

SciBytes @ SciSTIP Nr 3

How to identify and respond to the continuing threat of predatory publishers and journals

History and background

It is now more than a decade that Jeffrey Beall - a former librarian at the University of Colorado in Denver – coined the term ‘predatory’ journals to refer to journals (and their publishers) that exist for the sole purpose of making profit.

In his first major publication on the topic published in Nature in 2012, Beall provided a first description of what is meant by predatory publishing:

Then came predatory publishers, which 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. They set up websites that closely resemble those of legitimate online publishers, and publish journals of questionable and downright low quality. Many purport to be headquartered in the United States, United Kingdom, Canada or Australia but really hail from Pakistan, India or Nigeria. Some predatory publishers spam researchers, soliciting manuscripts but failing to mention the required author fee.

Beall uses the term ‘predatory’ to refer to journals that ‘prey’ on (often unsuspecting and often young) scholars to submit their manuscripts for the sole purpose of making money from these scholars. In this process, normal good editorial and review processes are violated or suspended.

Beall maintained two lists on a website he established in 2010: a list of standalone predatory journal titles (1220 titles at the time of writing this paper) and a list of predatory publishers.

The pioneering work of Jeffrey Beall to identify and, to publicly name and shame predatory journals and publishers soon evoked wide-spread response – both in academic and scholarly circles as well as amongst publishers. On the Blog that Beall maintained, he frequently posted the experiences of academics who fell foul to the unscrupulous practices of these predatory journals. At the same time, many of the publishers that were ‘blacklisted’ by Beall publicly attacked him claiming that they were legitimate publishers. In some cases, they threatened to take Beall to court for slander. Personal threats were also made to him and his family.

As Beall later indicated these threats were instrumental in his decision to close his website on the 17th of January 2017. Fortunately, his original lists have been archived and can be accessed at: <https://scholarlyoa.com/2016/01/05/bealls-list-of-predatory-publishers-2016/>

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What is undisputed is that Beall's work spawned a huge new interest in the issue of what is a legitimate journal/publisher in distinction from what he labelled as predatory journals. Multiple lines of research were developed: scholars who contested Beall's claims and specifically the use of the word 'predatory'. Crawford, a retired library systems analyst and programmer, analysed Beall's lists of possible and probable predatory journals and publishers and compared it to the DOAJ list of journals. His results indicate that all the OA journals he surveyed charge an APC, whether high or low. According to Crawford, "grey" OA journals are gold OA journals not included in the DOAJ list, but on Beall's list¹. Several scholars labelled journals that capitalise on APCs solely to make a profit without adequate peer review, as "fake"²³. Greenblatt and Bertino argue that these journals should instead be labelled as "opportunistic" as they provide an opportunity for authors to be published forgoing the appropriate review processes⁴.

In addition to the critical scholarship that developed, it is fair to say that the largest volume of studies in this field accepted the basic premise of Beall's work, i.e. that there are many journals and publishers that do in fact engage in unethical and unscrupulous activities to make money from unsuspecting students, academics and scholars.

A matter of definition

Although the number of studies on predatory publishing has been increasing since 2008, no standard definition of the characteristics of a predatory journal has been available. In April 2019, the Canadian Centre for Journalology, based at the Ottawa Hospital Research Institute (OHRI), convened a global Predatory Journals Summit focused on the issue of predatory publishing. One of the issues debated by the summit participants was using the term *predatory* to describe unethical journals and publishers. Several scholars at the summit argued that the term implies that any author who publishes in a predatory journal is a victim and are therefore not accountable for their actions. However, as Frandsen suggests it is often a two-way interaction as some authors are not only aware of these journals, but knowingly publish in these outlets, either for promotion and tenure purposes or to receive funding⁵. One of the Summit agenda's main items was to draft a consensus definition of predatory journals and publishers. The consensus definition was drafted by academics and practitioners attending the Summit following an extensive Delphi process:

*"Predatory journals and publishers are entities that prioritise self-interest at the expense of scholarship and are characterised by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices."*⁶

Although this definition is by no means perfect, we would maintain that it includes the key characteristics according to which it is possible to identify predatory journals and publishers. The definition also provides one with a basic framework (Table below) which can be used by any student or academic as a 'diagnostic tool' to assess whether a specific journal is or is not predatory.

¹ Crawford, W. (2017) 'Gray OA 2012-2016: Open access journals beyond DOAJ', *Cites & Insights*, 17(1), pp. 1–72. doi: 10.1006/geno.2002.6750.

² Mehrpour, S. and Khajavi, Y. (2014) 'How to spot fake open access journals', *Learned Publishing*, 27(4), pp. 269–274. doi: 10.1087/20140405

³ Hemmat Esfe, M. et al. (2015) 'Fake Journals: Their Features and Some Viable Ways to Distinguishing Them', *Science and Engineering Ethics*. Springer Netherlands, 21(4), pp. 821–824. doi: 10.1007/s11948-014-9595-z.

⁴ Greenblatt, D. J. and Bertino, J. S. (2018) 'Opportunistic Journals in the Clinical Pharmacology Space: A Policy Statement from the Publications and Public Policy Committees of the American College of Clinical Pharmacology', *Clinical Pharmacology in Drug Development*, 7(4), pp. 353–357. doi: 10.1002/cpdd.466.

⁵ Frandsen, T. F. (2019) 'Why do researchers decide to publish in questionable journals? A review of the literature', *Learned Publishing*, 32(1), pp. 57–62. doi: 10.1002/leap.1214.

⁶ Grudniewicz, A. et al. (2019) 'Predatory journals: no definition, no defence', *Nature*, 576(7786). doi: 10.1038/d41586-019-03759-y.

Table 1: Framework of characteristics of predatory journals

CATEGORY	DESCRIPTION
Seeking profit over contribution to scholarship	Characteristics related to article processing fees (APCs) and other sources of revenue
Misrepresentation of abstracting, indexing and metrics	Characteristics related to inappropriate inclusion in fake databases, indexing in sham services, fake metrics and the manipulation of metrics
Aggressive advertising and solicitation of articles	Characteristics related to indiscriminate and aggressive solicitation of publications, as well as inappropriate advertisements on websites
Inappropriate journal title and scope	Characteristics related to broad, indiscriminate coverage of disciplines
Lack of transparency in governance, editorial and publication practices	Characteristics related to the holding company, publisher, editorial board and editorial staff, as well as misinformation and unprofessional (or lack of) contact e-mail addresses. Characteristics related to article processing time, manuscript submission, publication policies, copyright retention and archiving
Unsubstantiated peer review process	Characteristics related to unsubstantiated self-reported or no evidence of peer review

Source: Authors

Seeking profit over contribution to scholarship

The business practices of predatory journals and publishers are characterised by unethical, non-transparent, revenue-seeking behaviour. The literature emphasises the profit-seeking nature of predatory journals with no regard for the scientific value of research. In a ground-breaking case, the US Federal Trade Commission (FTC) successfully sued the three American subsidiaries of the OMICS International Group (OMICS Group Inc., iMedPub LLC, and Conference Series LLC) and the owner of OMICS, Srinubabu Gedela. In April 2019, judgement was delivered in favour of the FTC and OMICS was ordered to pay the \$50.1 million fine. One of the complaints against OMICS was that the publisher either deceived or hid information on APCs from authors until they have submitted an article). OMICS is one of the predatory publishers that charged substantial APCs.

However, charging a substantial APC does not necessarily indicate a deceptive nature as established publishers such as Elsevier charges \$5,000 for publications in *The Lancet Global Health*. The charge of an APC, or not, combined with deceptive practices is indicative of predatory journals and publishers:

*A practice is deceptive, legally, if it involves a material representation or omission that is likely to mislead consumers acting reasonably under the circumstances.*⁷

Crawford found that 10.6% of grey OA journals conceal information about APCs⁸. Gonzalez, Bridgeman and Hermes-DeSantis found that although predatory journals often charge lower APCs than legitimate journals, it was still a profitable venture⁹. Conversely, some predatory journals do not charge APCs but non-refundable handling or submission fees, fees to fast-track the peer review process, as well as reader's charges^{10 11}. In addition, some predatory journals charge imprint fees as well as for submitting colour images in articles. The journals are often associated with predatory conferences, which provides another source of revenue. The publishers often introduce other services such as copywriting and the printing of theses to boost their profit margins.

⁷ Manley, S. (2019) 'Predatory Journals on Trial. Allegations, responses, and lessons for scholarly publishing from FTC v. OMICS', *Journal of Scholarly Publishing*, (April). doi: 10.3138/jsp.50.3.02.

⁸ Crawford, W. (2017) 'Gray OA 2012-2016: Open access journals beyond DOAJ', *Cites & Insights*, 17(1), pp. 1–72. doi: 10.1006/geno.2002.6750.

⁹ Gonzalez, J., Bridgeman, M. B. and Hermes-DeSantis, E. R. (2018) 'Differentiating predatory scholarship: best practices in scholarly publication', *International Journal of Pharmacy Practice*, 26(1), pp. 73–76. doi: 10.1111/ijpp.12380.

¹⁰ Dadkhah, M. and Bianciardi, G. (2016) 'Ranking predatory journals: Solve the problem instead of removing it!', *Advanced Pharmaceutical Bulletin*, 6(1), pp. 1–4. doi: 10.15171/apb.2016.001

¹¹ Eriksson, S. and Helgesson, G. (2017) 'The false academy: predatory publishing in science and bioethics', *Medicine, Health Care and Philosophy*. Springer Netherlands, 20(2), pp. 163–170. doi: 10.1007/s11019-016-9740-3.

Misrepresentation of abstracting, indexing and metrics

Given the history and proven dependability of research publication and citation data, academics regard Scopus and the ^{CA}Web of Science as the predominant bibliometric databases for indexing journals. But most predatory journals and publishers often refer to indexing in Index Copernicus, ResearchBible, and other fake indexing and abstracting indices. Fake indexing services often use variations of ISI such as the Institute for Science Information (ISI) and the Institute of Science Index (ISI) located in China and Taiwan to lure unsuspecting authors. Another common misrepresentation is to claim that the journal is “indexed” in Google Scholar. The latter is a search engine and not a bibliometric database in the same vein as Scopus or the Web of Science. An example of fake indexing claims is evident in the example below.

So, I Nasim AHmed (CEO of EAS Publisher) would like invite you that Published your Valuable Research work in Our Journal which

East African Scholars Multidisciplinary Bulletin

Website: <http://www.easpublisher.com/easmb/>

Frequency: Monthly

ISSN: 2617-4421 (Print) & 2617-717X (Online)

Publication Fee: USD \$25 or INR 1700

Manuscript Submission: easpublisher@gmail.com

Note: Please mention the **Journal name** to which manuscript is submitting.

Immediate acknowledgement, urgent review and publication within 48 Hrs. after payment

Indexing and Abstracting

Google Scholar, Index Copernicus, Research Bible, World Cat, Eurasian Scientific Journal Index (ESJI) Citefactor, SHERPA/RoMEO, Scientific Indexing Services (SIS), Road-Directory of Open Access Scholarly Resources, Directory of Research Journals Indexing (DRJI) and others in Progress

Aggressive advertising and indiscriminate solicitation of articles

Predatory journals and publishers typically engage in academic spam. Academic spam is defined as the frequent, unsolicited e-mails to academics pressing for articles or inviting academics to join as editors or reviewers of a journal. In these instances, the call for papers (CFPs) generally has no relevance to the author's expertise and is often from an unknown journal. The e-mail campaigns are aggressively aimed at soliciting articles, which means authors often receive daily reminders to submit papers from the same journal but from different e-mail addresses. These invitations get increasingly familiar with the author as the frequency of the e-mails intensify urging the author to submit. Such emails often use standard marketing strategies to gain the attention of the academics such as congratulating the academic on his or her outstanding research productivity or performance or the publication of an outstanding recent article. Different forms of flattery are used to persuade the recipient of the email to consider submitting a manuscript to the journal or – increasingly – also to predatory conferences. See the examples below.

Example: *First of all we would like to congratulate you for your consistent and incessant efforts till now in the field of ... Being aware of your eminence in the related field, we cordially invite you for your valuable contribution towards our journal (Geoinformatics & Geostatistics).*

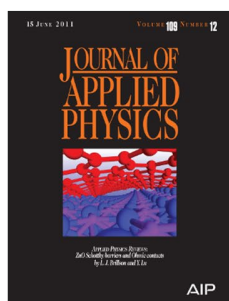
‘Predatory conferences’ use even more bombastic phrasing, when calling for speakers; an invitation to the 3rd World Congress on Cell Science & Stem Cell Research includes the following text:

“Dear Dr... Greetings. First of all, our Organization wants to honor you for your achievement and Awards. Your path and experience may guide many young researchers to be a successful scientist in the world. With your majestic presence which will take the conference to a supreme level and also will support to harness the current and future research in Cell Science & Stem Cell Research.”

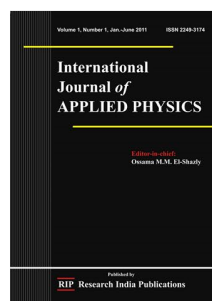
Inappropriate journal title and scope

Predatory journals often display wide-ranging journal titles, such as *Journal of Scientific Research and Reports*, which is not reflective of the content of the journal. The research team at OHRI, led by Dr David Moher, found that predatory journals advertise a broader disciplinary scope to ensure a higher article submission rate, and ultimately garner more APCs. Furthermore, some journal titles are a combination of scientific disciplines with very little in common, for example, combining humanities, geography and biomedical research in the title. *Science and Nature* is an example of a predatory journal that mimics the acclaimed journals, *Science* and *Nature*. Bolshete uses the example of the journal entitled “*International Journal of Applied Physics [IJAP]*, whereas the *Journal of Applied Physics* is published by IEEE” to highlight the adaptation of legitimate journals by predatory journals (see below). Additionally, their study identified popular terms such as “‘Modern’, ‘Innovative’, ‘Green’, ‘Progressive’, ‘Ingenious’, and ‘Standard’” which often feature in predatory journal titles¹². Predatory journals also use a fake geographical location in the CFPs, the website/s, and the journal title, for example, the *American International Journal of Social Science (AIJSS)* published in Bangladesh.

Example of copied / mimicked journal titles



Legitimate journal



Predatory journals

Lack of transparency in governance, editorial and publication practices

Legitimate journals and publishers disclose important information about the governance of their journals such as the full details of the editor and editorial board, the location of the publishing house, the editorial policies of the journal (with a specific emphasis on the adherence to good editorial practice as far as peer review is concerned). Predatory journals on the other hand are characterised by a range of questionable practices such as the following:

- Information on the editorial boards of predatory journals is often lacking.
- Predatory journals often add academics as editorial members to their Journal without their knowledge or permission.
- The composition of editorial boards of such journals typically varies from a small number of members from the same institution and country, or a larger-than-expected editorial board from many countries. Quite often a publisher lists one editorial board for a suite of journals regardless of the discipline/s of the individual journals.
- Some journals invent editorial board members or recruit any academic that approach them without checking their credentials. One example of the latter is the case of Dr Fraud. Researchers at the University of Wroclaw in Poland created an online profile for Anna O. Szust (oszust is Polish for fraud). They applied on her behalf for 360 editorial positions although it was clear from her CV that she was not a suitable candidate. Journals listed in WoS either did not respond to the solicitations or rejected it.

¹² Bolshete, P. (2018) ‘Analysis of thirteen predatory publishers: a trap for eager-to-publish researchers’, *Current Medical Research and Opinion*. Taylor & Francis, 34(1), pp. 157–162. doi: 10.1080/03007995.2017.1358160.

Conversely, 33% of the titles listed by Beall and 7% of the titles listed by DOAJ appointed her as an editor¹³. DOAJ subsequently delisted the titles.

- Lack of information or misinformation characterises predatory journals. The journals either do list an editorial board and editor or if they are listed, no academic qualifications, institutional affiliation or contact details are provided.
- The use of poor English on a website is not necessarily an indicator of a predatory journal or publisher but can also be indication of a poor quality journal. One of the distinguishing features of a predatory journal or publisher's website is the lack of a contact person and address. Most of the predatory journal websites only list the editor and an e-mail address from a free internet service provider such as Hotmail or Gmail. In many cases the publisher is not mentioned; neither is the physical location of the publication office. Several scholars have used Google Maps to verify the physical address listed on the website for the publication office. They found that the publication offices of some journals are either in residential areas or in a nondescript industrial building.

How to respond to the threat of predatory publishers: Five golden rules

In our experience, the threat of predatory journals continues unabated. Despite the growing scholarship and interest in this field and the salience of the issue, there is no question that post-graduate students and other emerging scholars as well as established academics and scientists continue to be approached by such journals and publishers and unfortunately also to be duped by them. We have thus formulated the following five rules that we believe everyone should consider following in dealing with this matter.

Rule 1: Your default position when approached to submit a paper to any journal is to be suspicious! It is not standard practice in scholarly publishing that journals approach academics to submit manuscripts to them for possible publication. You should immediately be on your guard when you receive such an invitation – irrespective of whether you are a novice or established scholar.

Rule 2: Look carefully for the tell-tale signs of a potential predatory journal or publisher as outlined and discussed in our framework above. When we are asked to assess whether a journal is predatory or not, we would specifically look for instances where there is a lack of information about the journal's editor and editorial board, where fake indexes and journal impact factors are highlighted and – perhaps most of all – when speedy publication (within days or weeks) is promised.

Rule 3: Consult any of the growing lists that are now available which identify potential predatory journals [Anonymous update of Beall's list <https://beallist.net/> Cabell's Predatory Reports <https://www2.cabells.com/about-predatory> Stop Predatory Journals <https://predatoryjournals.com/journals/>]. Use tool such as the Journal Evaluation Tool https://digitalcommons.lmu.edu/librarian_pubs/40/ and the Think.Check.Submit checklist <https://thinkchecksubmit.org/> . Also check whether the journal is a member of COPE <https://publicationethics.org/members>

Rule 4: Consult a senior colleague/scholar for advice on the selection of scientific journals. Especially if you are a student or an early career academic, ask for advice from the established colleagues in your department. One of the things that an experienced scientist learns over his/her long career of publishing in the field, is to be able to identify the top and authentic journals in their fields . If they have never heard of the journal that approached you, you should be on your guard.

Rule 5: As a general rule aim to publish in the top journals in your field. Such journals, with information about their journal impact factors, are typically indexed in the *Web of Science* or *Scopus* or *DOAJ*. There are more than 26 000 journal titles in these indexes which means that there should be more than sufficient high-quality journals in your field for you to publish in!

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¹³ Sorokowski, P. et al. (2017) 'Predatory journals recruit fake editor', *Nature*, 543(7646), pp. 481–483. doi: 10.1038/543481a.