



How to Spot Fake Journal: 10 Steps to Identify Predatory Journals

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Abstract. Nowadays, with overload information on the web, it is common to come across information and questionable content. This scenario is called fake news (for news), fake conference (for events), and predatory journals (for suspicious academic journals). Predatory journals explore the model of academic productivism, meeting the need for speed on the part of researchers in publishing, publish, or perish. A device created by academic immediacy. This study focused on analyzing the theme through methods and tools for the identification of predatory journals. A model is proposed for identifying these journals, using already established websites, databases, and repertoires. After monitoring some emails between January and April 2020, we identified a series of patterns in the forms of communication of these fake editorial boards. As a result of this research we suggest a ten practical recommendations steps to identify predatory journals: 1) ISSN; 2) inclusion in predatory journal lists; 3) web page and domain; 4) editorial information (call for papers, previous issues; indexing, plagiarism identification, editorial board members); 5) standards of published papers; 6) DOIs, and ORCID identification; 7) indexing status; 8) Article Processing Charge; 9) spelling and typographical errors on the web page and the papers; 10) If none of these actions have any effect and you still have doubted about the seriousness of the journal, consult a specialist on the subject.

Keywords: Fake journals · Predatory journals · Journals verification

1 Introduction

Nowadays, with overload information on the web, it is common to come across information and questionable content. This scenario is called fake news (for news), fake conference (for events), and fake and predatory journals (for suspicious academic journals). By definition, predatory journals mean a publication that misleads researchers into publishing in exchange for some form of payment (in submission or publication). Publishing under an Article Processing Charge (APC) requirement, without attention to publication ethics, peer review, or databases indexing [3].

In this context, as the information can be understood as correct because a predatory journal is something scientific, it is also necessary to be concerned with the ethical question. For example, it would be the same as saying that Hydroxychloroquine or chloroquine are 100% reliable to fight the infected of SARS-Cov-2 (Covid-19), but in health, you can't publish a study that indicates a medication and it can be used as truth [4], and in fact, we know that recent studies indicate that it is not, as it can cause irregular heartbeat and even lead to death.

An additional case is a fake editorial board, like OLLIE dog, who published articles in scientific media and currently is part of seven scientific predatory editorial advice and even he can review work [5]. Ollie dog owner Mike Daube created his fake curriculum and since then the dog has received numerous invitations to publish and be part of groups of scientific journals. This is a predatory journals strategy, occurs because it aims to recruit young researchers as scientific editors, generally at the beginning of their careers and who at low rates can be part of the editorial board [6], supposedly helping in the course of academic careers. The marketing of predatory journals is acuteness designed, which guarantees publication at an acceptable price, and guaranteed representation in large databases.

Another, predatory journals strategy is fake metrics, especially since researchers are constantly evaluated, for a variety of reasons, they need to justify the output of their research as a form of validation. Some of the fake metrics are (a) Scientific Journal Impact Factor available at <http://sjifactor.com/>; (b) Global Impact Factor - available at <http://globalimpactfactor.com/>; and (c) Universal Impact Factor available at <http://uifactor.blogspot.in>.

A third strategy relates to peer review, predatory journals never do peer review, these journals only make minimal editions of a foreign language, if this evaluation process applies. These journals do not verify the veracity of the data used, they promise peer review within 24 or 48 h, and a paper published in a few weeks. Predatory journals promise agility in publication and not quality.

Predatory journals explore the model of academic productivism, meeting the need for speed on the part of researchers in publishing, publish, or perish. A device created by academic immediacy.

A predatory journals also act as open access journals. This is clear in return for payment. The values are between 60 and 3.000 dollars to publish a paper. In this context, they facilitate the stages of the scientific process, promise speed review, publication in a few days, and indexing on databases of international prestige. Careless researchers, unaware of the negative consequences of publishing in predatory journals, become the victims of academic productivism that leads them to abuse quick solutions to publicize their publications, in search of better salary conditions, promotion of research, and increase their scientific indicators [7]. But it's not just young researchers who fall into the traps of predatory journals.

Interestingly, even the prestigious international databases indexing predatory journals in their databases. This shows that the process, in some cases, is meticulous to deceive researchers and even journals qualification systems. For example, SelcukBesir Demir [8] conducted an intense search of Bells' list of predatory journals (n = 2708) and identified that these journals were being indexed in several databases, such as the

power of infiltration of these types of content in the medium academic. In the databases indexed in the Web of Science, 3 journals were found; while in Scopus database, 53 journals were found.

According to the scenario presented on predatory journals, this study will focus on analyzing the theme through methods and tools for the identification of fake journals and predatory. Thus, this paper proposes a model for identifying these journals, using already established repertoires, such as the Bell's list [9], Kscien's list [10], UlrichsWeb proposing a checklist pattern to identify predatory journals.

2 Methodology

The purpose of analyzing the predatory journals arises from the constant receiving emails with invitations to publish papers, after we received numerous emails about the possibility of publishing articles in international journals, with speed and ease, upon payment fees. After monitoring 35 emails between January and April 2020, we identified a series of patterns in the forms of communication of these fake editorial boards. Thus, we used the parameters proposed by Tove Faber Frandsen [11] and Jeffrey Beall [12] to identify the veracity of these (35) emails, and we applied it to 10 random journals (Table 1):

Table 1. Predatory journals list

Journal title	ISSN	Email editor	Web site
International Multilingual Journal of Science and Technology (IMJST)	2528-9810	editor@imjst.org	http://imjst.org/
Revista Iberoamericana de Ciências	2334-2501	editor@reibci.org	http://www.reibci.org
Journal of Multidisciplinary Engineering Science and Technology (JMEST)	2458-9403	editor@jmest.org	https://www.jmest.org/
Journal of Travel Tourism and Recreation	2642-908X	jttr@sryahwpublications.com	https://www.sryahwpublications.com/journal-of-travel-tourism-and-recreation
Columban Journal of Life Sciences	0972-0847	cjlseditor@yahoo.com	http://cjlscience.org
Research Journal of Library and Information Science	2637-5915	rjlis@sryahwpublications.com	https://www.sryahwpublications.com/research-journal-of-library-and-information-science
International Interdisciplinary Journal of Scientific Research	2200-9833	editor.ijsrnet@gmail.com	https://iijsr.org/;
World Journal of Pharmaceutical and Life Sciences	2454-2229	editor@wjpls.org	https://www.wjpls.orges
Kashmir Economic Review	2706-9516	managing_editor@ker.org.pk	
Turkish Journal of Scientific Research (TJSR)	2148-5135	editor@tjsr.com	

3 Results and Discussions

We firstly identified the ISSN existence and validity since this item is the journal's universal identification. A journal without an ISSN number can be discarded without major concerns. The ISSN Portal was used for this number identification. According to the ISSN Center, the quality of a journal can be validated by means of the UlrichsWeb Global Serials Directory (<http://ulrichsweb.serialssolutions.com>), a quality control system for serial publications managed by the ProQuest Company. Secondly, some lists for predatory journals were consulted, including:

- 1) <https://beallslist.weebly.com/>;
- 2) <https://predatoryjournals.com/journals/>;
- 3) <http://archive.fo/9MAAD#selection-283.0-293.73>;
- 4) <http://kscien.org/predatory.php>

These four lists are the most extensive lists to locate a predatory journals (Table 2).

Table 2. Representation and visibility of journals (Items 1, 2, and 3)

ISSN	Portal ISSN	Ulrichs web	Bell's list	Predatory journal	Scholarly OA	KScien List	Own website
2528-9810	Yes	No	No	No	No	No	Yes
2334-2501	Yes	No	No	No	No	No	Yes
2458-9403	Yes	No	No	No	Yes	Yes	Yes
2642-908X	Yes	No	No	No	No	No	Yes
0972-0847	Yes	No	No	Yes	Yes	Yes	No
2637-5915	Yes	No	No	No	No	No	No
2200-9833	No	No	No	Yes	Yes	Yes	Yes
2454-2229	Yes	No	No	Yes	Yes	Yes	Yes
2706-9516	No	No	No	Yes	Yes	Yes	Yes
2148-5135	Yes	No	No	Yes	Yes	No	No

The journals 2528-9810 and 2458-9403 claim that their publishers Naci Kalkan of Bitlis University, but the institution and the name of the publisher do not even appear on alleged pages of the journals. The journals 2334-2501, 2642-908X, 0972-0847, 2637-5915, 2148-5135 do not present any information beyond the name, country of publication, and means of communication (online). The journals 2200-9833 and 2706-9516 do not actually exist, as can be seen from the lack of registration on the ISSN Portal.

We did not identify any periodical in the Bell's list; five journals are on the Stop Predatory Journals list and the KScien List. The list of journals from Scholarly Open Access: Critical analysis of scholarly open-access publishing (List of Standalone Journals) was the most efficient, with 6 titles identified.

Concerning the web domains of these journals, only 3 did not have their own names. Most have their own names, but just browse a little to identify that the editorial is very vague and the existence of an exorbitant number of editors, It is evident that part of this editorial board is either fake or was recruited by young researchers (Table 3).

Table 3. Indexing of journals (Items 4, 5, and 6)

ISSN	DOI	Call open	Number	2019 n = articles	General editor	Plagiarism	Google scholar	ORCID
2528-9810	No	Yes	Uneven	40	No	Yes	No	No
2334-2501	No	Yes	Even	48	No	No	Most	No
2458-9403	No	Yes	Uneven	327	No	Yes	Most	No
2642-908X	No	Yes	Even	19	Yes	No	Most	No
0972-0847	No	No	Uneven	0	Yes	No	No	No
2637-5915	No	Yes	Even	20	No	Yes	Minority	No
2200-9833	No	No	Uneven	0	No	No	No	No
2454-2229	No	Yes	Uneven	41	Yes	No	Most	No
2706-9516	No	Yes	Uneven	5	Yes	No	Yes	No
2148-5135	No	No	No	0	No	No	No	No

Source: Survey data, 2020.

Other checks in the journal's webpage are necessary, such as:

- 1) check in the previous volumes and issues if the articles presented were not published in another journal;
- 2) check the number of articles published per volume, issue, and year;
- 3) the journal submissions webpage;
- 4) identify if the journal has a Digital Object Identifier (<http://www.doi.org>), and check if it belongs to the journal in CROSSREF;
- 5) check the durability of the magazine on the web.

According to these criteria, we will analyze the websites of the journals that have sent us an e-mail (Table 4).

The payment of fees for submission and publication of articles is one of the main characteristics of a predatory journal. In our research we found that these values varied between \$25 and \$300).

Regarding the indexing status of the journals, none were identified in mainstream databases for the academic community (see Table 4, 5).

Because they are not in databases, some predatory journals use a fake metrics system to validate their impact. In this scenario, some non-existent scientific indicators were found, such as the Universal Impact Factor.

Table 4. Analysis of the journals' website (Items 1, 2, and 3)

ISSN	Website characteristics
2528-9810	Journal created in 11/2019 editions were missing, the volumes published in the journal have no temporal regularity, and the number of published articles varies from (1) to (7) studies in a single volume. Some articles consulted revealed that part of its contents had already been published in other journals. The editor of the journal was not on the editorial board of the journal's website, what was included were the members of the editorial board, authors with few publications in databases like Google Scholar, WoS and Scopus. The authors of the articles have generic names and without ORCID
2334-2501	Journal created in 2014, without DOI, submissions open to April 2020, volumes published regularly, but on different areas of knowledge; without editorial advice; without plagiarism checker information, most of the articles were indexed by Google Scholar, authors without ORCID
2458-9403	Journal created in 2014; without DOI and ORCID, publications have irregularities in the number of articles (high number of publications, equal to (327) papers); without editor-chief; indexed by Google Scholar, but not all articles. This is an important feature of - predatory journals, as they reveal the APC, thus the number of publications shows that the journal has already obtained financial returns
2642-908X	Journal created in 2019, a few published volumes, without temporal regularity; it has an editor, but a simple check on the editor's curriculum at his institution-revealed that he does not mention the journal, without DOI and ORCID; without plagiarism; most papers are indexed by Google Scholar
0972-0847	The journal presents little information; does not offer direct access to papers, previous numbers, DOI, ORCID, plagiarism checker, and content indexed in Google Scholar. It has an editor-chief, but he is a politician and not a scientist, according to information from Wikipedia
2637-5915	Journal created in 2017, located in India, regularity in published volumes (5); without DOI and ORCID; little indexed is in Google Scholar; plagiarism checker; submissions always open; without information about the general editor, only information from the editorial board
2200-9833	Journal created in 2014, volumes have temporal irregularity, closed in 2017, requesting submissions by email, without plagiarism checker, indexed in Google Scholar, no numbers published between 2018 and 2019
2454-2229	The webpage contains general editors, ISSN validated by the ISSN portal; created in 2016; irregularity in the number and papers of published without plagiarism, partially indexed by Google Scholar; without DOI and ORCID
2706-9516	Journal created in 1984, information on the editorial board until 2010, submissions for the second issue of 2019; only 5 articles published in 2019, without DOI and ORCID; papers without the same format style; edition is open, indexed by Google Scholar and plagiarism has not been identified

(continued)

Table 4. (continued)

ISSN	Website characteristics
2148-5135	Journal indexed in WorldCat, it does not present any information about its volumes and issues, editorial board, indexing, and identification metadata of papers and authors

Table 5. Payments, spelling errors, fake metrics, and indexing in international databases (items 7, 8, and 9)

ISSN	APC	WoS indexing	Scopus indexing	Misspelling	Fake factor impact
2528-9810	US\$ 25	No	No	Yes	Yes
2334-2501	No	No	No	No	Yes
2458-9403	US\$ 45	No	No	No	Yes
2642-908X	US\$ 300	No	No	Yes	No
0972-0847	No	No	No	No	Yes
2637-5915	US\$ 300	No	No	Yes	No
2200-9833	No	No	No	No	No
2454-2229	US\$ 50	No	No	Yes	Yes
2706-9516	No	No	No	No	No
2148-5135	No	No	No	No	No

Source: Survey data, 2020

4 Practical Recommendations and Concluding Remarks

The main characteristics of predatory journals are fast publication promises, irregularities in the publication schedule and frequency, and no editorial guidelines, and editors lacking academic. In this context, to help young researchers to publish in quality journals, we suggest a ten practical recommendations steps to identify predatory journals:

- 1) Check the ISSN at (ISSN Portal), UlrichsWeb Global Serials Directory, these web portals provide registration and history of the journals. Both systems are quite efficient;
- 2) Check the lists of fake journals and predatory;
- 3) Check the domain of the pages of the journal: Every coherent journal has its own page or is linked to some scientific institution, be it a publisher, university, associations, or research institutions. Always doubt when it is linked to blogs or pages of institutions unknown to the academic world;
- 4) Check the update of the web page: A quality journal always has called for submission, or at least indicates when it will be receiving scientific papers; informs previous editions, with basic information and in many cases access to articles; it has information from the editor, the editorial board and reviewers; it is essential to

- consult some of these characters to see if they are real; also check if the articles are on Google Scholar, most are not enough, but the entire collection; if you can, use a plagiarism sniffer in recent articles, because that says a lot about the journal;
- 5) Check the constancy of the journal: quality journals publish based on international standards, and follow recommendations from big databases;
 - 6) Check if the Journal has unique digital identifiers. the journal must have a Digital Object Identifier (DOI), as well as the authors the ORCID; these two identifiers are factors of informative quality for the standardization of papers and names of authors;
 - 7) Check if the Journal is indexed on the bases academy prestige: Indexing on platforms brings confidence to the journal; just being in the Directory of Open Access Journals (DOAJ) does not guarantee that the journal is good, you need to obtain more information, such as having a list of where the journal is represented; another detail is whether it is in serious databases, directories, and repositories such as Web of Science, Scopus, and others;
 - 8) Check if there are publication fees: That the journal is paid is not a problem, but that to submit an article you have to make payments does not seem very logical; another thing, with the payment system, the journal guarantees that it will be evaluated in 48 h, it also seems very dangerous, since this process is the most important of the whole process and requires time; ensuring publication in weeks also seem me very worrying, after all the process of managing and editing a journal is costly and requires a good group of people to be of quality (editors, reviewers, librarians, among others);
 - 9) Check that the journal is well-edited: In this case, revisions come in and in many cases in different languages, as many journals guarantee multilingual publications in their calls; check what the standards are if any manager is used in the journal;
 - 10) Consult an expert on the subject of the journal: Predatory journals are made to deceive the researcher, easily and quickly, but we believe that a specialist can be consulted; look for someone from your institution, with papers on the subject of the alleged journal, and ask for his opinion, it can make all the difference in recognizing something unreal.

As a proposal for the continuity of this work, a tool is being developed that includes a set of automatic methods for the identification of fake journals and predatory. Such methods will compose a framework that gives information about a certain journal, or a list of journals, such as title, ISSN, e-ISSN, or website, in an automatic way to class if they are and predatory journals.

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