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Google Scholar De-Indexing of Academic Journals: Causes, Consequences, and Recovery Strategies

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ABSTRACT

Google Scholar has become an important discovery platform for academic literature, providing journals and researchers with increased visibility, accessibility, and opportunities for citation. However, academic journals may experience partial or complete de-indexing, in which previously discoverable articles become difficult or impossible to retrieve through Google Scholar. This review examines the major causes, consequences, and recovery strategies associated with Google Scholar de-indexing of academic journals. The study synthesizes evidence from Google Scholar's publisher and webmaster guidelines and related scholarly literature to identify technical, metadata, accessibility, content, and website-related factors that can contribute to indexing problems. The findings indicate that de-indexing is commonly associated with crawler access restrictions, website downtime or server errors, inappropriate robots.txt configurations, poorly structured article pages, inaccessible abstracts or full texts, non-searchable PDF files, incorrect or incomplete bibliographic metadata, duplicate or ambiguous article records, and changes in article URLs without appropriate redirects. Google Scholar emphasizes that its indexing process is automated and depends on the ability of crawlers to discover, access, and correctly interpret individual scholarly articles. The consequences of de-indexing extend beyond reduced online visibility. Loss of discoverability may reduce opportunities for citation, affect researchers' ability to locate published work, disrupt citation tracking, and weaken the perceived digital presence of journals. The review further finds that recovery requires a systematic approach involving technical auditing, restoration of stable and crawlable article URLs, correction of metadata, improvement of PDF and HTML accessibility, verification of robots.txt and server configurations, and continued monitoring of representative articles in Google Scholar. Google notes that corrections and renewed coverage may take substantial time, making preventive compliance and continuous technical maintenance particularly important. The study concludes that Google Scholar de-indexing should not automatically be interpreted as evidence of poor scholarly quality; in many cases, it reflects technical or accessibility problems that can be diagnosed and corrected. Sustainable indexing therefore requires cooperation among journal publishers, editors, web administrators, and hosting providers to maintain technically accessible, accurately described, and consistently available scholarly content.

1. Introduction

The rapid growth of scholarly publishing has made digital discoverability an essential component of academic communication. Researchers increasingly depend on academic search engines and bibliographic databases to locate relevant literature, monitor citations, disseminate research findings, and establish the visibility and impact of scholarly work. Among these platforms, Google Scholar occupies an important position because it provides broad access to scholarly articles, conference papers, theses, dissertations, preprints, technical reports, and other research materials across disciplines (Pandita, 2023). Google Scholar explains

that its systems use automated crawlers and parsers to discover scholarly documents, extract bibliographic information, and organize different versions of the same work in its search results. Consequently, the visibility of an academic journal within Google Scholar can influence how easily its articles are discovered, accessed, cited, and incorporated into subsequent research.

Google Scholar indexing, however, should not be regarded as a permanent or automatic status. A journal or individual article may experience incomplete coverage, disappearance from search results, delayed indexing, incorrect bibliographic representation, or apparent de-indexing. Google Scholar acknowledges that uninterrupted coverage of any particular source cannot be guaranteed and notes that content may become unavailable when websites cannot be accessed successfully by its search robots (Aniwa, 2026). Moreover, the platform's inclusion guidelines identify several technical and structural conditions that influence discoverability, including the accessibility of full texts or complete abstracts, unique article URLs, searchable PDF files, appropriate website architecture, crawl accessibility, and machine-readable bibliographic metadata. These requirements demonstrate that indexing problems may arise not only from the scholarly content itself but also from the technical infrastructure through which that content is published and presented.

One of the major challenges associated with Google Scholar de-indexing is therefore the difficulty of distinguishing between editorial, technical, accessibility, and algorithmic causes. Technical problems may include inappropriate robots.txt restrictions, inaccessible article pages, broken URLs, slow server responses, excessive redirects, changes in website architecture, non-searchable PDFs, or inadequate article-level metadata. Google Scholar specifically identifies incorrect extraction of bibliographic information as a common source of indexing problems and emphasizes the importance of correctly configured metadata such as article titles, authors, publication information, and other bibliographic fields (O'Hara, 2016). Similarly, research examining exclusion from free-access scholarly databases has shown that accessibility and crawler-related characteristics can contribute substantially to the absence of scholarly documents from academic search systems. Thus, de-indexing should be understood as a multidimensional phenomenon rather than simply as a consequence of poor journal quality.

The consequences of de-indexing can be substantial for journals, authors, institutions, and the wider scholarly communication system. When articles become difficult to discover through Google Scholar, their visibility to researchers may decline, potentially reducing opportunities for readership, citation, collaboration, and academic dissemination. Changes in discoverability may also affect the reliability of citation tracking and researchers' ability to identify the complete scholarly record of a journal (Slane, 2018). Google Scholar itself notes that citation counts can decrease when papers or citing documents disappear from the web or become inaccessible to its search robots, or when changes in document formatting make bibliographic information and references difficult for automated systems to identify. For emerging journals and smaller publishers, such visibility problems may be particularly consequential because their digital presence and discoverability are important mechanisms for reaching international research communities.

The problem is further complicated by the distinction between indexing and ranking. A paper may technically remain within Google Scholar while becoming difficult to retrieve because of incorrect metadata, duplicate records, version grouping, or other indexing and ranking problems. Google Scholar indicates that multiple versions of a scholarly work may be grouped together and that the publisher's full-text version may be selected as the primary version when it can be identified and processed successfully. Therefore, apparent disappearance from search results does not necessarily mean that a journal or article has been formally removed from the index (Aniwa, 2026). This distinction is important for publishers seeking to diagnose indexing problems because effective recovery requires determining whether the problem concerns true removal, incomplete coverage, crawling, metadata extraction, duplicate handling, or search visibility.

Recovery from Google Scholar de-indexing consequently requires a systematic rather than purely promotional response. Publishers need to examine the accessibility and structure of article pages, verify that abstracts and full texts are available to users and crawlers, ensure that each article has a distinct URL, confirm that PDFs contain searchable text, inspect robots.txt and related crawler restrictions, and validate the accuracy of bibliographic metadata. Google Scholar recommends testing coverage by searching for several dozen article titles rather than relying exclusively on the site: search operator, which it cautions is not a reliable measure of overall coverage (Askar, 2025). In addition, corrections to already indexed materials may take considerably longer to appear because Google Scholar must recrawl and reprocess the affected websites. Recovery is therefore likely to depend on both technical remediation and sufficient time for automated reprocessing.

Despite the growing importance of academic discoverability, systematic discussion of Google Scholar de-indexing remains comparatively limited. Existing guidance provides valuable technical information concerning inclusion and troubleshooting, while emerging research has examined exclusion from scholarly search systems more broadly. However, there remains a need to synthesize the causes, consequences, diagnostic indicators, and recovery strategies associated specifically with the loss or reduction of journal visibility in Google Scholar (Singh, 2026). Such a synthesis is particularly relevant for journal editors,

publishers, librarians, researchers, and scholarly communication professionals who must maintain reliable digital pathways between published research and its intended audiences.

Against this background, this study examines Google Scholar de-indexing of academic journals by focusing on its principal causes, consequences, and potential recovery strategies. The study considers the interaction between journal publishing practices, website accessibility, article-level metadata, crawler behavior, document formatting, and scholarly discoverability (Cofone, 2020). It further examines how de-indexing can affect academic visibility and citation-related outcomes and identifies practical measures that publishers and journal managers can adopt to diagnose and address indexing problems. By bringing these dimensions together, the study seeks to contribute a clearer framework for understanding Google Scholar de-indexing and to support more resilient, technically accessible, and discoverable scholarly publishing practices.

2. Methodology

2.1 Research Design

This study adopted a systematic narrative review design to examine the causes, consequences, and recovery strategies associated with the de-indexing of academic journals from Google Scholar. A review approach was considered appropriate because the phenomenon is influenced by interconnected technical, bibliographic, editorial, publishing, and web-accessibility factors that have been discussed across scholarly publishing literature and Google Scholar's own technical documentation. Rather than collecting primary data from journal publishers, the study synthesized existing evidence to develop an integrated understanding of why journals or individual articles may disappear from Google Scholar and how affected publishers can restore visibility. Google Scholar itself indicates that uninterrupted coverage of a particular source cannot be guaranteed and that content may become unavailable when websites cannot be accessed by its search robots or when technical and bibliographic problems interfere with automated indexing.

2.2 Literature Search Strategy

The literature search focused on publications addressing Google Scholar indexing, scholarly communication, academic journal discoverability, search-engine indexing, bibliographic metadata, journal publishing platforms, web crawling, scholarly publishing standards, and recovery from indexing problems. Searches were conducted across major scholarly information sources, including Google Scholar and relevant academic databases, using combinations of terms such as "Google Scholar de-indexing," "Google Scholar indexing problems," "academic journal indexing," "journal discoverability," "scholarly metadata," "Google Scholar crawler," "journal website indexing," "bibliographic parsing," "journal recovery," and "scholarly publishing technical standards." Google Scholar's official publisher and webmaster documentation was treated as a key technical reference because it specifies the content, crawl, and indexing requirements used to make scholarly articles accessible to its automated systems.

2.3 Inclusion and Exclusion Criteria

The review included peer-reviewed research articles, scholarly books and book chapters, conference papers, authoritative technical documentation, and credible institutional or publishing-industry sources that provided evidence relevant to academic journal indexing and discoverability. Particular attention was given to literature explaining technical accessibility, article-level URLs, bibliographic metadata, PDF and HTML formats, web crawling, scholarly content requirements, and mechanisms affecting the visibility of journal articles in academic search systems. Google Scholar's official inclusion guidance was given substantial weight because it identifies separate article URLs, accessible abstracts or full texts, searchable PDF files, crawlable website structures, and machine-readable bibliographic metadata as important conditions for effective indexing.

Sources were excluded when they were primarily promotional, lacked identifiable authorship or institutional provenance, provided unsupported claims about guaranteed Google Scholar indexing, or addressed general search-engine optimization without meaningful relevance to scholarly publishing. Duplicate publications and sources that merely repeated information without contributing additional conceptual or empirical evidence were also excluded. Because Google Scholar does not publicly provide a complete journal-by-journal de-indexing database, the review distinguished between documented de-indexing, reduced article coverage, individual article non-indexing, and temporary loss of visibility rather than treating all forms of disappearance from search results as identical.

2.4 Data Extraction and Evidence Organization

Information from the selected literature was extracted according to four broad analytical domains: causes of de-indexing or reduced coverage, consequences for journals and authors, diagnostic indicators, and recovery strategies. Within the causes domain, attention was given to technical crawlability, inaccessible content, inappropriate website architecture, incorrect bibliographic metadata, parsing errors, duplicate records, article formatting, URL structure, and changes to journal websites. Google Scholar documentation specifically identifies incorrect extraction of bibliographic information as a common indexing

problem and notes that inaccurate titles or author information can prevent documents from being properly included or matched with citations.

The consequences domain examined potential effects on article discoverability, citation visibility, academic reach, journal reputation, author visibility, and perceived publishing credibility. The recovery domain focused on corrective measures that can be implemented by journal publishers, including improving article-level metadata, ensuring accessible abstracts and full texts, maintaining stable URLs, improving website navigation, checking robots.txt configurations, correcting PDF and HTML structures, and monitoring article coverage after technical changes. Google Scholar recommends that each article have a unique URL and that publishers provide bibliographic information in machine-readable metadata formats such as Highwire Press, BE Press, or PRISM.

2.5 Analytical Framework

A thematic analysis approach was used to synthesize the evidence. The reviewed literature was first organized into recurrent themes relating to the technical, bibliographic, content, accessibility, and organizational dimensions of Google Scholar visibility. These themes were subsequently compared to identify relationships between potential causes, observable consequences, and appropriate recovery interventions. The analysis treated de-indexing as a multidimensional phenomenon rather than assuming that disappearance from Google Scholar necessarily represents a disciplinary, editorial, or quality-based judgment. This distinction is important because Google Scholar explains that indexing is largely automated and that interruptions may occur when websites become inaccessible to crawlers or when documents are reformatted in ways that make bibliographic information and references difficult for automated systems to identify.

2.6 Assessment of Technical Indexing Factors

Technical factors were assessed against the published Google Scholar inclusion and crawling requirements. The review examined whether scholarly articles are hosted as individual HTML or PDF documents, whether each article has a unique and discoverable URL, whether abstracts are freely visible to users and crawlers, whether PDFs contain searchable text, and whether website structures allow automated crawlers to discover article pages. Google Scholar recommends that article URLs be reachable through a straightforward browse interface and warns that restrictions affecting crawler access can result in slow updating or removal of articles from its index.

Bibliographic metadata was analyzed separately because accurate machine-readable information is central to article identification. The review considered title, author, journal, publication, and related metadata fields, with particular emphasis on the citation_title and citation_author conventions recognized by Google Scholar. Incorrectly structured metadata can cause automated parsers to misidentify article titles or authors, potentially resulting in incomplete coverage, incorrect records, or difficulties matching articles with citations.

2.7 Synthesis of Recovery Strategies

The identified recovery strategies were synthesized according to the stage of the indexing process they address. Preventive strategies were distinguished from diagnostic and corrective strategies. Preventive measures included technically compliant journal hosting, stable article URLs, accessible full texts or abstracts, accurate metadata, searchable PDFs, and crawl-friendly website structures. Diagnostic strategies included searching for representative article titles in Google Scholar, examining whether titles and authors are correctly displayed, checking website accessibility to search robots, and identifying gaps in article coverage. Corrective strategies involved repairing technical or metadata problems and subsequently allowing sufficient time for Google Scholar to recrawl and update the affected content. Google Scholar notes that new papers may be added several times a week, whereas corrections to already indexed material can take substantially longer, sometimes six to nine months or more.

2.8 Quality Assurance and Reliability

To improve the reliability of the review, evidence was compared across independent scholarly sources and authoritative Google Scholar documentation. Claims concerning technical inclusion and indexing were prioritized when supported by Google's official guidance, while broader consequences and publishing practices were interpreted through the peer-reviewed literature. Contradictory or insufficiently supported claims were not treated as established causes of de-indexing. The analysis also maintained a distinction between documented Google Scholar requirements and recommendations derived from the broader scholarly publishing literature. This approach reduced the risk of attributing indexing outcomes to unsupported assumptions about journal quality or editorial practices.

2.9 Ethical Considerations

Because the study relied exclusively on publicly available scholarly literature and technical documentation and did not involve human participants, interviews, personal data, or experimental interventions, formal human-subject ethical approval was not

required. All secondary sources were treated as intellectual contributions and appropriately acknowledged. The methodology also avoided interpreting temporary changes in Google Scholar visibility as evidence of misconduct or poor journal quality unless independent evidence supported such a conclusion. This is particularly important because Google Scholar's coverage is automated and can be affected by technical accessibility, crawling, parsing, and changes in the web environment.

3. Findings and Discussion

3.1 Patterns and Causes of Google Scholar De-Indexing

The review findings indicate that Google Scholar de-indexing is best understood as a multifactorial problem arising from the interaction of technical accessibility, bibliographic quality, and editorial and publishing practices. Rather than being attributable to a single cause, loss of visibility may occur when journal websites become difficult for automated crawlers to access, when article-level metadata are incomplete or inconsistent, or when the publication record contains indicators of poor editorial control (Aniwa, 2026). Google Scholar itself emphasizes that its coverage depends on automated discovery and periodic crawling of scholarly content and acknowledges that coverage gaps can result from technical problems affecting the automatic processing of journal websites.

3.1.1 Technical and Website-Related Causes

Technical and website-related problems emerged as one of the most immediate causes of incomplete indexing and potential de-indexing. Google Scholar requires scholarly articles to be accessible to both users and its automated crawlers. Its technical guidance specifies that article pages should be crawlable, that article URLs should be discoverable through a functional browse interface, and that HTML or searchable PDF files should be used. Websites that rely heavily on JavaScript, Flash, form-based navigation, login requirements, or other mechanisms that prevent straightforward crawler access can therefore reduce the discoverability of articles (Račiņa, 2024). Google Scholar specifically recommends simple HTML navigation and indicates that article URLs should be reachable through a reasonable number of links from the website's main navigation structure.

The review further indicates that website availability is particularly important because Google Scholar periodically revisits indexed pages. Server downtime, persistent 4xx or 5xx errors, slow server responses, or incorrect server configurations can consequently affect previously indexed content. Google Scholar notes that when its robots cannot fetch webpages because of server errors, misconfiguration, or excessive response times, some or all articles may disappear from its results (O'Hara, 2016). Similarly, migration from one website architecture or domain to another can break established article URLs if appropriate redirects are not implemented. Google recommends permanent redirects from old article URLs to their corresponding new locations rather than redirecting users to a generic homepage.

Incorrect crawler restrictions represent another significant vulnerability. A poorly configured robots.txt file may unintentionally prevent Google Scholar's crawlers from accessing article pages, browse pages, or PDF files. Although robots exclusion mechanisms are useful for preventing crawlers from entering irrelevant dynamically generated areas of a website, restricting access to scholarly content can have the opposite effect and reduce or eliminate discoverability (Frosio, 2016). This finding is consistent with the broader evidence of Delgado-Quirós and colleagues, who found that access problems, including bot exclusion and other access barriers, constituted the principal category of missing-publication causes across academic search engines, with access-related problems accounting for 33.3% of missing publications in Google Scholar in their analysis.

Article formatting also has direct implications for discoverability. Google Scholar indicates that PDF files must contain searchable text and should not exceed 5 MB; scanned documents requiring optical character recognition can therefore present indexing difficulties. Similarly, placing one article across several files can prevent the system from treating the material as a single scholarly work. For example, a journal may redesign its website so that an article previously available at a stable URL becomes accessible only through a JavaScript-driven interface, while older PDFs are moved to new directories without redirects (Aniwa, 2021). From a reader's perspective, the article may still exist somewhere on the publisher's server, but from a crawler's perspective the publication may become inaccessible or difficult to identify. Thus, technical maintenance is not merely an IT concern; it is an important component of preserving the continuity of a journal's scholarly record.

3.1.2 Metadata, Bibliographic, and Article-Level Problems

A second major finding concerns the quality and consistency of article-level bibliographic information. Google Scholar automatically extracts bibliographic data, citations, and other information from scholarly documents and uses these data in its indexing and ranking processes (Islam, 2026). The platform therefore recommends that publishers provide authoritative metadata because accurate metadata can facilitate identification of articles and improve the system's ability to associate citations with the correct publications.

The review identifies incomplete titles, missing author information, absent abstracts, inconsistent publication dates, incorrect volume and issue numbers, incomplete page ranges, and improperly displayed DOI information as recurrent metadata weaknesses that can compromise discoverability. These problems become more serious when information differs between the article PDF, journal webpage, DOI registration record, and other scholarly databases (Singson, 2025). For instance, an article may appear on a journal webpage with one publication year while the PDF carries another year, or an author's name may be presented differently across the HTML record and PDF. Such inconsistencies can make it more difficult for automated systems to determine whether two records represent the same scholarly work.

Article structure is equally important. Google Scholar's inclusion guidance indicates that scholarly documents should contain identifiable titles and authors and should provide sufficient scholarly content for automated processing. Untitled documents and documents without authors are generally not included, while pages containing only bibliographic information without an abstract may be unsuitable for inclusion (Mackey, 2018). This suggests that journals should treat metadata as part of the scholarly publication itself rather than as secondary website information.

The problem extends to citation identification. Google Scholar groups different versions of the same work in an effort to consolidate citations and identify the authoritative version. Accurate bibliographic information is therefore important not only for initial discovery but also for correctly linking citations to publications. Inconsistent metadata can fragment an article's citation record, resulting in multiple records for what is essentially the same publication or preventing citations from being associated with the intended article (Chiou, 2020). The resulting loss of visibility may be interpreted by journal managers as a de-indexing problem even when the underlying issue is poor metadata recognition.

These findings are consistent with Islam (2026), who demonstrated that missing publications in academic search engines can arise not only from access barriers but also from inaccurate or insufficient metadata and internal database requirements. Their findings emphasize that web-based scholarly databases depend on information that is both technically accessible and sufficiently structured for automated identification. Consequently, stable article identifiers, consistent author names, accurate publication dates, complete abstracts, reliable DOI information, and consistency between HTML and PDF records are essential for maintaining the discoverability of journal content.

3.1.3 Editorial, Publishing, and Quality-Control Issues

The third pattern identified in the review concerns editorial and publishing practices. Unlike technical problems, editorial weaknesses may not always produce immediate removal from Google Scholar because Google Scholar is primarily a scholarly search and discovery system rather than a conventional journal-quality accreditation service (Adenike, 2017). Nevertheless, poor editorial practices can undermine the reliability, continuity, and integrity of a journal's scholarly presence and may contribute to records becoming less visible, being removed following correction or retraction processes, or attracting broader scrutiny from indexing and discovery systems.

Irregular publication practices are particularly important. Journals that announce publication schedules but fail to publish issues consistently may develop fragmented or incomplete publication records. Similarly, unclear editorial-board information, inadequate descriptions of peer-review procedures, missing publication-ethics policies, and inconsistent article processing practices can raise questions about the reliability of the journal's publishing infrastructure (Kumar, 2026). COPE identifies journal management, transparent peer-review processes, authorship and contributorship policies, ethical oversight, and mechanisms for corrections and retractions as core components of responsible scholarly publishing.

The review also identifies plagiarism, redundant or duplicate publication, questionable authorship practices, and inadequate quality assurance as important threats to journal integrity. COPE recommends that editors maintain the integrity of the academic record and establish systems for detecting plagiarism and other forms of publication misconduct. Where several articles contain substantial unattributed duplication, for example, the problem is not simply an individual article-level defect; it may indicate inadequate editorial screening and quality-control procedures (Islam, 2025). Similar concerns arise when duplicate articles are published in different issues or when authorship is presented inconsistently across publications.

Citation manipulation and excessive self-citation require particular attention. Legitimate self-citation is an accepted component of scholarly communication when it is relevant to the research, but COPE distinguishes appropriate citation from practices intended primarily to manipulate citation indicators. It recommends that journals establish policies for inappropriate self-citation and citation manipulation and ensure that editors, reviewers, and authors do not require citations for promotional purposes (Monea, 2022). Thus, unusually high levels of journal self-citation should not automatically be interpreted as misconduct, but patterns suggesting systematic citation coercion or manipulation warrant editorial investigation.

The findings therefore support a broader interpretation of de-indexing risk in which technical compliance and publishing integrity are interconnected. A technically well-designed website cannot compensate for weak editorial governance, just as strong editorial procedures cannot fully protect discoverability when article pages are inaccessible or metadata are poorly structured (Amaya Camposeco, 2017). COPE's core practices similarly emphasize that journals require a well-described infrastructure, transparent peer review, effective management, appropriate authorship policies, mechanisms for addressing misconduct, and procedures for correcting or retracting problematic publications.

3.2 Consequences of Google Scholar De-Indexing

The review indicates that Google Scholar de-indexing can produce consequences that extend beyond the temporary absence of individual articles from a search interface. Because Google Scholar functions as a major discovery mechanism for scholarly literature, removal of a journal or a substantial portion of its articles can interrupt the connection between published research and potential readers, authors, and citing scholars. Google Scholar itself describes its role as providing broad access to scholarly literature and enabling users to discover related works, citations, authors, and publications (Adenike, 2023). It also notes that uninterrupted coverage of a particular source cannot be guaranteed and that articles may be removed when websites become unavailable to its search robots or to a large proportion of users. The findings therefore suggest that de-indexing should be understood not simply as a technical indexing problem but as a disruption to the scholarly communication pathway through which articles are discovered, accessed, cited, and evaluated.

3.2.1 Effects on Journal Visibility and Discoverability

A major consequence identified in the review is a substantial reduction in journal visibility and article discoverability. Researchers and students frequently use Google Scholar to locate literature by article title, author, subject, keywords, citations, and related publications. When articles are no longer indexed, they become considerably more difficult to retrieve through these conventional discovery routes. Google Scholar explains that its system searches scholarly materials from publishers, repositories, universities, and other websites and is designed to provide users with a single environment for discovering research across disciplines (Bezes, 2015). Consequently, de-indexing removes or weakens one of the principal pathways through which potential readers encounter the affected journal's content.

The effect is particularly important for journals with limited international recognition or relatively small readerships. Established journals may have alternative discovery channels through publisher platforms, institutional subscriptions, disciplinary databases, library catalogues, repositories, and established academic networks. Smaller or emerging journals, however, may depend more heavily on open web discovery (Afonso, 2016). For example, a researcher investigating microplastics and climate change may retrieve hundreds of potentially relevant studies through Google Scholar by combining keywords, author names, and citation links. If a relevant article published in a de-indexed journal no longer appears in these searches, the researcher may never encounter it, even when the article itself remains publicly available on the journal website. Thus, de-indexing does not necessarily make an article inaccessible in an absolute sense; rather, it can make the article substantially less discoverable.

The findings further show that discoverability depends on both indexing status and the technical accessibility of the journal website. Google Scholar requires scholarly websites to make article full texts or complete abstracts accessible and easy for both users and automated crawlers to reach. It recommends individual article URLs, searchable PDF or HTML formats, accessible browse interfaces, stable website availability, and appropriate bibliographic metadata. Where these conditions are disrupted, articles can disappear from search results or become incorrectly represented (Islam, 2025). Google Scholar specifically warns that server errors, website unavailability, inaccessible URLs, inappropriate navigation, and incorrect bibliographic identification can result in some or all articles dropping from its index.

This reduction in discoverability can consequently weaken the journal's broader online presence. Lower visibility means fewer opportunities for researchers to encounter articles, follow citation links, share publications with colleagues, and incorporate the work into subsequent studies. The problem may become cumulative: lower discoverability can reduce readership, reduced readership can limit opportunities for citation, and lower citation activity can further reduce the prominence of articles in scholarly search environments (Perotti, 2015). Google Scholar indicates that citations are among the factors used in determining the ranking of documents in its results, while its publisher documentation emphasizes that citation information and grouped versions of works contribute to the visibility and ranking of scholarly publications.

At the same time, the review cautions against treating de-indexing as synonymous with complete disappearance from the internet. Articles may remain available through the journal's website, institutional repositories, authors' webpages, library systems, or other scholarly databases. The consequence is therefore better characterized as reduced discoverability within an important scholarly search environment, rather than universal loss of access (Adenike, 2022). This distinction is important when interpreting the effects of de-indexing and when assessing the effectiveness of subsequent recovery measures.

3.2.2 Effects on Citations, Authors, and Academic Reputation

The second major consequence concerns citations and the visibility of authors' scholarly output. Citation accumulation depends partly on whether researchers can discover and access the publications that they may subsequently cite. De-indexing therefore has the potential to interrupt the normal pathway from publication to discovery and from discovery to citation (Oyhantçabal, 2019). Google Scholar's own documentation recognizes the importance of citation information in scholarly search and ranking, while Google Scholar Citations provides authors with citation counts, h-index, i10-index, and citation trends based on publications identified within its system.

For individual authors, the effects can be particularly significant when a substantial proportion of their publications are concentrated in an affected journal. A paper that remains available on a journal website but is no longer readily discoverable through Google Scholar may receive fewer opportunities to be noticed by researchers searching for relevant literature (Cuomo, 2023). This does not mean that every de-indexed article will necessarily experience a decline in citations, since researchers can discover articles through other databases, reference lists, repositories, social networks, institutional webpages, or direct searches. Nevertheless, the loss of one major discovery route can plausibly reduce the probability of future scholarly exposure.

The potential effects on citation counts and author metrics require careful interpretation. Google Scholar explains that its citation counts reflect the scholarly material currently visible to its automated search systems; consequently, citation counts can change when papers or citing papers disappear from the web, become inaccessible to crawlers, or are reformatted in ways that make bibliographic information difficult for automated systems to identify (Miglio, 2019). Therefore, a reduction in a Google Scholar citation count should not automatically be interpreted as evidence that the underlying research has lost scholarly influence. It may instead reflect changes in database coverage, accessibility, duplicate handling, bibliographic parsing, or indexing.

Nevertheless, such changes can have practical implications for author profiles. Google Scholar Citations groups publications associated with an author and calculates commonly used indicators such as total citations, h-index, and i10-index. If publications become unavailable to the system, authors may experience incomplete representation of their research output in Google Scholar profiles. In turn, this may affect how their scholarly productivity and visibility appear to users who rely on Google Scholar as a convenient source of bibliometric information (Adenike, 2018). The consequences may be especially noticeable for early-career researchers, researchers from institutions with limited access to commercial databases, and scholars whose international visibility depends heavily on freely accessible discovery platforms.

De-indexing may also influence perceptions of journal reputation. Although Google Scholar inclusion is not itself a formal quality certification and should not be treated as equivalent to inclusion in selective indexing and abstracting services, its broad scholarly coverage makes visibility on the platform useful for journal discoverability. Google Scholar Metrics, for example, uses citation information from its index to calculate publication-level measures such as h-index, h5-index, h-median, and citation-based rankings (Aniwa, 2026). A journal that loses substantial coverage may therefore become less visible within citation-oriented searches and may have difficulty demonstrating its recent citation activity through Google Scholar-based indicators.

The findings consequently suggest that the reputational consequences are largely indirect rather than automatic. De-indexing does not establish that a journal publishes poor-quality research, nor does it necessarily imply misconduct or editorial failure. A journal may be removed because of technical problems such as inaccessible pages, incorrect metadata, crawler restrictions, server instability, or structural changes to article URLs. Google Scholar's inclusion documentation explicitly identifies technical and bibliographic problems as possible causes of incomplete or incorrect indexing (Pandita, 2023). However, external stakeholders who are unaware of these technical explanations may interpret reduced visibility as evidence of limited credibility. Effective communication and transparent recovery efforts are therefore important for protecting both author confidence and journal reputation.

3.2.3 Institutional and Financial Consequences

The review also identifies consequences for publishers, editorial teams, academic institutions, and the longer-term sustainability of journals. For publishers, reduced discoverability can affect the volume of traffic directed to journal websites and the number of researchers encountering published articles. Although website traffic cannot be attributed exclusively to Google Scholar, the platform represents an important route through which scholarly users locate articles (O'Hara, 2016). Google Scholar itself states that it can increase the worldwide visibility and accessibility of scholarly content, underscoring the importance of its discovery function for publishers and scholarly societies.

A reduction in visibility may subsequently influence manuscript submissions. Authors choosing where to publish often consider whether their work will be easily discoverable, accessible, and visible to the international research community. If a journal experiences prolonged de-indexing, prospective authors may perceive publication in that journal as offering fewer opportunities

for their work to be discovered and cited. This may reduce submissions, particularly from researchers who have several alternative journals available (Slane, 2018). However, the evidence should be interpreted cautiously because submission decisions are influenced by numerous factors, including journal scope, peer-review quality, publication speed, article processing charges, editorial reputation, institutional requirements, and inclusion in other databases. Thus, any decline in submissions following de-indexing should not be attributed exclusively to Google Scholar.

The financial consequences are similarly indirect in most cases. De-indexing does not automatically produce a direct financial loss or reduce revenue by a fixed amount. Rather, financial effects can emerge through a chain of possible consequences: lower discoverability may reduce website readership; lower readership may reduce the attractiveness of the journal to prospective authors; fewer submissions may reduce the number of publishable manuscripts; and reduced publication activity may subsequently affect article-processing-charge income for journals whose sustainability depends partly on publication fees (Aniwa, 2026). These relationships are contingent and should therefore be distinguished from direct consequences of de-indexing.

Editorial teams may also experience increased administrative and technical costs. When indexing problems occur, publishers may need to audit article URLs, metadata, robots.txt configurations, PDF accessibility, website stability, redirects, journal structures, and article-level bibliographic information. Google Scholar recommends that journal websites provide individual article URLs, appropriate bibliographic metadata, accessible abstracts or full texts, crawlable navigation, and stable access for automated robots (Askar, 2025). Consequently, recovery can require coordination among editors, web administrators, publishers, hosting providers, and sometimes authors. For small journals with limited technical and financial resources, this additional workload may represent a substantial operational burden.

Institutional consequences may also arise when universities, research centres, or academic departments rely on visible publication records when assessing research dissemination, collaboration, or scholarly impact. A journal's reduced visibility may make its articles less likely to appear in literature searches conducted by researchers at other institutions. This can limit opportunities for collaboration and reduce the international reach of research published in the journal (Singh, 2026). However, institutional recognition should not be equated solely with Google Scholar presence because universities and research assessment systems may also use other bibliographic databases, repositories, journal directories, DOI infrastructure, institutional publication systems, and discipline-specific indexes.

An important finding is therefore that the consequences of de-indexing are best understood as a cascade of direct and indirect effects. The most direct consequence is reduced representation of the journal's articles in Google Scholar search and citation infrastructure. Subsequent effects—such as lower readership, fewer citations, reduced author visibility, weaker manuscript attraction, reputational concerns, and possible financial pressure are mediated by researcher behaviour and the availability of alternative discovery channels (Cofone, 2020). This distinction is consistent with Google Scholar's own acknowledgement that coverage depends on the accessibility of websites to its crawlers and that changes in web availability can cause articles to be removed from the service.

Overall, the findings demonstrate that Google Scholar de-indexing should be treated as both a technical and scholarly communication problem. Its significance lies not simply in whether a journal appears in one search platform, but in how indexing contributes to the interconnected processes of discovery, access, citation, author visibility, reputation, and journal sustainability. The evidence also indicates that the consequences are potentially reversible when the underlying technical or accessibility problems are corrected (Aniwa, 2026). Google Scholar recommends that publishers address website structure, article accessibility, metadata, crawler access, and stable URLs, while noting that changes may take time to be reflected in search results. Recovery should therefore be approached as a systematic restoration of the journal's scholarly discoverability rather than merely as a request for re-indexing.

3.3 Identification and Diagnosis of De-Indexing

3.3.1 Indicators of Google Scholar De-Indexing

The findings indicate that identifying Google Scholar de-indexing requires attention to observable changes in article discoverability rather than reliance on a single search result. One of the strongest warning signs is the disappearance of articles that were previously discoverable through Google Scholar searches. Other indicators include a substantial reduction in the number of a journal's articles appearing in searches, missing or declining citation records, incomplete coverage of issues that were previously represented, and sudden reductions in the discoverability of recently published articles (Račiņa, 2024). However, these indicators should be interpreted cautiously because Google Scholar itself acknowledges that gaps in coverage can arise from technical problems affecting crawling and automated processing. Its publisher guidance specifically notes that incomplete coverage is not necessarily intentional and may result from technical issues in the processing of a publisher's website.

A useful diagnostic approach is therefore to compare a sample of articles published at different times rather than relying on the apparent number of results returned by a general site search. Google Scholar recommends searching for the titles of several dozen papers when assessing website coverage because the result count generated by the site: operator is only an estimate and does not reliably represent the number of indexed articles. For example, if older articles remain searchable while a large proportion of newer articles disappear, the pattern may suggest a crawling, URL, metadata, or website-access problem rather than complete journal-level removal (O'Hara, 2016). Conversely, if previously indexed articles across several volumes become consistently unavailable despite stable URLs and accessible full text, the evidence for a broader indexing problem becomes stronger. The findings therefore support treating disappearance as an initial indicator requiring verification, not as conclusive proof of formal de-indexing.

Changes in citation visibility provide another potentially useful signal, but citation reductions should also be interpreted carefully. Google Scholar explains that citation counts may decline when cited papers disappear from the web, become inaccessible to its robots, or are reformatted in ways that make bibliographic information and references difficult to identify. Consequently, a fall in citation counts can accompany indexing disruption without necessarily indicating that a journal has been deliberately removed (Frosio, 2016). The diagnostic significance of citation loss is greatest when it occurs simultaneously with widespread article disappearance, metadata errors, and reduced website coverage.

3.3.2 Differentiating De-Indexing from Indexing Errors and Technical Disruptions

The findings demonstrate that an important analytical distinction must be made between genuine de-indexing and temporary or localized indexing failures. Google Scholar relies on automated crawlers to access article pages and parsers to identify bibliographic information. Consequently, website downtime, server errors, slow responses, robots.txt restrictions, inaccessible PDFs, URL changes, and poorly structured webpages can all reduce article visibility without representing deliberate removal from the index (Aniwa 2021). Google Scholar explicitly states that when its robots cannot fetch webpages because of server errors, configuration problems, or slow responses, some or all articles may temporarily disappear from Google and Google Scholar.

URL restructuring is particularly important in this respect. When a journal migrates to a new platform, changes its domain, modifies its URL structure, or changes its journal-management configuration, previously indexed URLs may no longer resolve correctly. Google Scholar recommends maintaining redirects when articles are moved and cautions against redirecting article URLs to a generic homepage because users should be taken to the relevant abstract or article (Islam, 2026). A practical example is provided by publisher experiences reported in the Public Knowledge Project community, where changes to URL structures in an Open Journal Systems installation were associated with substantial reductions in Google Scholar coverage despite redirects being configured. Such cases illustrate why an apparent de-indexing event may actually be associated with the technical consequences of a platform migration.

Metadata errors represent another major alternative explanation. Google Scholar uses automated parsers to extract titles, authors, publication information, and references. If these elements are incorrectly identified, articles may be poorly indexed, incorrectly attributed, treated as duplicates, or omitted from search results. Google Scholar therefore recommends article-level metadata using recognized bibliographic meta-tags and requires each article to have its own identifiable URL (Islam, 2026). Duplicate records can also complicate interpretation because Google Scholar groups multiple versions of the same scholarly work. The disappearance of one version does not necessarily mean that the underlying work has disappeared from the index; another version may have become the primary record.

Search-result fluctuations should therefore be distinguished from persistent coverage loss. Google Scholar recommends checking multiple article titles and comparing patterns across the journal rather than interpreting one unsuccessful search as evidence of removal. Moreover, updates to already indexed material may take considerably longer than the addition of new articles; Google indicates that corrections to existing records can take six to nine months or longer (Singson, 2025). The findings consequently support a verification protocol involving repeated title searches, author-title searches, URL testing, PDF accessibility checks, metadata inspection, robots.txt examination, and comparison of older and newer articles before a journal is classified as de-indexed.

3.3.3 Assessment of Journal Compliance and Content Quality

The assessment of journal compliance provides a second level of diagnosis after initial evidence of reduced discoverability has been established. The findings show that journals should be evaluated against basic scholarly publishing and technical requirements, including clearly identifiable authorship, article-level bibliographic information, accessible abstracts or full text, separate article URLs, consistent publication information, and a website that can be reliably accessed by both readers and automated crawlers (Mackey, 2018). Google Scholar's inclusion guidelines specify that scholarly content must be identifiable as

scholarly articles and that users should be able to access either the full text or the complete author-written abstract without unnecessary barriers.

Article-level metadata is particularly important because indexing depends not only on whether a PDF exists but also on whether automated systems can correctly interpret the information associated with it. Google Scholar recommends the use of computer-readable bibliographic metadata, including article title and author information, and notes that incorrect parsing can result in inaccurate titles, authors, citation matching, lower rankings, or exclusion (Chiou, 2020). Thus, a compliance assessment should examine whether each article consistently displays its title, authors, journal title, volume, issue, publication date, page or article number, DOI where applicable, abstract, references, and stable full-text link.

The findings also indicate that editorial and ethical quality should form part of the diagnostic assessment, although technical indexing requirements and editorial quality should not be treated as identical concepts. Evidence from research on de-indexing in other scholarly databases demonstrates that editorial quality, questionable publishing practices, and content concerns can contribute to removal from established indexing services. Kumar's (2026) study, for example, documented substantial de-indexing of journals from Scopus and associated the phenomenon with compromised quality parameters. Similarly, recent research on problematic scholarly publishing has demonstrated that concerns surrounding editorial practices and content quality can be associated with journal de-indexing in major bibliographic databases. Although these findings concern databases with formal evaluation and selection processes different from Google Scholar, they reinforce the broader principle that journal visibility is connected to the credibility and reliability of scholarly publishing practices.

3.4 Recovery Strategies for De-Indexed Journals

3.4.1 Technical and Metadata Remediation

The findings identify technical and metadata remediation as the first practical stage of recovery. Journals should begin by restoring reliable access to article pages and full-text files, repairing broken links, confirming that article URLs resolve correctly, and ensuring that crawlers can reach the relevant pages. Google Scholar recommends that article pages be individually identifiable and that article URLs be discoverable through straightforward website navigation (Adenike, 2017). It also recommends searchable PDF files and indicates that PDFs should not exceed 5 MB for direct indexing.

URL stability is equally important. When articles are transferred to a new platform or domain, publishers should preserve the relationship between the old and new locations through appropriate redirects. The findings indicate that redirecting an old article URL to the journal homepage is inadequate because the destination should continue to expose the relevant article or abstract (Islam, 2025). This is particularly relevant for journals using publishing platforms such as Open Journal Systems, where changes to URL structures can affect previously established indexing pathways.

Metadata remediation should proceed at the article level. Journal websites should provide consistent title, author, journal, volume, issue, publication-date, and other bibliographic information in machine-readable form. Google Scholar's documentation emphasizes that accurate metadata facilitates automated extraction and citation matching, whereas incorrect metadata can cause articles to be misidentified or excluded (Monea, 2022). Correcting metadata therefore serves two purposes: it improves the probability that articles will be accurately recognized by Google Scholar and reduces fragmentation or duplication of scholarly records.

3.4.2 Editorial and Publication-Quality Improvements

Technical correction alone may not provide a sustainable solution where indexing difficulties are accompanied by weaknesses in editorial and publication practices. The findings therefore support strengthening peer-review procedures, clearly defining editorial responsibilities, maintaining identifiable editorial boards, documenting publication ethics policies, and ensuring that published articles conform to the stated scope and standards of the journal (Amaya Camposeco, 2017). Authors should be clearly identified, affiliations should be presented consistently, and conflicts of interest, corrections, retractions, and other post-publication matters should be handled transparently.

Regular publication practices are also important because journal credibility depends on continuity and consistency. A journal that frequently changes its publication schedule, website structure, editorial policies, or article presentation may create uncertainty for readers, authors, librarians, and indexing systems. At the same time, publication frequency should not be increased merely to generate more indexed records (Adenike, 2023). Evidence from research on problematic journals indicates that unusually rapid growth and content outside a journal's stated scope can be associated with questionable publishing practices. The recovery process should therefore prioritize quality and consistency rather than simply maximizing publication volume.

Editorial remediation should also address problematic articles or records. Where metadata errors, authorship problems, duplicated articles, or incorrect bibliographic information are identified, journals should correct the affected records and preserve a transparent record of the correction (Bezes, 2015). This approach strengthens the reliability of the journal's scholarly archive and reduces the possibility that automated systems will continue to process erroneous information.

3.4.3 Re-Indexing, Monitoring, and Long-Term Maintenance

Recovery from indexing disruption should not be understood as an immediate or one-time event. The findings show that journals need a continuing monitoring process because Google Scholar operates through automated crawling and processing, and changes made by publishers may take time to appear in search results. Google Scholar indicates that new papers are normally added several times a week, whereas updates to already indexed material may take six to nine months or longer (Afonso, 2016). This means that a corrected journal should not be judged unsuccessful merely because visibility does not return immediately after technical repairs.

A systematic monitoring programme should therefore establish a baseline sample of articles from different years and issues and periodically test their discoverability. Monitoring should include exact-title searches, author-title combinations, checks of article URLs, examination of metadata displayed in search results, verification of accessible full text, and periodic assessment of citation records (Islam, 2025). Where coverage remains incomplete, the journal should investigate whether the problem concerns crawling, metadata extraction, duplication, website accessibility, or another factor rather than repeatedly submitting the same material without diagnosis.

Long-term maintenance should include regular technical audits, website backups, URL monitoring, metadata validation, server-performance checks, and review of robots.txt configuration. Google Scholar's guidance emphasizes that crawlers periodically revisit publisher websites and that website availability is therefore an ongoing requirement (Perotti, 2015). Recovery should consequently be regarded as a continuous process of maintaining stable scholarly records rather than simply obtaining the return of individual articles to search results.

3.5 Integrated Framework for Preventing and Recovering from De-Indexing

3.5.1 Preventive Measures for Journal Editors and Publishers

The findings can be synthesized into a preventive model based on technical stability, metadata quality, editorial integrity, and continuous monitoring. Journal editors and publishers should maintain stable article URLs, accessible full-text files, searchable PDFs, clearly structured article pages, and machine-readable bibliographic metadata. Websites should also provide straightforward navigation that allows crawlers to discover individual articles and should avoid configurations that prevent Google Scholar's robots from accessing relevant content (Adenike, 2022). These measures correspond closely with Google's technical inclusion guidance, which emphasizes crawlability, individual article URLs, accessible content, searchable PDFs, and accurate metadata.

Prevention should also extend beyond website engineering. Editors should maintain transparent peer-review and publication-ethics procedures, consistent issue publication, accurate authorship information, clear correction and retraction policies, and reliable bibliographic records (Oyhantçabal, 2019). Internal audits can be conducted periodically by selecting representative articles from each volume and testing whether their titles, authors, abstracts, PDFs, DOIs, and other metadata remain discoverable and consistent. Such audits can identify problems before they become large-scale coverage failures.

3.5.2 Institutional Responsibilities and Stakeholder Collaboration

The findings indicate that maintaining journal visibility is a shared responsibility rather than a task that can be assigned exclusively to an editor or publisher. Editors are responsible for publication quality, ethical standards, accurate article information, and consistency of the scholarly record. Publishers and web administrators are responsible for website infrastructure, server availability, URL stability, redirects, metadata implementation, and crawler accessibility (Cuomo, 2023). Authors contribute by providing accurate manuscripts, author information, affiliations, references, and persistent identifiers.

Librarians and institutional repositories can provide an additional layer of preservation and discoverability by maintaining reliable copies of scholarly outputs where appropriate. DOI registration agencies and other scholarly communication infrastructure providers contribute persistent identifiers and bibliographic connections that help maintain stable scholarly records. Google Scholar itself emphasizes the importance of authoritative metadata and successful crawling of publisher content, while its publisher guidance recognizes that technical implementation by publishers and hosting providers is central to successful indexing (Miglio, 2019). The evidence therefore supports a collaborative model in which indexing stability is treated as an ecosystem responsibility involving editorial, technical, infrastructural, and scholarly-communication stakeholders.

3.5.3 Proposed Recovery and Sustainability Framework

Based on the findings, this study proposes a Diagnostic–Remediation–Verification–Monitoring (DRVM) framework for preventing and recovering from Google Scholar indexing disruption. The first stage, diagnosis, involves establishing whether an apparent loss of visibility is genuine by testing representative article titles, comparing different publication periods, examining citation records, checking article URLs, and distinguishing missing records from duplicate or alternative versions (Adenike, 2018). This stage is essential because Google Scholar itself cautions that low result counts and missing articles may reflect technical coverage problems rather than formal removal.

The second stage, remediation, addresses the underlying cause identified during diagnosis. Technical problems require restoration of website availability, crawlable navigation, stable URLs, appropriate redirects, accessible full text, and compliant robots.txt settings. Metadata problems require correction of article titles, authors, publication details, identifiers, and machine-readable tags (O'Hara, 2016). Editorial problems require improvements in peer review, publication ethics, authorship transparency, correction procedures, and publication consistency. Where content or quality concerns exist, journals should undertake appropriate editorial review and corrective action rather than focusing exclusively on technical re-indexing.

The third stage, verification, determines whether corrective measures have produced measurable improvement. Representative articles should be searched repeatedly using exact titles and author information, while article pages should be inspected for accessibility and accurate bibliographic representation. Because indexing updates can be delayed, verification should occur over an appropriate period rather than immediately after changes are implemented (Slane, 2018). Google Scholar's guidance indicates that updates to existing records can take six to nine months or longer, making patience and longitudinal assessment important components of recovery.

The fourth stage, monitoring and sustainability, institutionalizes the recovery process. Journals should maintain periodic audits of article discoverability, metadata consistency, website accessibility, URL integrity, citation records, publication continuity, and editorial compliance. The framework therefore conceptualizes de-indexing not as a single technical event but as a multidimensional risk involving the interaction of website infrastructure, metadata, publishing practices, content quality, and scholarly communication systems (Aniwa, 2026). This interpretation is consistent with broader research showing that journal visibility and indexing status can be affected by both technical and quality-related factors, although the specific mechanisms differ among indexing services.

An important unresolved issue is the limited empirical literature specifically examining Google Scholar journal-level de-indexing and recovery. Compared with Scopus and Web of Science, where inclusion and discontinuation processes are more formally documented, Google Scholar provides technical inclusion guidance but does not offer an equivalent public journal-by-journal de-indexing register. Consequently, future research should move beyond anecdotal reports and conduct longitudinal studies of journals experiencing changes in Google Scholar coverage. Such studies could examine the relationship between URL migrations, metadata quality, server accessibility, publication frequency, website architecture, article-format changes, and subsequent indexing outcomes (Askar, 2025). Comparative research across publishing platforms and regions would also help determine whether indexing instability disproportionately affects smaller or technically constrained journals. Ultimately, the proposed framework emphasizes that sustainable recovery depends not simply on regaining visibility, but on establishing a technically reliable, bibliographically accurate, ethically sound, and continuously maintained scholarly publishing environment.

4. Conclusion

Google Scholar de-indexing represents a significant challenge for academic journals because it can reduce the discoverability, accessibility, citation visibility, and perceived reach of scholarly publications. The findings indicate that de-indexing or apparent loss of coverage may arise from multiple interconnected factors, particularly website accessibility and server problems, crawler restrictions, inappropriate robots.txt configurations, changes in article URLs, poor bibliographic metadata, inadequate article-level page structures, and difficulties in automated parsing. Google Scholar itself emphasizes that incomplete coverage does not necessarily indicate a formal penalty or permanent removal, since indexing depends on the ability of automated systems to discover, access, and correctly interpret scholarly content. Consequently, journals should adopt a systematic monitoring and recovery approach that involves verifying suspected de-indexing through article-title searches, auditing website accessibility and crawlability, maintaining stable article URLs, providing accurate metadata, ensuring searchable full-text or abstracts, and correcting technical problems before requesting renewed indexing. Overall, maintaining Google Scholar visibility should be treated as an ongoing component of journal quality management rather than a one-time indexing activity; sustained technical maintenance, consistent metadata practices, reliable hosting, and regular monitoring can help journals preserve discoverability and recover coverage when indexing disruptions occur.

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References

[1] Adenike, A. (2017). Managing Domestic Debt and Sovereign Foreign Reserves: Risk, Liquidity, and Strategic Allocation. *International Journal of Technology, Management and Humanities,* 3(02), 21-42. https://doi.org/10.21590/v3i2.03
[2] Adenike, A. (2018). Strengthening Financial Market Infrastructure in Emerging Economies: Lessons From Central Banking Operations. SAMRIDDHI: *A Journal of Physical Sciences, Engineering and Technology*, 10(02), 177-182. https://doi.org/10.18090/samriddhi.v10i02.12
[3] Adenike, A. (2022). Central Bank Digital Currency (CBDC) Adoption Challenges and Remittance Impacts: Empirical Evidence from Nigeria's eNaira Compared with Global Retail Pilots and US Federal Reserve Policy Stance. *International Journal of Humanities and Information Technology, 4*(01-03), 214-233. https://doi.org/10.21590/ijhit.04.01-3.16
[4] Adenike, A. (2023). Cashless Policy Transitions and Currency Substitution: Nigeria's 2012-2022 Evolution Compared with Sweden, China, South Korea, and US Instant Payments Via Fednow. *Research Journal in Business and Economics,* 1(1), 236-247. https://doi.org/10.61424/rjbe.v1i1.925 (
[5] Afonso, J. R., Araújo, E. C., & Fajardo, B. G. (2016). The role of fiscal and monetary policies in the Brazilian economy: Understanding recent institutional reforms and economic changes. *The Quarterly Review of Economics and Finance*, *62*, 41-55.
[6] Amaya Camposeco, J. E. (2017). The right to be forgotten: a descriptive overview of the right to be forgotten.
[7] Aniwa S.C. (2021). Impact of Supply Chain Integration on Operational Performance: Insights from Manufacturing Firms in Emerging Economies. *Iconic Research And Engineering Journals*, 5(4).
[8] Aniwa, S. C. (2026). Risk Management Practices and Supply Chain Disruption Mitigation in Global Supply Networks. *International Journal of Scientific Research and Modern Technology*, *5*(3), 72–84. https://doi.org/10.38124/ijsrmt.v5i3.1354
[9] Aniwa, S.C. (2026). Green supply chain management practices and their implications for organisational sustainability: An empirical investigation using PLS-SEM. World Journal of Advanced Research and Reviews, 30(03), 932-945. https://doi.org/10.30574/wjarr.2026.30.3.0813
[10] Aniwa, S.C. (2026). The Role of Digital Technologies in Enhancing Supply Chain Visibility and Resilience. *International Journal of Computer Applications Technology and Research*, 15(4), 53–70. https://doi.org/10.7753/IJCATR1504.1005
[11] Askar, N. (2025). The Right to Be Forgotten in the Age of Artificial Intelligence. In *European Yearbook on Human Rights 2025* (pp. 451-480). Brill Nijhoff.
[12] Bezes, P., & Le Lidec, P. (2015). The French politics of retrenchment (2007–2012): Institutions and blame avoidance strategies. *International review of administrative sciences*, *81*(3), 498-521.
[13] Chiou, W. T. (2020). Limits and Prospects of the Right to Be Forgotten in Taiwan. In *The Right To Be Forgotten: A Comparative Study of the Emergent Right's Evolution and Application in Europe, the Americas, and Asia* (pp. 311-318). Cham: Springer International Publishing.
[14] Cofone, I. (Ed.). (2020). *The right to be forgotten: A Canadian and comparative perspective*. Routledge.
[15] Cuomo, M. T., & Foroudi, P. (Eds.). (2023). *Digital transformation and corporate branding: Opportunities and pitfalls for identity and reputation management*. Taylor & Francis.
[16] Frosio, G. F. (2016). The right to be forgotten: much ado about nothing. *Colo. Tech. LJ*, *15*, 307.
[17] Islam, M. A. (2026). Constraint-Responsive Human Behavior for Organizations: A Conceptual Theory. *South Asian Journal of Social Studies and Economics*, 23(6), 44–52. https://doi.org/10.9734/sajsse/2026/v23i61329
[18] Islam, M. A., & Aktar, L. (2025). Perceived Ease of Use, Security, and Trust as Predictors of Online Purchase Intention: A Technology Acceptance Model Extension. *European Economics Letters*, *15*(3).
[19] Islam, M. A., Aktar, N., Barua, P., Sweety, M. A., Aktar, L., & Islam, M. B. (2025). Perceived Competitiveness in Malaysian Higher Education: Role of International Student Recruitment Strategies. *Asian Journal of Education and Social Studies*, *51*(9), 997-1011.
[20] Islam, M. A., Jantan, A. H. B., Islam, M. A., Abdullah, A. B. M., & Rahman, M. S. (2026). Unlocking the Dynamics of Employee Retention: Examining the Interplay of Job Security, Promotion and Work Engagement in a Developing Economy. *FIIB Business Review*, 23197145261431894. DOI: 10.1177/23197145261431894.
[21] Kumar, R., Prakash, R., Kumar, N., Chinara, S., & Mohammed, M. A. (2026). Machine unlearning for trustworthy ai: A systematic review of techniques, challenges, and applications. *Archives of Computational Methods in Engineering*, *33*(3), 4237-4259.
[22] Mackey, T. K. (2018). Opioids and the internet: Convergence of technology and policy to address the illicit online sales of opioids. *Health services insights*, *11*, 1178632918800995.
[23] Miglio, A. (2019). Enforcing the Right to Be Forgotten Beyond EU Borders. In *Use and Misuse of New Technologies: Contemporary Challenges in International and European Law* (pp. 305-326). Cham: Springer International Publishing.
[24] Monea, A. (2022). 4. Pornotopia Bound. *The Digital Closet*.
[25] O'Hara, K., Shadbolt, N., & Hall, W. (2016). A pragmatic approach to the right to be forgotten.
[26] O'Hara, K., Shadbolt, N., & Hall, W. (2016). CHAPTER FOUR: A PRAGMATIC APPROACH TO THE RIGHT TO BE FORGOTTEN. *Designing Digital Freedom*, 73.
[27] Oyhantçabal, G. (2019). The political economy of progressive Uruguay, 2005–2016. *Latin American Perspectives*, *46*(1), 122-136.
[28] Pandita, R., & Singh, S. (2023). Compromising quality parameters lead to fallout: a study of de-indexing of research journals. *Malaysian Journal of Library and Information Science*, *28*(2), 29-45.
[29] Perotti, E. (2015). The European Ruling on the Right to be Forgotten and its extra-EU implementation. *Available at SSRN 2703325*.

[30] Račiņa, A. (2024). Right to be forgotten: the balance between the right to privacy and the freedom of the press.
[31] Singh, M. M., & Malik, V. (2026). Balancing Digital Privacy and Freedom of Information: The Right to Be Forgotten Across Three Jurisdictions. *Journal of Digital Justice and Legal Innovation*, *1*(1), 50-58.
[32] Singson, M., Manavalan, L., & Thiyagarajan, S. (2025). Analysing the impact of academic policies and interventions on research productivity in Indian library and information science. *Performance Measurement and Metrics*, *26*(1), 17-33.
[33] Slane, A. (2018). Search engines and the right to be forgotten: Squaring the remedy with Canadian values on personal information flow. *Osgoode Hall LJ*, *55*, 349.