

A contextual framework for bibliometric integrity: synthesizing positivist and rationalist paradigms in the analysis of African LIS research during COVID-19

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Received 24 January 2026

Revised 8 July 2026

Accepted 13 August 2026

Abstract

Purpose – This paper aims to examine bibliometric analysis's role in advancing academic integrity through contextual citation practices. It identifies methodological and conceptual gaps in the literature. The paper proposes a philosophically informed novel framework integrating positivist and rationalist paradigms to address these limitations.

Design/methodology/approach – A multi-phase mixed-methods design is employed, combining a comprehensive literature review, a diagnostic critique of a prior study, and an illustrative case study. The empirical component reanalyses COVID-19's impact on African Library and Information Science research via triangulated data from Scopus, Google Scholar, journal metadata and author surveys.

Findings – The diagnostic critique identifies common shortcomings: temporal oversimplification, contextual blindness, data source bias and overreliance on descriptive statistics. The case study demonstrates that applying the contextual framework yields more nuanced insights. Key results show preexisting publishing infrastructure, not the pandemic, primarily drove output, and citation visibility varied significantly across databases.

Research limitations/implications – While the illustrative case study validates the framework's utility, broader application across diverse geographic and disciplinary contexts is needed. Future research should test and refine the framework in varied settings to establish its generalizability.

Practical implications – Researchers should adopt context-sensitive bibliometric practices, including mixed-methods designs, data source triangulation, and consideration of local scholarly infrastructures to support more equitable and credible research assessment, particularly for underrepresented regions.

Originality/value – This paper provides a novel, philosophically grounded framework synthesizing positivist and rationalist traditions. It offers a critical diagnostic tool and a constructive methodological model, supported by original empirical evidence from an under-researched regional context.

Keywords Bibliometrics, Academic integrity, Citation analysis, Covid-19, Africa, Contextual, Analysis

Paper type Research paper



1. Introduction

Academic integrity rests on the rigor and transparency of evaluative practices, especially in citation analysis (Saura and Darya, 2023; Gargouri *et al.*, 2010). Bibliometric analysis has become a dominant tool for assessing research output, impact and trends, grounded in a long tradition of quantitative inquiry (Pritchard, 1969; Garfield, 1964). Yet its application often