### Supplementary File 4

### Table 9: Items to be Considered in the Creation of a Composite Checklist to Identify Predatory Journals Based on Grudniewicz’s et al.’s [6] Five Components of the Definition of Predatory Journals and Publishers

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| --- | --- | --- |
| Category | Item | Proposed Wording |
| Journal Title | Legitimate journals usually have field- and discipline-appropriate titles. Predatory journals often have broad titles (e.g. the Global Journal of Advanced Research) or titles with disjointed scopes (e.g. the Journal of Economics and Engineering). With respect to this journal’s journal titles, would you consider this journal to be “legitimate” or “predatory”? (Mouton et al. 2017)  Is the name of the journal incongruent with the journal’s mission? Is the name of the journal excessively broad? Does the name of the journal make sense? (Hansoti et al. 2016) | Is this journal's title excessively broad in geography (eg, use of terms such as World, International, Global) or content range (eg, cellular biology and clinical care)? |
| Editors | With respect to the journal editors' affiliation, which of the following is true? Full affiliations are provided; only their country name is provided; no information about their editors is available; editors are from a certain country? [Reworded as: Does the journal provide complete information regarding their editors' affiliations (including a full affiliation, country, and information about the editors)?] (Dadkhah et al. 2016)  Legitimate journals provide accurate and appropriate contact information about their journal and editorial board. Predatory journals often list false or insufficient contact information, including contact information that does not clearly state the headquarters location or misrepresents the headquarters location (e.g. through the use of addresses that are actually mail drops). With respect to this journal’s contact information, would you consider this journal to be “legitimate” or “predatory”? (Mouton et al. 2017) | Does the journal provide accurate information regarding their editors' qualifications and affiliations (including academic appointments, institution, country)? Verify by internet search on editor’s names. |
| Misleading Metrics/ Indices | Beall published a list in 2015 of 38 “Misleading Metrics” companies that purport to gauge a journal’s impact factor, and provide scholarly metrics at the researcher and article level. Does this journal make mention of being indexed on any of these 38 misleading metrics? (Hansoti et al. 2016) | Does this journal promote any bogus metrics and/or indices, such as a false impact factor? If the journal claims to have an Impact Factor, check it at <https://mjl.clarivate.com/home>.  White list: Does the journal have a valid International Std Serial No. (ISSN) (<http://ulrichsweb.serialssolutions.com/>)  Is the journal indexed by a major bibliographic database (eg MEDLINE https://pubmed.ncbi.nlm.nih.gov/ , EMBASE https://www.embase.com/login)  If the journal is Open Access, is it listed in the Directory of Open Access Journals (DOAJ) (<https://doaj.org/>)  Blacklist: Is the journal on a blacklist? eg <https://predatoryjournals.com/journals/> |
| Does this journal use bogus metrics and/or indices? (Dadkhah et al. 2016) |
| Are the various claims related to impact factor or use of made-up measures such as view factor, universal impact factor, feigning international standing, etc. associated with this journal correct? (Patwardhan et al. 2018) |
| Correctness of claims regarding indexing or use of predatory, dubious indexing agencies. (Patwardhan et al. 2018) |
| If claiming to be an OA journal, is it in the Directory of Open Access Journals (DOAJ)? This is a sort of “whitelist” of legitimate journals that must meet specific criteria for inclusion. (Hansoti et al. 2016) |
| Publication Time | Publication lag time is often correlated with the status of the journal (with the best journals taking more time to get to production because of high demand). [Predatory] journals boast extremely rapid (and unrealistic) response (review) and publication times. They often also publish extremely high numbers of papers per year. This is arguably one of the best indicators of whether a journal is predatory or not as it speaks to the capacity of any editor to handle literally hundreds of submissions per year through proper peer review. With respect to this journal’s time to publication, would you consider this journal to be “legitimate” or “predatory”? (Mouton et al. 2017) | Does this journal boast extremely rapid review (eg, < 1 month) or publication times (eg, < 3 mo)?  Check journal website. |
| Technical Production Values | Read the articles in the journal before submitting an article. Warning signs include grammar errors, poor quality science, poorly maintained website with prominent misspellings and grammatical errors. For this journal, do such warning signs exist? (Hansoti et al. 2016) | Do this journal's web pages or its published articles contain obvious grammar or spelling errors, poorly maintained/dead webpages, or poorly edited or formatted published articles? |
| Frequency of Publication | Does this journal have a declared frequency of publication each year? (Patwardhan et al. 2018)  Does this journal publish regularly and in time following its declared frequency? (Patwardhan et al. 2018) | Does this journal have a declared frequency of publication each year that it adheres to? Review back issues on the journal website. |
| Editorial Practices/ Policies | Is the journal transparent and following best practice in editorial and peer-review processes, governance, and ownership? The best way to discern this is by reviewing the journal documents and governance, likely available online at the website, or reaching out to the journal leadership. Legitimate journals should have a robust list of policies and procedures on their website, including human and animal subject policies, OA license type (something like Creative Commons Attribution License 4.0), conflict of interest and informed consent. (Hansoti et al. 2016)  Are there clear policies on plagiarism, authorship, and copyright on the website? (Hansoti et al. 2016)  Does the journal provide a peer review process and assurance of publication in any manner? (Patwardhan et al. 2018)  Does this journal have a well-defined peer review, publication and ethics policy? (Patwardhan et al. 2018) | Does this journal provide clear and detailed instructions to authors, including policies on plagiarism, authorship, copyright, peer-review, and publishing ethics on their website?  (example of complete instructions: <https://www.bmj.com/about-bmj/resources-authors/article-types>) |
| Governance | With respect to the journal editors' affiliation, which of the following is true? Full affiliations are provided; Only their country name is provided; no information about their editors is available; editors are from a certain country? (Dadkhah et al. 2016) | Are the editorial board members for each journal of interest identified by 1) field of expertise or academic position, and 2) institution, and 3) can any of the editorial board members be verified on an independent online search? |
| Spam | Authors usually submit manuscripts to journals of their own accord. Predatory journals typically solicit manuscripts by spamming researchers (especially using their Yahoo and Gmail accounts). With respect to this journal’s origin of papers, would you consider this journal to be “legitimate” or “predatory”? (Mouton et al. 2017)  Does this journal send journal spam email to receive papers? (Dadkhah et al. 2016) | Does this journal aggressively solicit papers by e-mail? |
| Business Model | Legitimate scholarly journals do not exist solely for profit. Predatory journals are open-access journals that exist for the sole purpose of making a profit. With respect to this journal’s business model, would you consider this journal to be “legitimate” or “predatory”? (Mouton et al. 2017) | Are the author fees readily available before submission and reasonable compared with other OA journals? |
| Critical Feedback | Be honest about the methodological flaws of your own work. It is unlikely that good reviewers will not identify them. If the reviewers do not see the same limitations as you have, this is a red flag that you have sent your work to a predatory journal. Be concerned if you do not receive any critical feedback and your article is accepted, as this rarely happens with legitimate peer review. Did you receive any critical feedback on your submitted article? (Hansoti et al. 2016) | If you have already made a submission to the journal and received peer-reviewed feedback, are substantive comments provided from at least one reviewer about the article’s methods (eg, study question, logic, study design, execution, analysis)? |