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ETHICAL AND PREDATORY PUBLISHING: EXPERIENCES AND PERCEPTIONS OF RESEARCHERS

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Abstract: *This study examines the experiences of how a sample of 30 researchers in Europe and Asia express their perceptions, describe their experiences, and navigate the challenges of predatory publishing. Most of the respondents commented on lack of experience of researchers and also the desire for quick publishing as reasons why inexperienced researchers use predatory journals. Generally, respondents held negative views of predatory journals describing them as fake journals. Respondents indicated that difficulties for ethical publishing despite doing rigorous research. We conclude that we should navigate our publishing so that we have the resources and ability to do an honest, rigorous research.*

Key words: *peer-review, predatory journals, academic publishing.*

1. Introduction

The present world of academia is fraught with challenges, and researchers face ethical issues in publishing to share their work with the academic community and gain a sense of personal and professional satisfaction (Lakhotia, 2015; Yeoh et al., 2016). Beall (2010) introduced the term 'predatory publishers' to describe publishers of journals that did not have a mission to promote science or scholarship, but are set up for monetary gain. They promised peer review; but the reality was that there was hardly any high-quality peer review, and it was not surprising the journal articles were a mixture of good, mediocre and poor quality. Predatory journals also spam researchers to submit papers and collect a publishing fee. At times, predatory journals do not mention a processing fee or publication fee, until the research paper is submitted, and the author is obliged to pay a large sum of GBP1000, for no review, and for a fake impact factor (Beall, 2013; Gutierrez et al., 2015).

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Significance of study

This study reports on the experiences of researchers in publishing their research papers, their encounters with these questionable journals, and their perceptions on them, and we will focus on how the respondents manage to navigate through the challenges of predatory publishing. To the best of knowledge, there has not been a research investigating the perceptions of scholars about publishing in predatory journals, and how these researchers navigate the challenges posed by predatory journals.

1.1.History behind the Issue

In a knowledge economy, many countries desire to boost research output. The reason for this is the premise that scientific research will stimulate economic growth. Economists agree that growth is driven by innovation with its new ideas and new technology, but it is not possible to accurately determine a relationship between funding in scientific research that produced innovation. This lack of a relationship has prompted UK and USA to reduce research funding (Macilwain, 2010). At the same time, Asian countries made huge investments in research and development and obtained impressive gains in research output. The Asia-Pacific region more than doubled its global research share from 13% (in 1980s) to 30% (in 2009), while research from USA dropped from 40% to 28%. China led the increase followed by Japan, India, and Singapore. Research4Life that provides access to critical research in health, agriculture and environment, aims to achieve Millennium Development Goals also reported a 6.4 fold increase (or 194%) in research output of articles from developing countries published in peer-reviewed journals before the years 1996 – 2002 and after the period 2002 – 2008 (Royal Society, 2011; Tabachnikoff & Parker, 2009).

A second reason for the increased research output could be that Asian universities were competing to publish journal articles and produce highly cited research to move up in rankings at Shanghai Jiao Tong University. Although US universities still dominated the Shanghai rankings, 34 Chinese universities had moved up to the top 500 in 2010, from 16 universities in 2004. Collaboration between universities and other institutions had resulted in the boost of research productivity. Although research output had increased, the citation rates of articles from Asia-Pacific region are much lower than citation rates of research from USA. The exception is Singapore where scholars possess academic freedom.

There is nothing wrong in boosting research as long as the output is of a good quality, findings are honestly reported and there may lead to innovations that drive the economy. In India, the University Grants Commission (UGC) requires a doctoral research scholar to have a minimum of two articles in a recognized journal. Similarly, the appointment and promotion of lecturers require a certain minimum publishing activity (Beall, 2014). The situation is the same in other countries. In the past decade, more universities have required post-graduate and doctoral students to publish in accredited national journals and international journals as a requirement for graduation. Such requirements have been imposed based on the premise that scholars must possess the skill of scientific writing; and that universities should have a role to enhance a culture of scientific writing (Nurdiani, 2012). Academics in Indonesia agreed that it was good to improve students' writing skills, but doubted if the Education Ministry had done enough for the ruling to be successfully implemented, when academic funding was just not sufficient, and was not likely to increase. In Malaysia, academics have been informed that the present severe

economic crisis and reduced funding for education could not be allowed to reduce their output of research. With the need to publish and the lack of sufficient English language skills, academics in places where English is not the first language (including India, China, Indonesia and Malaysia) may fall easy prey to predatory journals that send unsolicited emails to invite authors to publish in them. The need to publish creates a 'ready market' for predatory publishers. Jalalian and Mahboobi (2014) described the excitement of authors from developing countries whose papers were published in predatory "American Journals", but this excitement dwindled when they realized that their papers were not reviewed. The Gold open access (OA) has been exploited by predatory publishers that publish papers without stringent peer review or no review at all.

1.2. What is known about this Topic before this Study?

While the intention of boosting research publications is good, the mechanism by which it is working has led to publishing for quantity rather than to produce quality research. At the same time, the author-paid open access system that began with good intentions to make science publications free for the reader or consumer of research has been commercialized, and authors seem to have a new role as customers who pay to publish (Beall, 2014). The situation has given rise to predatory journals that do not have a conscience to provide peer-review as they have stated on their websites, predatory journals that accept all papers for a fee regardless of the quality of the research, and journals that publish more than 200 research papers in each monthly issue, and journals that lie about the academic qualifications of their editors (Beall, 2010). Such journals send spam email messages to catch their prey, and inexperienced researchers are very likely to believe that there is quality peer-review as promised (Xia et al., 2015). The websites of such journals boast their spurious impact factor including Global Impact Factor and Citefactor, and these are metrics calculated by alternative impact factor companies (Jalalian, 2015).

However, specialized academic bodies like University Grants Commission (UGC) in India have come up with steps to reduce the flourishing business of predatory publishers (Pathak, 2016). In this country that is home to a significant number of predatory journals (Beall 2012), it was announced that UGC, India has set up a committee to prepare an exhaustive journal list for which academics may gain Academic Performance Indicators (API) points that decide their promotions. Publishing in refereed journals and reputed journals bring points, but points are not awarded for publishing in journals that are not peer-reviewed (Pathak, 2016). This will be viewed as a step forward by academics that do an honest research and are capable of communicating it clearly.

How does author-paid model affect academia? It could be exploited so that funded researchers will be more successful (Beall, 2014). This is the challenge posed by predatory journals that is keenly felt by researchers in poor developing countries. This model reduces the importance of merit, innovation, originality and talent. Publishing becomes less about sharing discoveries, but paying to obtain scientific credibility and the number of publications seems to be more important than the quality, and this is bad for science (Beall, 2013). Without a proper peer review by experts that help to improve our paper, some facilitation from academically qualified editors, there is no "safeguard" set in place against plagiarisms and data manipulations (Beall, 2013; 2014; Jalalian & Mahboobi, 2014).

1.3.How will this Study Advance new Knowledge or Ways of Understanding?

This study highlights the conditions of researchers in developing Asian countries. We make a few comparisons with researchers from countries in Europe. How can researchers from developing countries produce good quality papers that will not be rejected by journals managed by academic societies? Such journals have a high rejection rate, if they possess a non-zero impact factor, and it is difficult to publish in them. This study aims to synthesize the data from respondents, including their experiences and perceptions of journals, and to learn how they successfully and less successfully navigate the challenges posed by the journals of predatory publishers.

2. Brief Literature Review

There have been reports of predatory journals in Europe publishing pseudoscience. These journals had impact factor from Thomson Reuters (TR), at a time when TR included more European regional journals in its index (Djuric, 2014). Djuric described the 'publish or perish' situation in Serbian academia, where the conferring of doctorate, the appointment to faculty and promotions within the academic institution all depended on publishing research in ISI impact factor journals. The condition was just ripe for predatory journals to flourish. Djuric was not the first western researcher to send a purposely flawed research report to such a journal that solely aimed financial gain by quickly accepting and publishing research papers without review.

The same situation is present in universities in developing countries where the same pressure to publish prevails, and this leads to the emergence of predatory journals that observe a ready market, and who may even consider their predatory publishing business set-ups as entrepreneurship to gain some wealth for themselves and the nation (Todd & Javalgi, 2007). For Asian authors, the chance to publish in good journals is rather low. Asian (Indian, Chinese, Malaysian, Indonesian) authors do not always speak or write native English. India and Pakistan are countries where there are many predatory journals boasting high impact factors provided by alternative impact factor companies (Beall, 2012; Gutierrez et al., 2015; Voutier, 2017). Inexperienced researchers are impressed by these bogus metrics. Besides, the time duration for publishing a research paper in such a journal is extremely quick because there is no rigorous review or any review at all. Xia et al. (2015) reported that inexperienced researchers in developing countries publish in such journals that are usually based in the same country. In India, publishing in international peer-reviewed journals are a condition for advance in scholarship, and so the journals add a description like 'Global' or 'International' to the title; and describe their service as including peer review. Unfortunately, it is after sending the paper that the scholars find out the lie concerning peer review.

Xia (2015) stated that "most of the criteria associated with predatory behaviour seem to be dependent on APCs", and went on to explore the relationship between APC (article processing fees) amount, the geographic location and publication frequency. Xia reported that 72% of the journals (or 214 journals) required a publication fee, but it was usually < USD 100, with the highest number of journals charged up to USD 50; and very few exceeded USD 200. It was Indian journals that made up the majority that required APCs, although some of them put their location as US, UK or Canada. Most of the journals published monthly. This was followed by bimonthly and quarterly publications. There

was a large range of articles published (p.a.) from 7 to 2000; the means being 227 articles per journal, and the median was 86 articles. With the 72% figure, Xia (2015) suggested that there is a link between predatory publishing and APCs, although the amount was less than USD 100. But is it worthwhile to pay USD100-200 for no review as was promised? However, authors from developing countries that find it difficult to publish in western journals (Omobowale et al., 2014) still pay an APC to publish in predatory journals, with a low APC rate but whose income comes from the large number of articles published. Xia et al. (2015) found that most authors are from the country where the journals are based. With the current research intensity in Asian countries (Tabachnikoff & Parker, 2009; The Royal Society, 2011), notably China, India, Malaysia, and South Korea, with authors whose first language is not English, the author-paid open access journals with little or no review, and a quick publication time, are likely to be even more popular.

3. Thesis Statement

In this study, we investigated the challenges that were faced by Asian and European researchers in publishing their research papers. We described their experiences with predatory publishers and their perceptions of these predatory publishers. We focused on how their feedback informs us on how we can manage to navigate through the challenges of predatory publishing.

4. Methodology

4.1. Recruiting Collaborators and Experts

The first author sent emails on ResearchGate (RG) to several persons who showed a willingness to collaborate. They were selected based on the interest they had shown, and from their remarks on a thread on predatory publishing on RG (Yeoh, 2015), and on a project on the same subject on RG (Yeoh et al., 2016). Of the five authors, three persons were in Europe, and two were in Asia.

4.2. Designing the Questionnaire

The questionnaire was designed by the first author, with input from three senior researchers who were knowledgeable about predatory publishing or had researched and written on this issue. The first of these was a senior professor in UK, Sheffield University. The second person was a researcher in Iran, and the third was a professor in India. The questionnaire was shared on ResearchGate, RG (Yeoh et al., 2016), and can be downloaded from RG. The first researcher checked the questionnaires and incomplete questionnaires were sent back through the co-authors who helped to collect the data. The questionnaire collected some demographic data and answers to the following questions.

1.What are the consequences for publishing in predatory journals?
2.What can be done about predatory journals so that researchers are not caught unaware, publishing in them, being unaware of their status?
3.Why do researchers submit papers to predatory journals?
4.What do you think of predatory journals?
5.Why do researchers find it hard to do good ethical publishing?
6.Suggest how researchers can be prevented from publishing in predatory journals.

From the data collected on Table 1 of the questionnaire (Yeoh et al., 2016), we made a comparison of the experiences of researchers in Europe and in Asia, in terms of the number of years they have been doing research, and the number of research papers they reported. We asked how many research papers they authored in the last five years, to get some idea of their productivity during that period, since that was the period when predatory open access journals boomed. We also asked concerning the likelihood of receiving spam emails from predatory journals and asked our respondents to make a count for the last week to see if this was significantly different for researchers in Europe and in Asia.

5. Results and Discussions

The number of years of research experience ranged from 2 to 38 years, with a mean of 9.93, SD of 8.99. A Mann Whitney test showed that the Mean Rank and Sum of Ranks of European researchers in the study were 22.20 and 333.00 respectively, while the values for Asian researchers were 8.80 and 132.00. The value of Z was -4.191 (U = 12, W = 132) and the difference in the number of years of research experience was significantly different, with Asian researchers in the study having less years of experience ($p = 0.0005$). We used non-parametric stats because we only had a small sample size. While this is so for the sample, it may not hold for other studies that may be conducted. We recommend larger samples, but we could only manage to get 15 respondents each from Asia and Europe, despite having putting the project on RG for about six months. We believe that researchers are generally very busy, and publishing in predatory journal may not be the experiences they wish to share with colleagues, as was mentioned by some Malaysian authors.

The number of research papers in the last five years reported ranged from 1 to 20, with a mean of 6.27, SD of 4.88. A Mann Whitney test showed that the Mean Rank and Sum of Ranks of European researchers in the study were 19.07 and 286.00 respectively, while the values for Asian researchers were 11.93 and 179.00. The value of Z was -2.234 (U =59, W = 179) and the difference in the number of research papers published was significantly different, with Asian researchers in the study having less papers published in the last five years ($p = 0.025$). The study shows that European respondents were more productive than Asian researchers. This is probably due to a research culture that has been long developed in the West, although the review shows that in recent years, Asian universities are keen to improve their rankings, but they have not yet achieved a comparable productivity as measured by the papers published in the last 5 years.

Ten respondents reported that they checked the journal reputation against a blacklist or white list, while 20 persons did not perform this check before sending their papers to a journal. The number of unsolicited emails from journals claiming to do peer review ranged from 0 to 12 (M = 6.13, SD = 4.05). A Mann Whitney test showed that the Mean Rank and Sum of Ranks of European researchers in the study were 11.17 and 167.50 respectively, while the values for Asian researchers were 19.83 and 297.50. The value of Z was -2.709 (U = 47.5, W = 167.50) and the difference in the number of unsolicited emails from journals was significantly different, with Asian researchers in the study receiving more unsolicited emails in the past week ($p = 0.007$). This is in line with Xia et al. (2015) who found that predatory journals were mainly used by inexperienced researchers of the same developing region where the predatory journals are operating. This study has found that Asian researchers have less experience, so it is not a surprise that Asian researchers receive more spams, and are likely to fall into the trap set by predatory journals (Butler, 2013).

Five persons reported that they had no publications in open access (OA) journals, but 25 have had at least a research published in OA journals. Fourteen reported that they had not published in journals on Beall's list, while 15 had published in such journals, and one person did not know if this had been done. One person had published in a journal blacklisted by the institution, 24 had not done this, and five were not aware if they had done this. Only one respondent had published in a hijacked journal, but did not give details of this experience. The next section will discuss answers to the six questions that have been put forward.

5.1. Question 1

Concerning 'consequences of publishing in predatory journals', 3 persons perceived that there are no consequences, 3 are not certain, and 16 reported there will be consequences (Table 1). Some of the respondents described negative consequences on their promotions, future grant applications, and status in academia. The most prevalent comment, from 6 respondents, was that fake impact factors are not recognised for promotion in academia.

Consequences for publishing in predatory journals Table 1

Descriptors	Frequency
Fake impact factor is not recognized for promotion	6
(We) pay but get almost nothing	3
Copyright manipulation	3
Grave consequences if researcher stays in academia	2
Plagiarism is tolerated by (some) predatory journals	2

5.2. Question 2

Concerning what can be done about predatory journals so that researchers are not caught unaware, twenty one respondents declared that something could be done (Table 2), seven were uncertain, while one person had never thought of this and one person did not respond. The most prevalent comments were that "campaigning for high awareness of predatory journals" and "institutions should list them". Institutions like UGC should list them, and provide blacklists and white lists (Pathak, 2016). We suggest that it is not just Beall alone who should take on this responsibility, and the removal of Beall's website confirms that we are right to exercise caution (Voutier, 2017). Our institutions that would get the credit besides all of us who are researchers and benefit from the work of Beall should be among those raising awareness, so that new researchers do not trust the words "Peer reviewed" on webpages of predatory journals, but have sufficient scientific literacy to recognize predatory publishers (Beall, 2012).

5.3. Question 3

On why researchers send their papers to predatory OA journals, 29 persons responded as in Table 3. Only one person wrote 'Don't know'. Most of the respondents stated comments about lack of experience of researchers and also the desire for quick publishing. These statements clearly indicated that naïve young researchers are at risk (Xia et al., 2015).

Besides that, researchers who are constantly being spammed were also at greater risk (Butler, 2013). Our earlier results have shown that Asian researchers in this study receive a significantly higher number of spams. Besides, predatory journals charge a much lower fee than genuine OA journals that do a good review (Xia, 2015). But we believe that a journal that does no review should not charge anything close to USD100.

Table 2

Suggestions to "What can be done about predatory journals, so that researchers are not caught?"

Description	**Frequency**
Campaign for high awareness, wide dissemination of info about 'predators'	5
Institutions must list them (i.e. predatory journals or 'predators')	5
Predatory journals should be banned	3
Read Beall's list	3
Experienced researchers can act as mentors	2
We must ignore predatory journals	1
(We) must blacklist predators, do not cite from them	1
"Check and balance" on these journals	1

Reasons why researchers submit papers to predatory journals Table 3

Descriptor	Frequency
Naïve, no experience	7
Easy, quick way to publish	7
Response to spam emails	6
Rejected by other journals	5
Unaware of the risks, institutions did not condemn the journals	4

Responses to "What do you think of predatory journals?" Table 4

Descriptor		Frequency
Fraud, fake		7
More business than science, just want to make money		5
Useless, papers are wasted		3
Just got to know them on RG		2
They are a product of implementing economy practices in research		1
All bad things		1
Completely undesirable		1
Very disheartening that my papers were published in them		1
Can we stop them?		1

5.4. Question 4

From the question "What do you think of predatory journals?" the responses were negative thoughts from 22 persons, three respondents stated that "they are just another avenue for our publishing", three persons said that they do not know, and two persons did not respond. Of the 22 negative responses, the frequency breakdown is in Table 4. Most of the respondents commented about "fake/fraud" and "more business than science". Generally the respondents have got wise concerning the fact that journals that do not uphold ethical standard practices of doing peer-review but charging them USD100 are

fakes or frauds, as are the ones who keep quiet about fees, and then asking for a hefty fee of USD 1800, GBP1000 for doing some peer review (Beall, 2012; 2013), when the paper is published and the copyright has been transferred from author to predatory publisher.

It was through ResearchGate and interactions with experience on this platform that researchers, including several authors of this paper got to know about predatory journals. The fact that Beall took off his webpage (https://scholarlyoa.com/) confirms the truth that the job of addressing predatory publishers should not be a one-man task, although we greatly appreciate his commitment and great abilities (Voutier, 2017).

5.5. Question 5

Concerning the question "Why do researchers find it hard to do good ethical publishing?" 23 persons stated problems that can be overcome. Two persons said they did not know, one person said s/he did not understand the question, one person said "no ethical issues for publishing" and two persons did not respond. Of the 23 problems in publishing that could be overcome, the frequency breakdown is in Table 5. The difficulties for ethical publishing were related. One person stated in a positive light, that if researchers respected the rules, they should have no problems. This emphasizes the fact that we should do a competent, rigorous and honest research and reporting, as some other respondents indicated.

Responses to "Why do researchers find it hard to do good ethical publishing?" Table 5

Descriptor	Frequency
Great setback is finding resources especially in developing countries	3
Good journals are not available, but predatory journals are readily available	3
Good journals publish few papers in each issue	3
No research grants, few resources (free papers, free abstracts)	3
Lack of rigor in research and writing	2
Established journals take so much time to review and publish	2
High rejection rates by good journals	2
High fees by some good journals	2
Researchers from developing countries are frustrated by the 'politics' of publishing	2
Publishing has become a senseless control of academics	1
Researchers should have no problems if they respect the rules of scientific research	1

The responses to this question indicated how we should navigate our publishing. The great setback is finding resources, literature for our review, so that we can identify the gaps in knowledge that our work can fill, and how to go about doing our research. These are related to having access to library, and research grants, otherwise we are restricted to only free abstracts and papers that are often found on the websites of author paid predatory journals. An interesting point that this has brought up is that authors in developing countries are frustrated by the 'politics' of publishing where good honest papers can get desk-rejected as not fulfilling the scope of the journal, although it clearly fulfils the scope, as one respondent expressed it. One more answer that this question has yielded is that publishing has become a "senseless control of academics" that was expressed by one other respondent implying that we are judged on our publishing, with little regard to our teaching and developing students and human capital, and hence, gives an unbalanced judgment of academics.

Suggestions on how publishing in predatory journals can be prevented Table 6

Descriptor	Frequency
Reduce the waiting time between submission and publication	3
Papers in predatory journals must not be counted for promotion	3
Researcher must check journal reputation on white list and/or black list	3
Have more genuine reviewed journals for developing countries	3
More genuine journals that ask for a small fee, but do a good review	3
Increase awareness about predators who spam us	3
Must have a professional association to check on journals	2
Academia can use Beall's list	2
Institution should provide knowledge about predatory journals	2
Researchers must be aware that predatory journals do not preserve data	1
Special policy for new/young researcher (Seniors provide mentoring)	1

5.6. Question 6

Concerning suggestions on how researchers can be prevented from publishing in predatory journals, 26 suggestions were given, three persons did not respond, and one person wrote "Don't know" (Table 6). There is some overlap in the responses on increasing awareness of predatory journals, making use of white lists and black lists, including Beall's list, and mentoring of young researchers. Reducing the period of peer-review, or increasing efficiency is stated by three respondents. Having more journals for researchers from developing countries that charge a small fee for genuine review that improves the research paper, will be helpful for all researchers, especially those from developing countries who may have less experience and may need hints on what are required in a scientific paper.

6. Conclusions

This study investigated the challenges that a sample of Asian and European researchers faced in publishing their research papers. We focused on their experiences with predatory publishers and their perceptions of these predatory publishers, and how some of them managed to navigate through the challenges of predatory publishing. Concerning the consequences for publishing in predatory journals, our respondents expressed their concern of copyright manipulations, and most of them indicated the concern that fake impact factors were not considered for promotion in academia. The respondents called for campaigns for wide dissemination to create high awareness, so that researchers do not get caught up by predatory journals. The responsibility was placed on institutions that should blacklist these journals, and on the researchers themselves. Inexperience and a desire for a quick and easy way to publish were identified by most of the respondents as reasons why researchers submitted papers to journals of predatory publishers that most respondents termed a 'fraud, fake'. The respondents provided several reasons on why they found it difficult to practise ethical publishing that are based on personal lack of rigour, finding resources, lack of good journals and their high rejection rates and high fees of genuine open access journals. Their suggestions included reducing the waiting time between submission and publication, and the need for institutions and researchers themselves to be responsible in the use of blacklists and whitelists, having more genuine reviewed journals that charge a smaller fee, especially in developing countries.

This study is particularly relevant to researchers in developing countries. We should investigate the journal in which we want to publish, using white lists and black lists. We agree that publishing fees alone are not the criteria for predatory journals, but the lack of review is a serious indicator. We should also get in touch to enquire about publishing fees or article processing fees (if this is not evident on the website) so that we avoid a situation where a journal keeps quiet on publishing fees until we have sent our papers, and then asking for exorbitant fees. If money is the motivation, predatory journals will continue to do quick publishing and will not think of the legitimacy of what they publish.

In conclusion, we should navigate our publishing so that individually, or as a group, we have the needed resources; the ability to do an honest, rigorous scientific research to get valuable answers to our pressing research questions that fill some gaps in knowledge and worthy to be shared with others. We should communicate our research in ways that can be easily understood and appreciated by the research community that is ultimately the ones who read and review our papers. We readily acknowledge that it would have been far better if a larger sample size was available, from many countries of each geographical region. We hope that future work can contribute to improve on the weaknesses in these areas. We are grateful for the commitment of Beall and others who have studied this issue before us, and consider it a privilege to bring the plight of researchers in developing countries in Asia to the attention of the international community, and postgraduates who would be contributing to the extending of our knowledge.

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