

# The Ethics of Predatory Journals

## **Abstract**

Predatory journals operate as vanity presses, typically charging large submission or publication fees and requiring little peer review. The consequences of such journals are wide reaching, affecting the integrity of the legitimate journals they attempt to imitate, the reputations of the departments, colleges, and universities of their contributors, the actions of accreditation bodies, the reputations of their authors, and perhaps even the generosity of academic benefactors.

Using a stakeholder analysis, our study of predatory journals suggests that most stakeholders gain little in the short run from such publishing and only the editors or owners of these journals benefit in the long run. We also discuss counter-measures that academic and administrative faculty can employ to thwart predatory publishing.

## **1. INTRODUCTION**

The department tenure committee, the dean of the college, and the university president were all impressed with the applicant's tenure packet, which listed 15 articles in prestigious-sounding journals. In addition, the professor was well liked by his colleagues and his department chair. His teaching was only "adequate," but no one seemed to mind because so many of the tenure decisions at his school depended upon an applicant's publication record—in this case, a seemingly stellar one. The recommendations from the review bodies were consistently favorable, and the professor was awarded tenure in the spring semester. No one noticed the fact that all 15 of the articles listed in his application appeared in "pay-to-publish" journals—publication outlets that masquerade as serious, legitimate scholarly periodicals but in reality are mostly financial scams. In short, the professor had bought his way to tenure.

Pay-to-publish journals—often known as “predatory journals”—exist mainly to make money for their editor-owners. In the “wild west” of open access journals, journal quality and publishing hoaxes jeopardize academic integrity and show little concern for ethics (Shaw 2013). Thus, contributors to predatory journals can usually count on (1) remarkably short review periods, (2) automatic acceptance for publication, and (3) large publication and other fees.

The effects of predatory publishing are far reaching. In addition to tenure decisions, they potentially influence measures of faculty research productivity, the “best-school” rankings of external raters, university reputations, the decisions of accreditation bodies, and even the hiring choices of local and regional employers. In short, predatory publishing has negative consequences for a number of stakeholders.

In recent years, Jeffrey Beall (2015) has compiled a list of “potential, possible, or probable global open-access publishers.” In an interview for the *Chronicle of Higher Education*, he states:

“Predatory open-access publishers are those that unprofessionally exploit the gold open-access model for their own profit. That is to say, they operate as scholarly vanity presses and publish articles in exchange for the author fee. They are characterized by various level of deception and lack of transparency in their operations. For example, some publishers may misrepresent their location, stating New York instead of Nigeria, or they may claim a stringent peer-review where none really exists. (Elliot, 2012).

No one knows exactly how many journals are predatory. At the time of this writing, Beall’s list contained 1150 predatory publisher entries, but many publishers on the list support multiple journals. Mathews (2015) found approximately 1,800 such journals in 2010—a number that he suggests has grown to 8,000 in 2015. He also found that there has been an

eight-fold rise in articles published in this period—from 53,000 in 2010 to 420,000 in 2014 (Mathews, 2015). Finally, a separate study by Shen and Bjork (2015) identified 11,873 such journals. Given the volume, many argue that the number of scientific articles has increased dramatically. However, questions remain about the peer-review process and the ethics of these predatory publishing practices (Shaw 2013).

The distribution of predatory journals across disciplines does not appear to be uniform. Beall (2013) suggests that the largest concentration is in the sciences because many grants in these disciplines also cover the costs of publishing articles in scholarly journals. A comprehensive study by Nelson and Huffman (2015) suggests that he is correct, but that science is but one of several subject areas with high concentrations of predatory journals (see Table 1). Other disciplines include medicine or health, technology and business. Finally, although predatory journals are international, more than 60 percent of the corresponding authors were from Asia (Mathew, 2015).

(Insert Table 1 here)

In the next section of this paper, we review predatory journal practices in greater detail, and in Section 3, provide a brief history of cameo publishing, of which we feel predatory publishing is a part. In Section 4, we identify those most affected by predatory practices, and use a stakeholder model to explore the ethics of predatory journal publishing. In Section 5, we provide some ways that authors can identify predatory journals and encourage authors to avoid them. Finally, we summarize our findings and present our conclusions.

## **2. PREDATORY PRACTICES**

In the authors' opinion, the primary purpose of a predatory journal is to make money for its owner/publisher—not to create and disseminate knowledge. As such, it is instructive to

examine the fee structures of such journals, many of which are as creative as they are deceptive. Here, we also discuss ways in which predatory journals attempt to achieve a semblance of legitimacy.

#### **A. Publication Fees**

How predatory journals charge authors varies. In some instances, there is simply a substantial submission fee—for example, \$500—which the user pays independent of the review outcome (bearing in mind that premier, legitimate journals with low acceptance rates may also charge a significant submission fee). In others, there is a “article processing charge” of similar magnitude, which the user only pays if the article is accepted for publication (an incentive to accept marginal articles). In yet other cases, the journal assesses the author a per-page charge—despite the fact that the journal only publishes online, where page costs are negligible.

Journals have many additional methods of charging authors. At one publisher, for example, the writer pays no submission or per page charges, but instead must first join a bogus professional society whose main purpose is to collect the toll required for publication. At another, the publisher charges high, upfront reprint fees—a contingency fee, some claim, in case readers order copies. In yet another permutation, the journal editor assigns an accepted paper a “priority category.” High-priority articles are free, but “medium” and “low” priority articles cost hundreds of dollars—a ranking that claims to rate the value of the article itself, but that also provides an incentive for the editor to assign paper priorities in the “medium” and “low” categories.

The magnitude of article processing charges vary widely. Xia et al. (2015) used a sample of 297 journals listed on Beall’s list to compute an average fee of \$94 per article.

Similarly, using a sample of 613 journals, Shen and Bjork (2015) computed average fees ranging from \$104 to \$239 per article (depending upon journal category). The article processing charges in the Shen and Bjork study ranged from as little as a few dollars to \$1,800 per article.

## **B. Legitimacy**

The success of predatory journals depends upon their ability to appear as serious, legitimate publication outlets. They attempt to accomplish this in various ways, all of which are deceptive, and some of which we feel are fraudulent. Perhaps the simplest practice is to create a website with the exact same name as a reputable journal. A similar practice is to adopt a journal name that is nearly identical to an existing, prestigious one in the hopes that contributors will confuse one for the other. A third practice is to convince, trick, or simply use the names of prestigious, well-known scholars to serve as the journal's editor-in-chief or senior associate editors. Yet a fourth way is to misrepresent the origins of the journal itself—for example, when an editor in Nigeria claims that his journal is published by the university press of a well-known American institution (Lakhotia, 2015).

Finally, there is journal hijacking. In one unusual case, for example, some “obscure” investors purchased an existing, legitimate journal (*Experimental and Clinical Cardiology*), and converted it to a predatory journal, charging \$1,200 per article in publication fees. The journal also increased the number of articles published from 63 in 2013 to more than 1,000 articles in 2014 (Shen & Bjork, 2015).

Predatory journal editors also use creative and deceptive ways to misrepresent the exclusivity of their publications. To increase their self-reported rejection rates, for example, some editors simply lie about them. Others launch entire families of interrelated journals and

then treat a submission to any of them as a submission to all of them. The result is that (say) for a family of 25 journals, one submission results in one acceptance and 24 rejections. In their study, Shen and Bjork (2015) identified 20 families, each of which published 100 journals or more, and an additional 230 families that published between 10 and 99 journals *each*.

Another way that editors try to increase the prestige of their journals is to increase the number of references to articles published in them. At some journals, therefore, editors require authors to include at least ten references to other articles that have already appeared in the same journal. The resulting citations are often obscure or inappropriate at best, but serve the intended purpose of increasing the number of references to existing journal content.

Finally, in the last few decades, many disciplines have relied upon Impact Factors to assess journal quality. While Impact Factors are hardly perfect, they at least attempt to measure the importance of a journal, and therefore the contribution to the discipline in which it publishes. Because larger impact factors suggest greater importance, predatory journal editors manipulate their Impact Factor rankings in a number of ways. The easiest method is to simply lie, reporting large Impact Factors that have no basis in reality. A more subtle way is to reference the high Impact Factors reported in the “external” rankings of bogus journal-ranking websites—rankings that are just as crooked as the journals they rank. Gutierrez, et al. (2015) provides a list of 22 current websites that “provide impact factors of dubious validity.”

### **C. Stealth Retractions**

In a worst-case situation, online predatory journals can take a “poison pill.” One variation is to issue a *stealth retraction* of an already-published article—i.e., remove it with no explanation (Gutierrez, et al., 2015). It is also possible for the publisher to delete an entire

collection from online access (Nelson and Huffman, 2015). This is the ultimate weapon and an important concern to those demanding that scholarly efforts be available in perpetuity.

### 3. A BRIEF HISTORY OF CAMEO PUBLISHING

We consider the act of publishing works in predatory journals akin to cameo publishing—i.e., paying another party to publish a composition. This pay-to-publish, or self-published, business model has a long history. For example, many of the first recordings on cave walls, clay tablets, or papyrus scrolls were self-published recordings of interest mainly to the artist or writer (Fitzgerald, 2013). The invention of movable type by Johannes Gutenberg in 1450 enabled authors to mass-produce books—again, mostly works of interest to those writers able to pay the (considerable) costs of the initiative. In the colonial United States, most of the first publications were, again, self-published. A famous example is the annual *Poor Richard's Almanac* that Benjamin Franklin began publishing in 1732, and that contains essays, household tips, and proverbs mainly of interest to himself (FitzGerald, 2013).

Self-publishing has continued into modern times. In 1931, for example, Irma Rombauer paid a local printing company to self-publish 3,000 copies of her now-famous cookbook, *The Joy of Cooking*. Other books that began as self-published works include *A Time to Kill* by John Grisham, *Fifty Shades of Grey* by Erika Leonard (E.L. James), and *Still Alice* by Lisa Genova (Balson, 2013).

Self-publishing in predatory journals is similar to earlier forms of self-publishing, but with one big difference—the presumption that the reported research has been vetted by external referees and therefore *peer reviewed*. Predatory articles lack such a process (although many *claim* otherwise), with most publications depending entirely on the payment of the journal's fees—the equivalent of hidden self-publishing.

The rise of predatory publishing can be traced to the growth of the Internet, and the ability of journals to easily “publish” content online. These “open access journals” convert articles to web pages, thereby allowing authors to reach a wider audience while simultaneously lowering publication costs. Many legitimate journals are now either published online exclusively, or are hybrid journals that use both online and print media. Thus, an online presence is not necessarily evidence that a journal is predatory.

Questions about the legitimacy of some open access journals appears to date back to Suber (2007), who noted the potential for predatory practice and therefore suggested the following identifiers for predatory journals: (1) little evidence of peer review, (2) spamming researchers, soliciting them for articles in hastily-constructed “call for papers,” (3) claiming fictitious titles as published journals, (4) hiding the names of editors, and (5) hiding the names of owners and business addresses. Conspicuously absent in this list is the presence of publication fees, which the authors of this paper would add to this list.

One of the earliest reported cases of predatory publishing comes from Davis (2009), who submitted a computer-simulated paper of little merit to a suspected predatory journal. Not surprisingly, the journal editor immediately accepted it for publication—provided the author pay the \$800 publication fee. In a related experiment, Bohannon (2013) submitted a fabricated article with a deliberately-deficient research design to more than 300 suspected open-access journals, over half of which accepted it for publication.

Predatory journals have their supporters. For example, an author wishing to publish an article quickly might use one to accomplish this task. Similarly, these journals provide financial benefits to their owners, and aspiring departments might allow, or even encourage, new hires to use them as “warm-up publication outlets.”



#### 4. THE ETHICS OF PREDATORY PUBLISHING

It is useful to address the ethics of a given problem within a formal framework.

Although several such constructs are available for this task, the authors chose to use the “stakeholder framework” of Brooks (2004: 310-318). Our preference rests on the fact that this approach enables us to identify the stakeholders in this matter and explore how predatory journal actions impact them. The framework requires consideration of the following fundamental interests (Brooks 2004, 312-313):

1. Betterment: predatory journal publications should result in more benefits than costs for the stakeholders.
2. Fairness: The distribution of benefits and burdens among stakeholders should be fair.
3. Rights: The publication in a predatory journal should not impinge on the rights of any stakeholder.

Stakeholders today expect organizations to respect their values and interests, and this respect in turn helps determine the organization’s success and ethical standing (Brooks 2004, 2). In reality, trade-offs have to be made among stakeholder interests. For example, while all stakeholders may find an action acceptable because it advances the betterment of most stakeholders in aggregate, one or more individuals or groups may be worse off as a result (for example, the implementation of a universal health care system results in increased taxes for higher-income earners). Regardless of the trade-offs, *all three interests must be satisfied* before predatory publishing can be considered ethical (Brooks 2004, 312). This would not be the case, for example, where predatory publishing produces an overall benefit, but may be so harmful to

one or more stakeholder groups that most would consider it unfair. Alternatively, a decision may result in an overall net benefit and be fair, and yet the rights of one or more stakeholder groups may be offended (Brooks 2004, 312).

Stakeholder theory requires an analysis of the major stakeholders directly involved in the paradigm under review. In the matter of predatory journals, we identified five major participants: (1) authors, (2) predatory publishers, (3) universities, (4) professional disciplines, and (5) accreditation bodies. Of these, we consider faculty members to be the main stakeholder, but all stakeholders can also be seriously impacted by predatory publishing. How might each stakeholder view this matter? Who benefits and who suffers? How are the rights of each stakeholder affected? We examine each stakeholder group in turn.

#### **A. Authors**

At many universities, “conducting research” and “publishing research results in respected journals” are conditions of employment for tenure-track professors (Garfield, 1996). Most modern academic employment contracts explicitly state as much, and faculty members must sign them as part of the hiring process. So one form of betterment in this environment would be that a publication in an acceptable journal would benefit a tenure track faculty member by helping them obtain tenure. The problem is that the publication may not count since it is not occurring in a “respected outlet.” This is particularly true at those schools wise enough to create acceptable journal lists. If, however the school is not actively reviewing the publication record and evaluating outlets, predatory journal articles may slip by and provide additional counts for the faculty member.

There is also the cost associated with publication. Although most publishers of academic journals do not financially compensate authors for their intellectual contributions,

most are aware of the fact that universities or grants often will. Such compensation can be direct—as, for example, when a department or dean pays the publication charges imposed on the author by the journal. Compensation can also be indirect—as, for example, with annual merit awards based on research productivity, lower teaching loads for “productive faculty,” sabbaticals, promotions to higher professorial ranks, and higher salaries. Alternatively, the absence of research productivity in a professorial profile at mainstream research institutions is the almost certain “perish option” for that faculty member—i.e., the loss of his or her job via a terminal contract.

Consider the reputation of a faculty member in a tenure process at a “predatory-aware” university. A simple analysis of Beall’s list (2015a) will reveal that some of an author’s publications are in predatory journals and this, in turn, might cast ethical doubts when reviewed by a tenure and promotion committee. While paying to publish appears enticing to authors, it also puts them at risk in promotion or tenure decisions (Nelson et al 2015). An unknowledgeable author who is under pressure to produce intellectual contributions may turn to a predatory journal and view it as solving a vexing problem. Similarly, an author might publish in predatory journals knowing his university does not adequately consider “journal quality” in the tenure process. The predatory journal benefits from a “publication sale,” but the author is at risk if decision makers become aware of the act. Similar comments apply to an individual with a predatory-laden vita who applies for a tenure-track position at a different university.

While a line item on a vita might impress, it doesn’t tell us whether the distribution of the benefits of this line item were equitable. At best, there may be short-term benefits to the author, but the majority of benefits will accrue to the publisher. For example, intellectual

property rights usually transfer from the author to the publisher, so the author pays money but receives no compensation. Author distribution of “benefit” is limited to the inclusion of the publication on their vita—if one can consider this a benefit at all. Thus, the distribution of benefits seems to disfavor authors, especially once universities become more aware of predatory publishing.

The third framework element considers the rights of the stakeholders. In this case, a publication in a predatory journal should not infringe on the rights of authors. But how are the rights and interests of the author protected by predatory journals? We think it unlikely that the editor of a predatory journal would come to the defense of an author who is not hired because his or her vita contained too many predatory journal publications, or denied tenure for much the same reason.

This means that predatory journals do not consider the author’s rights important. In fact, we speculate that a predatory-journal editor or owner does not care whether an author is denied tenure or what the impact of publishing in this type of journal might have in a school’s judicial appeal process. No predatory journal editor would lend support because their organization’s success is not predicated on an author’s credibility, reliability, trustworthiness, or responsibility – in short, the author’s reputation. An author’s prospects for getting a job, pursuing an academic career, and even reputation can be damaged by publishing in journals with questionable quality standards (McQuarie 2015).

Table 2 shows the results of the ethical analysis for authors. Here, we conclude that authors who publish in predatory journals may not get credit for their articles, pay a large amount of money for it, but may not participate in “betterment.” In the long run, therefore, it is questionable whether the fundamental interests of the authors are satisfied.

(Insert Table 2 here)

## **B. Publishers**

Publishers of predatory journals assume a “take it or leave it” position with regard to publishing an author’s paper: no pay–no pub! Traditionally publishers have played the role of validating research through a blind peer review process (Beall 2015b). In contrast, predatory journals focus on their profitability and therefore shy away from the responsibilities of “research validation” (McQuarie2015). Yes, publications results in “betterment” in that there are more financial benefits than costs to the predatory journal.

At face value, this appears “fair” to predatory publisher. After all, the publisher pays the costs of a publication, not the author (Butler 1999). But we question the cost of publication, particularly in today’s web-driven society. The incremental cost of publishing an author’s work is far less when only an online version is available and hardcopies are not available. It is hard to justify an author’s paying several hundred dollars to have a paper appear on a website – but is definitely “fair” to the publisher.

Another fairness question involves intellectual property assignment. Most publishers acquire the intellectual property rights when accepting publications. The purpose of this transfer is to allow the publisher to make money providing access to published articles. In a traditional publication this is deemed as a fair benefit accruing to the publisher. We question whether it is fair on the one hand to charge a fee for publication requiring intellectual property assignment and then to charge those who would like access to the article. This seems unfair to authors but the publishers would consider it fair.

It is questionable whether asking authors to provide an indemnity clause is reasonable when authors have not received financial compensation from the publisher. After all the author is transferring the intellectual property rights free to the publisher. The indemnity clause adds “insult to injury” in that the publisher requires the author to be legally responsible in the event of litigation. The predatory journal might argue that it has the right to demand indemnification, shifting the burden to the creator of the content and views this as just. The non-infringement of rights favors the predatory journal in this case. Table 3 lists the stakeholder analysis with regard to publishers.

(Insert Table 3 here)

### **C. Universities**

Universities are major stakeholders in the predatory-journal controversy. After all, universities make long-term employment commitments to faculty in hopes of achieving a visible and active reputation for research, academic excellence and innovation, teaching, and scholarship (Neumann 2009). Thus, colleges and universities hire faculty expecting them to become successful scholars who enhance the reputation of their colleges and departments (Fabianic 2002). Predatory journals threaten these goals when they publish poor-quality work that circumvents or minimizes the peer review process.

Are predatory journals fair to universities? We suggest that they are not. A university gains no benefit from faculty publications in such journals, and we would argue loses ground if its tenure, promotion, or merit awards depend, even in part, on publications placed in predatory journals. This is neither even-handed, nor fair. Universities invest in faculty; faculty pay publishers for an inferior product, which could negatively impact the reputation of the school.

Predatory journals also negatively impact university library programs. One problem is the growth of such publications, burdening librarians with the task of eliminating them from library catalogs and databases. Another difficulty is the need to advise both students and faculty about the questionable quality of the research they contain.

A school's rights and interests include being able to build a faculty base to support research and teaching. Inferior publications hidden behind look-a-like websites and names, infringe on university rights. Universities depend on faculty to create knowledge and vet that knowledge via a peer review system that accepts good quality articles. Predatory journal systems undercut those interests with a lesser product – a market for lemons (Akerlof 1970). Table 4 lists the stakeholder analysis with regard to publishers.

(Insert Table 4 here)

#### **D. Professional Disciplines and Benefactors**

Professional disciplines such as Accounting, Information Systems, and Healthcare as well as the donors to these disciplines also hold a stake in the ethical outcomes related to authors and predatory journals. Given the time and effort devoted to managing the intellectual contributions of their colleagues, professional disciplines require consideration (Bellas & Toutkoushian, 1999). Each discipline retains its own culture and processes but in general the professions expect an impartial peer review process in order to establish the validity of funded research, the reliability of grant outputs, and the measure of scientific process. Bedeian (2004) suggests that “Whereas there is little question that peer review, as a quality-control mechanism, remains essential for accepting or rejecting claims to knowledge prior to entering a scholarly

discipline's published record, the system has been criticized on conceptual, methodological, and political grounds” (Bedeian, 2004).


These criticisms of the current system do not suggest abandoning the peer review system, but rather call for a continuance of the “author’s voice.” We find that the rewards of the peer review system are many and that voluntarily reviewing the works of others is one way for colleagues to give back to their academic peers. Professional disciplines rely on the peer review process and this is circumvented by predatory journals in which little or no review takes place. One well known example of this was the article published in the International Journal of Advanced Computer Science and Technology – “Get me off Your F\*\*\*ing Mailing List” (our \*) (Beall 2014). Figure 1 shows the acceptance email from the bogus journal.



Figure 1 - Bogus Journal Acceptance (Beall, 2014)

The lack of peer review was obvious in this profane article. Figure 2 shows the bogus journal peer review form.



*International Journal of Advanced Computer Technology (Online)* 

http://www.ijact.org  
 Email: editor@ijact.org, submit\_ijact@yahoo.in

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REVIEW FORM

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Paper ID	IJ0350030
Paper Title	Get me off Your Fucking Mailing List

NOTE: 1. Excellent 2. Very Good 3. Good 4. Fair 5. Very Poor

1. Appropriateness to publish in IJACT

Option:	Excellent
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Figure 2 - Bogus Journal Peer Review (Beall, 2016)

For a mere \$150 this “Excellent” paper could be published, obviously circumventing any professional discipline review. There is no betterment for the discipline in such cases. This is purely for the financial betterment of the predatory publisher.

Consider whether publishing in such journals is fair to professional disciplines. Many hours of volunteer work by colleagues interested in advancing scientific knowledge in authentic publications has established high quality research outlets for faculty (Bedeian, 2004). Fairness is not considered by those participating in predatory publication. Inferior publications hurt the scientific community of each discipline and fail to adequately assess knowledge creation – the foundation of all research.

Similar comments apply to academic benefactors. In evaluating the effects of predatory journals on mainstream academics, consider the recent, annual report of the chair of an accounting department at a well-known Midwestern university. Its university as a whole ranks among the top 100 in the nation, the department’s undergraduate accounting program ranks

among the top 50 such programs, and its graduate program ranks among the top 25 graduate accounting programs (all rankings from US News and World Report). The chair also mentions that his college recently received \$40 million from a benefactor as a naming gift, and that it collected an additional \$10 million from another donor to help the college construct a new building.

This annual report also includes a list of publishing faculty as well as the journals in which they published. In total, the report lists 12 articles—the research productivity of the department—of which we found that 8 (or two thirds) of the reported articles were published in easily-recognized predatory journals. The chair himself published three articles that year, including one in a pay-to-publish journal. We wonder how this department’s rankings might change if the true nature of its scholarship were better understood by *US News and World Report*, or whether the donors mentioned above would be as generous if they knew what the department counts as bonafide research.

The rights and interests of an author’s professional discipline are not considered by predatory journals. The ability to rely on knowledge created by others and to advance one’s work is seriously challenged when predatory journals publish poor quality work. One could argue that authors select relevant articles to use in crafting their work and therefore substandard publications are a matter of choice. We question if the addition of low quality work to a discipline’s body of knowledge adds value. Predatory journal publications add little to a discipline’s body of knowledge and therefore infringe on the discipline’s ability to rely on scholarly articles. Table 5 lists the stakeholder analysis with regard to publishers.

(Insert Table 5 here)

### **E. Accreditation Bodies**

Accrediting bodies are another set of stakeholders in the saga of predatory journals. *Accrediting Board for Engineering and Technology* (Prados, Peterson & Lattuca, 2005), *Joint Commission on Accreditation of Healthcare Organizations* (O’Leary, 2000), *Association to Advance Collegiate Schools of Business* (Thomas & Trapnell, 2007), and many others provide standards for Sciences and Engineering, Healthcare, and Business schools and evaluate whether important benchmarks are met by academia. Accreditation provides value to students, faculty and external stakeholders by showing that a school has programs that meet their standards. One metric is the quality of faculty publications—publications that demonstrate how a school’s faculty test hypotheses and create knowledge and innovation. Schools spend large sums of money to meet accreditation standards. Predatory journals lend nothing to this partnership and, we believe, weaken the value of accrediting bodies. No betterment ascends to accrediting bodies when faculty publish in predatory journals.

To question fairness, we considered whether the “pay-to-publish” model provide equitable treatment to accrediting bodies. Because predatory journals do not interact directly with such bodies, one would think that “fairness” is not an issue. We question this logic when evaluating whether predatory journal articles should be considered in reviewing faculty for tenure and meeting accrediting bodies’ publishing requirements. Faculty, schools and accrediting bodies know their publication standards. Predatory journals provide lesser products. Accrediting bodies’ standards are compromised when the number of publications is met but there is no consideration of quality. Fairness is lacking with regard to Accrediting Bodies.

A school's accrediting body deserves to have its rights and interest included in predatory publishing evaluations. These bodies play a serious role in helping a school to build solid programs that include faculty publishing in quality journals. When this is not the case, the accrediting bodies standards are called into question. Accrediting bodies expect that an internal evaluation of journal article quality will occur at the school level. When predatory journals do not provide adequate peer review these standards mean nothing violating the interest of accrediting bodies. In fact, these types of journals threaten school accreditation, jeopardizing the rights and interests of all involved. Table 6 lists the stakeholder analysis with regard to publishers.

(Insert Table 6 here)

## **5. PROTECTION FROM PREDATORY PUBLISHING**

Predatory journals will only exist as long as there are writers desperate or ignorant enough to publish in them, academic administrators uninformed enough to “count” them, or accreditation bodies naïve enough to accept them. The preceding discussions make clear what makes a journal “predatory.” But what can academicians, review bodies, or individuals do to protect themselves from the deceit of predatory publishing?

The authors suggest that much depends upon the awareness of stakeholders to the long-term negative consequences of predatory publishing. How likely is it, for example, that the electorates of those states funding international institutions of higher learning or the donors of private ones will continue to support them when it becomes known that the research productivity and reputations of its university scholars rest upon fabricated or unvetted work?

Indeed, how much can any academic organization endure after newspapers publish such headlines as “professor tenured on the basis of bogus journal articles.”

We anticipate that departments and colleges that formally adopt resolutions to not count predatory research in tenure, promotion, or merit decisions are likely to encounter some pushback from concerned faculty—especially during periods of transition from systems that endure them to ones that do not. Going through such a process, one associate dean blogged: “You can imagine how disheartening this has been given that my dean and I have been portrayed as “witch hunters” and worse by those who got caught, and that by doing the right thing we have faced both personal and professional bullying from faculty, some of whom I have known for the past 20 years” (O’Donnell, 2015).

At present, the AACSB does not have a formal policy about predatory publishing, but we anticipate this will change in the near future. In the meantime, we recommend the following:

1. Check Beall’s list at: <http://scholarlyoa.com/publishers/>. If a journal appears on this list, do not publish in it.
2. Check Academic OneFile database, which is often considered the “premier source for peer-reviewed, full-text articles for academic libraries.” (Gale, n.d.). This compendium contains a list of over 16,500 peer-reviewed journals published by more than 3,750 publishers in such areas as the “physical and social sciences, technology, medicine, engineering, the arts, technology, literature and many other subjects.”

3. Be sensitive to any online journal that charges large submission or similar fees to publish. Not all such journals are predatory, but large fees are endemic to such journals.

4. Be suspicious of emails that announce calls for papers from unknown journals or their editors.

5. Try to publish in known, highly-ranked publication outlets. Department chairs and senior colleagues should be able to help with this, but research articles that rank journals in most fields are also usually available to help.

6. Adopt departmental policies that prohibit payments or reimbursements of submission or publication fees for all but very limited sets of known, quality journals.

7. Create lists of “acceptable” publication outlets, and disqualify predatory publications from counting towards tenure, promotion, or merit decisions in faculty policies and procedures.

8. When papers are published in new online journals, or in unfamiliar journals outside the reviewer’s immediate discipline, require faculty to provide the detailed comments of the paper’s reviewers, and also the names of the members of the journal’s review board.

## **6. SUMMARY AND CONCLUSIONS**

Predatory journals are publication outlets that masquerade as legitimate scholarly journals, but whose primary purpose is to generate income for their owners. While the exact number of such journals is unknown, current research suggests that (1) there are now almost 4,000 individual titles, and (2) this number is growing (Kolata 2013). A comprehensive study

by Nelson and Huffman (2015) suggests that “business” ranks fourth among the disciplines of pay-to-publish journals, and that science, medicine, and technology outrank it.

Using a stakeholder analysis, we found that there is little to defend about predatory publishing, and much to indict it. Authors, institutions of higher learning, the professions, and even accreditation bodies all suffer long-term costs of predatory publishing, and only the owners of such journals enjoy any short term benefits. On the basis of this analysis, it is difficult to justify any serious scholar from publishing in one of them, and we suggest that there are good reasons for faculty to avoid them entirely.

Predatory journals will only exist as long as there are authors willing to pay for them. We feel that adopting departmental and college-wide policies that disallow reimbursements to payments to pay-to-publish journals, as well as policies that do not count articles appearing in them in tenure, promotion, and merit decisions will encourage scholarly publications in legitimate works and hasten the demise of the predatory ones.

## 7. COMPLIANCE WITH ETHICAL STANDARDS

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

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<b>Table 1. Distribution of Predatory Journals by Discipline*</b>	
<b>Discipline</b>	<b>Percent of total</b>
Science	30.5
Medicine or Health	21.8
Technology	20.1
Business	14.2
Education	4.1
Humanities or Social Science	3.4
Multidisciplinary	2.5
Government or Politics	1.2
Communication	0.9
Philosophy or Religion	0.7
Arts or Entertainment	0.4
Language or Literature	0.3
<b>Total</b>	<b>100</b>

\*Source: Data from Table 5 in Nelson, and Huffman (2015), p. 186.

<b>Table 2: Are The Fundamental Interests of the Author Satisfied?</b>		
Fundamental Interests	Yes	No
1. Betterment: Does publishing the paper result in more benefits than costs to the author?		√
2. Fairness: Is the distribution of benefits and burdens fair to the author?		√
3. Rights: Does publishing the paper sustain the rights of the author by not impinging on them?		√

<b>Table 3: Are The Fundamental Interests of the Publisher Satisfied?</b>		
Fundamental Interests	Yes	No
1. Betterment: Does the publishing the paper result in more benefits than costs to the publisher?	√	
2. Fairness: Is the distribution of benefits and burdens fair to the publisher?	√	
3. Rights: Does the publishing the paper sustain the rights of the publisher by not impinging on them?	√	

<b>Table 4: Are The Fundamental Interests of the University Satisfied?</b>		
Fundamental Interests	Yes	No
1. Betterment: Does the publishing the paper result in more benefits than costs to the university?		√
2. Fairness: Is the distribution of benefits and burdens fair to the university?		√
3. Rights: Does the publishing the paper sustain the rights of the university by not impinging on them?		√

<b>Table 5: Are The Fundamental Interests of the Professional Discipline?</b>		
Fundamental Interests	Yes	No
1. Betterment: Does the publishing the paper result in more benefits than costs to the author's discipline?		√
2. Fairness: Is the distribution of benefits and burdens fair to the author's discipline?		√
3. Rights: Does the publishing the paper sustain the rights of the author's discipline by not impinging on them?		√

<b>Table 6: Are The Fundamental Interests of University Accrediting Bodies?</b>		
Fundamental Interests	Yes	No
1. Betterment: Does the publishing the paper result in more benefits than costs to the university's accrediting bodies?		√
2. Fairness: Is the distribution of benefits and burdens fair to the university's accrediting bodies?		√
3. Rights: Does the publishing the paper sustain the rights of the university's accrediting bodies by not impinging on them?		√

