

# Predatory Journals: What They Are and How to Avoid Them

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## Abstract

Predatory journals—also called fraudulent, deceptive, or pseudo-journals—are publications that claim to be legitimate scholarly journals but misrepresent their publishing practices. Some common forms of predatory publishing practices include falsely claiming to provide peer review, hiding information about article processing charges, misrepresenting members of the journal's editorial board, and other violations of copyright or scholarly ethics. Because of their increasing prevalence, this article aims to provide helpful information for authors on how to identify and avoid predatory journals.

## Keywords

fake peer review, deceptive journal, predatory publishing, predatory journals, scholarly communications, publishing ethics

## What Are Predatory Journals?

Beall, a librarian at the University of Colorado in Denver, is often credited as coining the term “predatory publishers,” which he described as organizations that “publish counterfeit journals to exploit the open-access model in which the author pays. These predatory publishers are dishonest and lack transparency. They aim to dupe researchers, especially those inexperienced in scholarly communication.”<sup>1</sup> Beall also hosted a list of publishers he believed to be predatory on his blog, Scholarly Open Access, from 2012 to 2017.<sup>2</sup> Since the popular “Beall’s List” was taken down, several other tools have been created to make it easier to identify which journals are reliable and which are potentially predatory.<sup>3,4</sup>

The main goal of predatory journals is profit. They attempt to deceive authors to publish for a fee without providing robust peer-review or editorial services, thereby putting profit over trustworthy and dependable science. For many, career progression depends on publishing, so one may look for journals that promise to publish all submissions. However, there is variation in an author’s ability to assess an unfamiliar journal, and this is how predatory journals are able to persist. The purpose of this article is to provide useful information for an author to assess whether or not a journal engages in predatory practices. Table 1 lists some of the common characteristics of predatory journals.

## Why You Should Avoid Submitting to Predatory Publishers

Many authors first encounter predatory publishers when they receive e-mails requesting that the author submits an article to one of their journals. These e-mails can be extremely flattering,

make promises to publish anything the author submits, or promise review and publication on an unusually fast time line.

It may be tempting for authors to submit to these journals, particularly if they are not aware that it may be a scam, or if they are in a hurry to be published.<sup>15</sup> However, submitting articles to predatory journals may have serious negative consequences such as the ones listed below.

## Fake Peer Review Undermines the Scientific Conversation

One of the most common forms of fraudulent publishing practices is for predatory journals to claim to provide true peer review when they do not. This practice leads to many problems in the broader context of scientific progress. Articles with flawed research or communication issues do not receive the benefit of peer feedback before publication and can be published with inaccurate information. Articles with low-quality or deliberately false information, which true peer review would likely catch, are also sometimes published in these journals. When articles like these are published under the false pretense of having received peer review, it can allow misinformation to enter the broader research community and slow or divert effort away from more legitimate lines of investigation.

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**Table 1.** Common Characteristics of Predatory Journals.

- Claims to be a peer-reviewed open-access publication but does not provide adequate peer review or the level of peer review promised (some predatory journals repeatedly use a template as their peer review report).<sup>5</sup>
- Advertises a Journal Impact Factor or other citation metric on the website that is incorrect or cannot be verified.<sup>6,7</sup>
- May advertise an unrealistic time line for publication.<sup>7,8</sup>
- Publishes all articles for which authors pay an APC even if the article is low quality, unrelated to the topic of the journal, or nonsensical.<sup>5</sup>
- Publishes articles that have many grammar mistakes (little or no copyediting).<sup>6</sup>
- Editorial board includes people who do not exist, do not have credentials relevant to the topic of the journal, have affiliations that cannot be verified, or are real people who are not aware that they are listed as members.<sup>6,9,10</sup>
- Mimics name or website of other well-known, legitimate journals.<sup>5</sup>
- Aggressively targets potential authors through e-mails.<sup>6,11,12</sup>
- May state that offices are in one country but contact details are in another.<sup>5</sup>
- Solicitation e-mails contain grammatical errors of phishing scams.<sup>12</sup>
- Lack of transparency about acceptance process or APCs, so that authors do not know how much they will be charged until their article is accepted.<sup>5</sup>
- Requires authors sign away their copyright to the article at the time of submission, making it impossible for the author to submit the article to another publisher.<sup>1</sup>
- Publishes articles submitted before the authors have signed the publishing agreement, then refuses to take the article down if the author withdraws the submission.<sup>13</sup>
- Removes articles or entire journals from the web without warning or informing authors.<sup>14</sup>

Abbreviation: APC, article processing charge.

### *Publishing in a Low-Quality Journal Can Make Your Research Harder to Find and Less Likely to Be Used By Others*

Because fraudulent journals are perceived to be low quality and untrustworthy, researchers in your field are less likely to browse those journals or read them on their own.<sup>16</sup> Therefore, articles containing important research findings may be passed over by the broader scientific community. Many popular citation databases also do not index low-quality journals, so other researchers may not be able to find your work just by searching by topic.

### *You Could Be Scammed and Lose Your Work*

The goal of predatory publishers is to convince authors to pay an article processing charge (APC) while performing the least amount of work possible on the publisher's side. Sometimes, this includes not actually publishing accepted articles, taking articles or journal websites offline without notice, or publishing submitted articles before authors have signed a publishing agreement. Since many legitimate publishers will not accept articles that have been published before, submitting an article to a predatory publisher can be risky, even if you ultimately decide not to publish with them.

## **Tools and Strategies to Avoid Predatory Publishers**

To avoid predatory journals and publishers, there are a number of techniques that an author can employ. These can be as simple as looking through the journal's archives for articles that seem off-topic, checking that the APCs and review process are clearly stated on the journal website or just checking for grammar and spelling mistakes in solicitation e-mails. There are also several tools and checklists now available for verifying the identity of publishers. Table 2 provides some helpful tips on how to check the credibility of a journal or publisher. Table 3 provides a list of online resources for checking journal quality. If all of the above seems a bit daunting, we highly encourage you to ask your institutional or local librarian.

**Table 2.** Helpful Tips to Determine Whether a Journal or Publisher Is Predatory.

- Are there spelling or grammatical mistakes or other questionable characteristics on their website or in the solicitation e-mail?
- Is the peer review process clearly stated on the website?<sup>17</sup>
- Does the website clearly state the publishing fees?<sup>18</sup>
- Is the journal indexed in databases that you use,<sup>18</sup> such as MEDLINE<sup>19</sup> for biomedical journals?
  - Note: Not all journals with articles in PubMed are indexed for MEDLINE.<sup>20</sup> To check if a journal is indexed for MEDLINE, check the journal's page in the NLM Catalog—you can do this by following the link for journal in the article's record in PubMed. If the NLM Catalog listing says the journal is "Currently indexed for MEDLINE," this means that all articles published in this journal will appear in PubMed.
- Can you easily contact the publisher?<sup>18</sup>
- Are the time stamps of incoming e-mails consistent with the working hours of the reported country of origin?
- Does the phone number have the correct country code?
- Is the journal a member of the Committee on Publication and Ethics (COPE)<sup>21</sup> or Open Access Scholarly Publishers Association (OASPA)<sup>22</sup> or listed in the Directory of Open Access Journals (DOAJ)?<sup>23</sup>

**Table 3.** Free and Subscription Resources That May Be Helpful for Identifying Predatory Journals.

- Free resources
- *ThinkCheckSubmit.org* is a nonprofit website with a step-by-step guide to evaluating journal quality.<sup>17</sup>
- *The Directory of Open Access Journals (DOAJ)* is a nonprofit database containing a searchable list of high-quality, peer-reviewed open-access journals in all scholarly disciplines.<sup>24</sup>
- *The Committee on Publication Ethics (COPE)* is a group of publishing organizations that agree to uphold certain standards ethical publishing practices. The COPE website provides a searchable database of reputable publishers and journals,<sup>21</sup> guidance for authors and editors on addressing suspected misconduct,<sup>25</sup> and example cases and advice for authors that have dealt with predatory publishers.<sup>26</sup>

(continued)

**Table 3.** (continued)

- *SCImago Journal Rank* is a free online database that provides measures of journal citation rates based on data in the Scopus database. Journals in SCImago can be sorted and filtered by subject, country, and open-access status. Using SCImago can help you determine whether a journal is actually indexed in a major citation database and help you identify other high-quality journals in your subject area.<sup>27–29</sup>
- For biomedical journals, you can check to see whether a journal is in the *National Library of Medicine (NLM) catalog*.<sup>19</sup> If a journal's entry in the NLM Catalog is listed as "Currently indexed for MEDLINE" that means that all new articles published in this journal will appear in the citation database PubMed. If a journal is *not* in the NLM catalog or has an entry in the NLM Catalog but is not listed as indexed for MEDLINE that may mean that it is either not considered a biomedical journal or that it might not be considered a trustworthy journal.
- *Stop Predatory Journals* is a crowd-sourced project that provides lists of potentially predatory journals and publishers, journals with names intended to imitate those of legitimate journals, and potentially fake or misleading journal metrics systems.<sup>30</sup> However, the administration is anonymous so the process for labeling predatory publishers lacks transparency.
- Subscription resources
- Cabells International is a for-profit company that sells 2 subscription-based journal directories—*Cabells' Whitelist*, which contains journals verified to provide high-quality, peer review, and transparent business practices, and *Cabells' Blacklist*, which contains journals with questionable or problematic business practices.<sup>31</sup> Both lists contain in-depth explanations for each entry, an explanation of their methods, and ways for users and publishers to report errors or appeal miscategorizations.<sup>32</sup>
- *Journal Citation Reports (JCR)* is a journal analysis tool that is currently owned and maintained by Clarivate Analytics. JCR uses data from Web of Science, a subscription citation database also owned by Clarivate, to provide high-quality measures of journal impact metrics, including Journal Impact Factor (JIF).<sup>33</sup> This tool can help authors verify citation metrics for potentially predatory journals and identify high-quality journals in their field.



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