# Open Access Journals and Predatory Publishing: Detective Mechanisms for Information Seekers and Library and Information Science Researchers

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**ABSTRACT**
Predatory publications are proliferating on the open-access market at an alarming rate, and they are getting better at imitating respectable journals. This paper examines the detective mechanisms for information seekers and LIS researchers for identifying open-access journals and predatory publishing. The systematic review was used to gather and collect relevant and recent literature in tandem with the topic under study. Findings revealed that it can be difficult to identify a predatory journal in practice because there are no distinct lines separating journals that adhere to moral editorial standards from those that are only used to extort publication fees. It is believed that using articles and publishing in predatory journals would affect library and information science research. The paper suggested that there is an urgent need for more information to alert LIS researchers and information seekers to the dangers of predatory journals.

**Keywords:** Open access, predatory journal, publishing, researchers, LIS, information seekers, mechanisms.

## 1. INTRODUCTION

One of the biggest risks to science and librarianship research is the advent of predatory journals, which are fake scientific journals. Predatory journals have affected a lot of scholars, particularly those in underdeveloped nations. The bulk of fraudulent journals are probably run from a single computer by a single person. As a result, the validity of research published in reputable, indexed journals is put at risk. Such journals send out mass spam invitations to all authors, inviting them to submit publications for which they are seeking article processing charges (APCs), and specifically guarantee the approval and publication of manuscripts without requiring the stringent peer review procedures that are typically adopted by those journals (Bjork et al., 2020).

Predatory journals use a variety of strategies and tactics to appear reputable and attract the attention of young, inexperienced academics who are eager to publish quickly to advance their careers. Most young and inexperienced researchers actively publish in fake journals, along with some respectable researchers, to build their resumes and curriculum vitae, increasing their numbers of publications to find work, fund additional studies, qualify for grants, and advance in their academic careers (Cukier, et al., 2020).

In essence, the open-access movement is responsible for the development of predatory publishing. Due to the rapidly growing number of specifically open-access publications, so-called "predatory publishers" are now able to profit by replicating or imitating academic

journals using dubious marketing techniques (Kurt, 2018). Predatory journal publication is now a rising problem for the open-access publishing paradigm and a danger to scholarly communication and research. In the model, the publisher receives the author's copyright; the author is not required to pay a publication fee; and the publisher covers the costs by collecting a subscription charge from readers or libraries.

## 2. OPEN ACCESS PUBLISHING

Anyone can read scholarly content online for free thanks to the idea of open access (OA) (Kumar et al., 2022). The open-access publishing approach upholds the notion of information tolerance and enables people without access to extensive library holdings to retrieve material for use in education, research, or daily needs (Kurt, 2018). Researchers can reach a bigger audience by publishing in open-access journals, which can boost the effectiveness of their work as measured by bibliometric or altimetric metrics (Papanikos, 2022). Because of this, open-access publishing is quickly gaining popularity as a substitute for traditional publishing strategies.

The practice of publishing research output while making it completely free and available to consumers is known as "open-access publishing." A new paradigm for accessibility in scholarly publishing emerged in recent years, giving rise to the open access movement. An article is "Open Access" if it can be freely accessible by anybody with an internet connection anywhere in the globe. In 2002, open-access publishing made its debut (Beall, 2013). In addition to subscription journals that also make their electronic versions publicly available immediately or after a delay, open access (OA) journals without publishing costs are included in scholarly publishing under this category (Macháek & Srholec, 2022). Additionally, the majority of prestigious publishers' subscription journals now offer paid individual articles, or so-called hybrid OA (Memon, 2019). It's common to refer to direct OA publishing as "gold" OA. Also, there is a "green" option where writers or other parties are permitted to freely distribute manuscript versions of papers that have been published in conventional journals online (Cook, 2017).

## 3. PREDATORY JOURNAL

The labels "predatory," "questionable," "illegitimate," "dark," or "deceitful publishing" are used to describe phoney and scam publications that accept papers for payment without conducting adequate quality control while professing to be something else entirely (Frandsen, 2017). False or misleading material, a departure from appropriate editorial and publication processes, a lack of openness, and/or the use of aggressive and indiscriminate solicitation techniques are characteristics of predatory journals and publishers, which put self-interest over scholarship. It is a term used to indicate the misuse of open-access, paid scientific publishing. Authors publishing via paid open access conduct business with publishing companies directly, in contrast to traditional subscription-based arrangements.

Predatory journals permit the publication of pseudoscientific conclusions and only carry out hazy, pro forma, or (in certain cases) no peer review (Kumar et al., 2022). Moreover, predatory journals have been charged with using aggressive marketing techniques, using fraudulent editorial board members, and using poor business management (Cobey et al., 2018). The phrase "predatory journals" refers to publications that are allegedly employing paid open access to extort payments from authors and engaging in seriously deficient editing practices, according to Duc et al. (2020).

## 4. NEXUS BETWEEN OPEN ACCESS MODEL AND PREDATORY PUBLISHING

As a phenomenon, predatory publishing of journals that falsely claim to have a peer review process is a subset of a larger range of related web-enabled illegal economic activities. Among them are the phoney impact variables that unscrupulous publishers use to appear more legitimate (Krawczyk & Kulczycki, 2021). Predatory journals can also be considered a part of Open Access (OA) publishing from a technical and business model perspective. OA is a disruptive innovation that is changing how academic peer-reviewed articles are published (Downes, 2020). Under open access (OA), the content is publicly accessible to anybody with internet access, and the publisher receives payment in forms other than subscription fees. The primary method used by commercial open-access publishers is article processing (or publication) fees, commonly referred to as APCs. Instead of paying the authors, many non-commercial journals get publishing subsidies from academic institutions, government funding, or professional organisations.

During the past two decades, open access (OA) has steadily grown to account for over 20% of the market for scientific articles (Ferris & Winkers, 2017). These statistics, which are based on credible journals included in the Scopus journal index, do not include articles published in predatory open-access journals. Unfortunately, all OA journals that charge authors have developed a bad reputation as a result of the notoriety that predatory journals have garnered. OA journals have prospered, although OA alters a journal's revenue strategy. Under the conventional paradigm, readers are the customers, but the article author is the main emphasis for many open-access journals. Using the OA model, OA journals get more money from authors through APCs by publishing more papers (Ayeni & Adetoro, 2017). Predatory journals, which encourage authors to pay APCs for publications but do not engage in a rigorous review process, have also become a corrupt variant of the open-access model (Cook, 2017).

## 5. DETECTIVE STRATEGIES FOR IDENTIFYING PREDATORY JOURNAL PUBLISHING

It can be difficult to identify a predatory journal in practice because there are no distinct lines separating journals that adhere to moral editorial standards from those that are only used to extort publication fees. Most frequently, lists are used to identify alleged predatory publications to make awareness and identification easier. The most notable instance is Jeffrey Beall's blog, which was discontinued at the start of 2017 (Beall, 2016). (Straumsheim, 2017). Following that, a private company called Cabells started to provide a comparable list (Silver, 2017); however, access to its material requires payment (Cabells, 2022). The National Scientific Library of the Chinese Academy of Sciences created a list of doubtful journals after China announced the construction of a list of "bad quality" journals (Zhang et al., 2022), however, this list appears to be far more constrained in scope than either of its predecessors.

In support of the aforementioned, Grudniewicz et al. (2019) stated that predatory journals and publishers are organisations that put self-interest ahead of scholarship and are distinguished by providing false or misleading information, departing from best editorial and publication practices, a lack of transparency, and/or using aggressive and indiscriminate solicitation techniques. However, they propose that rather than attempting to gauge the calibre of peer review, criteria for the identification of predatory journals in practice should instead concentrate on flaws that are simple to spot, like errors in the information, spam, and/or typos. The identification is likely to overlook predatory journals that have professionalised and can avoid the most glaring errors while still ignoring peer

review to maximise earnings if the identification gives up on the latter, though. In this regard, we agree with Moed et al. (2022) that the main trait of predatory journals that we should not leave out is accepting papers without any rigorous kind of peer review.

Demir (2020) also makes the case that the standard of research evaluation is likely related to the propensity for publishing in predatory journals. The greater the motivation for academics to publish in dishonest journals only to earn points for outputs regardless of value, the more the research evaluation system relies on antiquated practices like counting papers indexed in Scopus, Skimago, Web of Science, or Medline. There is minimal to no incentive to use predatory journals in nations where the culture of evaluation and peer pressure forces researchers to publish in reputable journals because doing so will damage the researcher's reputation.

Some common indicators include big volumes, a high acceptance rate, and peer review and editing procedures that do not adhere to acceptable academic standards (Eriksson & Helgesson, 2017). Using bulk emails that contain links to professionally created journal home pages that can be hard to distinguish from high-impact OA publications, predatory publishers contact their targets (Beall, 2012; Eriksson & Helgesson, 2017). The journals are mostly funded by author fees, therefore they have an interest in publishing as many papers as quickly as possible (Papanikos, 2022). The characteristics listed below, according to Ferris and Winkers (2017), define predatory journals and can be used to spot suspect journals when submitting articles for publication and examining already published publications:

- ✓ Peer review is a quick and ineffective process without helpful criticism.
- ✓ Notifies the author of any APCs only after the paper has been accepted, any unclear APCs, or any nebulous APCs that can be bargained after acceptance.
- ✓ Actively sends unsolicited or mass spam emails requesting involvement in editorial boards or as journal reviewers or inviting authors to submit articles for future or special editions.
- ✓ Adds scientists without their consent to an editorial board and won't let them be removed.
- ✓ International scientists on the editorial board who lack qualifications (uncheckable RESEARCH ID and/or ORCID ID).
- ✓ Uses a name or website layout that is very similar to that of an established prominent journal.
- ✓ Provides fabricated metrics, databases, or impact factors when none exist.
- ✓ The journal's website has grammatical and typographical problems.
- ✓ The top page's graphics and logos have an unprofessional, distorted, and fuzzy appearance.
- ✓ The website specifies that the manuscript must be sent through a personal email address.
- ✓ Published papers contain grammatical errors and are unprofessional.
- ✓ Published articles fall outside of the journals' intended audience and purview.
- ✓ Each article that is published will have a distinct digital object identification (DOI), however, it cannot be verified at https://www.doi.org/
- ✓ Journal titles range from the objectives and purview of the journals.
- ✓ Journal titles that integrate two or more distinct areas simultaneously include Journal of Library Science, Journal of Political Review, and Journal of Communication to draw in more submissions and increase APC revenue.

- ✓ Journals do not use well-known software against plagiarism, and there is no legal action for plagiarism.
- ✓ There is no stated withdrawal or retraction policy.
- ✓ No withdrawal or retraction policy is outlined.

The so-called hijacked journals are one kind of predatory journal that can be challenging to spot. These predatory publications imitate reputable, peer-reviewed academic journals to deceive scholars and profit from their errors (Anderson, 2019).

## 6. USAGE OF PREDATORY OPEN ACCESS JOURNALS BY LIBRARY AND INFORMATION SCIENCE RESEARCHERS

It has been discovered that deploying predatory OAJs for research activities makes researchers prey (victims). At some point or another, researchers from various fields – including those in library and information science (LIS) have used publications that were published in these journals. The legitimacy of some professors and academics in LIS's research output in the global scholarly community is seriously impacted by the fact that the majority of their research findings are published in predatory journals. Several authors continue to pay the necessary fees for their manuscripts to be published in predatory journals despite their generally greedy methods. According to Ayeni and Adetoro's opinion from 2017, some predatory journals have evolved into mega-journals that publish thousands of papers annually. Also, they claimed that predatory journal writers typically come from poor nations, notably the one where the magazine is published. Authors have been paying their article processing fees and publishing their articles in these predatory journals.

For instance, International Institute for Science, Technology, and Education is one of the LIS journals included in Beall's list of likely, prospective, and predatory OAJs. Among the more than 40 publications in this magazine is the well-liked Information and Knowledge Management, where LIS instructors have been publishing their work for years. Beall's list also includes the International Journal of Advanced Information in Arts, Science, and Management, International Journal of Digital Library Services, International Journal of Information Research, International Journal of Information Research and Review, International Journal of Information Sources and Services: A Research Journals in Library Science, International Journal Information and Communication Technology Research, and International Journal of Information Research. Because the aforementioned publications are predatory, LIS researchers should refrain from using their articles and from publishing their research findings there.

## 7. FACTORS INFLUENCING THE USAGE OF PREDATORY OPEN ACCESS JOURNALS

Emerging researchers who want their works published by any means possible have fueled the growth of predatory publishing, which is one reason why LIS scholars are encouraged to adopt predatory OAJs. Several authors have become victims of publishing in predatory journals due to their unguided ambition for global visibility of their scientific products (Memon, 2019). Authors have also been driven by the "publish or perish" ethos in academia to carelessly publish in any publication that has little to no necessity for peer review. Unlike other refereed journals, which may take six to seven months before publishing, this journal publishes quickly. It has been noted that some publications' quick reviews have drawn writers who couldn't handle the demanding and stressful peer review process of regular peer-reviewed journals.

Authors' ignorance of the existence of these predatory publishers, the aggressive solicitation of articles by predatory publishers via enticing e-mails, and the deceptive editorial information used to attract potential authors to the journals' patronage are additional factors that encourage the use of predatory journals among LIS scholars.

## 8. STRATEGIES FOR LOCATING INCREDIBLE SCHOLARLY OPEN ACCESS JOURNALS

It can be challenging to identify safe journal names for publication. In solving this, the Directory of Open Access Journals (DOAJ), where journals approved after March 2014 have satisfied revised, strict inclusion standards, is one tactic to use. A green check mark denotes journals that meet revised, strict requirements. Publishers of journals lacking the symbol have been urged to reapply for acceptance under more stringent standards as they were previously accepted before March 2014. Another choice is to assess the relative significance of a published article using its "impact factor" - a computation that serves as a gauge of the item's quality and is based on how frequently experts in the area cite it (Zhang et al., 2022). The presumption is that the original article must be reliable if other scientists and authors are willing to expand on its published ideas (Papanikos, 2022). The new SciELO* Citation Index, Journal of Citation Reports®, Scopus®, and Web of Science® are all reputable examples of databases with an impact factor. Sadly, shady publishers and databases may also exploit impact factors, and not all credible publications have an impact factor that has been determined.

Examining website navigation is another tactic. The validity of a website or database may be called into question if the navigation is confusing, the topic being searched for cannot be found in a database "on" the issue, and/or the editors do not respond to requests for more information. The Public Library of Science and BioMed Central websites can be used as beneficial tool for scientific publication. Each website began as a platform for authors to publish quickly and with authority. Both at the moment have publication fees. Each item costs roughly $2,500 at the Public Library of Science, and each article costs between $1,450 and $3,000 at BioMed Central (Papanikos, 2022).

The crucial peer review process, however, is necessary for assuring high-quality, moral publication and frequently serves as a source of publication and production costs. As a result, although some people think it's horrible, charging writers for peer review needs to be acceptable. There are currently plans in place to establish "safe" or "white lists" of trustworthy publishers (Ayeni & Adetoro, 2017).

## 9. CONCLUSION

Predatory publications are proliferating on the open-access market at an alarming rate, and they are getting better and better at imitating respectable journals. They are distinguished by an expedited review procedure, shoddy editing, dishonest article allegations, and fast publication. LIS authors and researchers should steer clear of articles published in predatory journals because they lack intellectual and scientific merit. Because more academics are using these journals, they are more vulnerable to predatory publishers whose goal is not to advance excellent research but rather to rob authors and researchers blind by engaging in several dishonest and immoral tactics. Using articles and publishing in predatory journals would affect library and information science research because the articles were not subjected to a thorough peer-review process by experts in the field. There is an urgent need for more information to alert researchers and information seekers to the dangers of predatory journals, and scientists in the field of librarianship should frequently examine the strategies utilised by predatory publishers. LIS researchers should take into

account a few of the proposed characteristics of predatory journals mentioned in this study to avoid potential predatory publications.

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