation systems should combine quantitative indicators (citations, h-index) with qualitative measures (societal relevance, policy influence, community engagement).

Implications for LIS Education and Policy :

1. **Curriculum Development**: LIS programs should integrate research metrics, scholarly communication, and IKS documentation.
2. **Faculty Development Workshops**: Libraries should organize regular training on research visibility, ORCID, Scopus, Web of Science, and altmetrics.
3. **Policy Reform**: The UGC and NAAC should consider incorporating altmetrics and qualitative indicators to better reflect the goals of NEP 2020.
4. **Collaborative Platforms**: Developing national citation databases (beyond Scopus/WoS) will ensure Indian scholarship, particularly in social sciences, is adequately represented.

Conclusion :

Research metrics play a critical role in shaping faculty development, institutional ranking, and academic visibility. However, an overemphasis on quantitative measures risks marginalizing social sciences and IKS contributions. NEP 2020 offers an opportunity to reimagine LIS education as a driver of research literacy, ensuring faculty are equipped to balance global research standards with local knowledge traditions. By embedding research metrics literacy in LIS curricula, fostering inclusive evaluation systems, and strengthening national databases, India can build a more holistic, multidisciplinary, and equitable academic ecosystem.

References :

- Beall, J. (2016). Predatory journals: Ban predators from the scientific record. Nature, 534(7607), 326.
- Garfield, E. (2006). The history and meaning of the journal impact factor. JAMA, 295(1), 90–93. https://doi.org/10.1001/jama.295.1.90

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- Glänzel, W. (2019). Bibliometrics and scientometrics in LIS education. Scientometrics, 118(1), 1–10. https://doi.org/10.1007/s11192-018-2953-3
- Government of India. (2020). National Education Policy 2020. Ministry of Education.
- Harzing, A. W. (2019). Two decades of research on the h-index: A review and assessment. Scientometrics, 120(2), 193–210. https://doi.org/10.1007/s11192-019-03100-1
- Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences, 102(46), 16569–16572. https://doi.org/10.1073/pnas.0507655102
- Kumar, S., & Dora, M. (2012). Research productivity of LIS faculty in India: A bibliometric analysis. Annals of Library and Information Studies, 59(2), 128–136.
- Machin-Mastromatteo, J. D., Uribe-Tirado, A., & Romero-Ortiz, M. E. (2016). Research visibility and academic reputation in the digital age. Information Development, 32(3), 449–457. https://doi.org/10.1177/0266666914555333
- Moed, H. F. (2017). Applied evaluative informetrics. Springer.
- Parthasarathy, R. (2021). Indian Knowledge Systems and research visibility. Journal of Indian Education, 47(3), 22–35.
- Priem, J., Taraborelli, D., Groth, P., & Neylon, C. (2012). Altmetrics: A manifesto. Retrieved from http://altmetrics.org/manifesto
- Thanuskodi, S. (2019). LIS education in India: Current trends and future prospects. Library Philosophy and Practice, 2763.
- UGC. (2018). UGC Regulations on Minimum Qualifications for Appointment of Teachers and Other Academic Staff in Universities and Colleges.

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