

Screening VABB-SHW version X with Cabells Journal Blacklist and Directory of Open Access Journals

Report to the Authoritative Panel
15 January 2020

Joshua Eykens and Raf Guns

1 Introduction

During the summer of 2018, Flanders (and the rest of the world) experienced considerable media upheavals around the issue of open access (OA) publishers whose standards and ethics can be questioned. The periodicals that fall under this claim have been called *predatory open access* (POA) journals. For the sake of simplicity, we will use the same terminology but note that it has been criticized (Eriksson & Helgesson 2018). Recently, a definition of predatory journals and publishers has been proposed: “Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices.” (Grudniewicz *et al.* 2019, 211).

As a consequence of the appearance of POA journals, *blacklists* of such journals and publishers have been created in the past. Blacklists contain names of publishers and titles of journals that ought to be avoided because of questionable standards. This practice, however, faces a lot of criticism (see for example Bloudoff-Indelicato 2015) and some scholars have argued in favour of *whitelisting* instead. The Directory of Open Access Journals (henceforth DOAJ), for example, aims to cover all OA journals maintaining good scholarly publishing practices.

The key issue in this controversy remains the contrasting view on which conclusions can be drawn when facing low publishing standards and other questionable practices linked to scholarly publishing. To give one example, the use of proper academic English is typically seen as an inevitable part of current internationally oriented scholarly publishing. However, journals (or journal websites) that contain language errors do not necessarily have fraudulent or ‘predatory’ intentions. Moreover, some argue that such (language-based) criteria are biased towards scholarly publishers from developed countries (Berger and Cirasella 2015). In contrast, there are also practices such as claiming to carry out peer review while in reality no peer review takes place. Such practices clearly indicate the ‘predatory’ nature of a journal or publisher. These two examples illustrate that the distinction between low(er)-quality journals and POA journals is not entirely straightforward. Decisions on whether a journal is to be considered POA is often a matter of mutually reinforcing characteristics.

Of interest for this report is to what extent malpractices in scholarly publishing are a matter of concern for Flemish academia. To address the current state of affairs, we study to what extent journal articles and conference proceedings published by social science and humanities (SSH) scholars within Flanders reside in outlets of questionable quality. Since 2013 ECOOM-UAntwerp has organised comparisons of the annual lists of journals submitted to VABB-SHW¹ (Vlaams Academisch Bibliografisch Bestand voor de Sociale en Humane Wetenschappen) with blacklists and whitelists. Specifically, the previous screenings used the following lists (for details see Eykens, Guns, Rahman and Engels, 2019):

- versions IV-V: Beall’s list(s) as blacklist (Rahman, Dexters, & Engels 2014; Rahman & Engels 2015),
- versions VI–VII: Beall’s list(s) as blacklist, DOAJ as whitelist (Rahman, Guns, & Engels 2015; Sile, Guns, & Engels 2017),
- versions VIII-IX: Cabells Journal Blacklist as blacklist, DOAJ as whitelist (Eykens, Guns, & Engels 2018a, 2018b).

This report is based on the set of publications submitted for VABB-SHW version X (publication years 2009–2018). All journals and proceedings with ISSN were extracted and compared with, firstly, Cabells

¹ VABB-SHW is the Flemish Academic Bibliographic database of the Social Sciences and Humanities. For an overview of the design of this database, see Verleysen *et al.* (2014).

Journal Blacklist (consulted between 15 September and 15 October 2019) and, secondly, the list of journals indexed in DOAJ (consulted on the 8th of January 2020).

2 Data sources

2.1 Cabells Journal Blacklist (CJB)

Cabells Journal Blacklist (CJB henceforth) is a commercial service provided by Cabells Scholarly Analytics. The review board working on CJB makes use of an extensive list of pre-specified criteria which are used to identify deceptive, fraudulent, and/or predatory journals. Misra *et al.* (2017) argue that the use of such criteria – by a team of professionals (and an additional ‘violations report’ when the journal is consulted) – allows for ‘lesser bias in selecting the journals’. In 2019, Cabells updated their list of criteria from version 1.0 to 1.1 by adding, removing and changing some criteria. In addition, version 1.1 introduced a distinction between severe, moderate, and minor violations.

The full list of criteria can be found in Appendix A. The 75 criteria range from severe to minor violations and are divided over 8 categories:

- A. **Integrity (13 criteria):** Relates to the journal’s ethics. Does the publisher abide to standard publishing or research ethics?
- B. **Peer review (14 criteria):** Does the journal have adequate procedures for editorial control and peer review?
- C. **Website (7 criteria):** Relates to the information displayed on the website. Is it deceptive, wrong or unclear?
- D. **Publication practices (18 criteria):** Closely relates to research and publishing ethics, but focuses on the actual process of publishing, the techniques to attract authors, and statements about the management of the journal and its content.
- E. **Indexing and metrics (2 criteria):** Is the journal using misleading or wrong metrics?
- F. **Fees (6 criteria):** Does the publisher focus on payments and/or not communicate about them clearly prior to manuscript submission?
- G. **Access and copyright (6 criteria):** Does the journal (or its publisher) communicate clearly on the access granted and the copyright policy that is being carried out?
- H. **Business practices (9 criteria):** Relates to the marketing techniques used by the publisher or the journal’s editorial team.

The criteria grouped under each category could be characterized as indicators ranging from completely fraudulent to vague (severe) or questionable practice (minor). For instance, under integrity we find criterion “insufficient resources are spent on preventing and eliminating author misconduct”, which is quite subjective – what is enough? On the other hand, two other criteria of the integrity category apply to hijacked journals, which are completely fraudulent and point to the deceptive marketing techniques used by some predatory publishers. When making use of the violation reports of CJB for evaluation purposes, it therefore seems advisable to consider the severity and co-occurrences of the criteria.

2.2 The Directory of Open Access Journals (DOAJ)

In 2003 DOAJ was set up ‘to increase the visibility and ease of use of open access scientific and scholarly journals, thereby promoting their increased usage and impact’ (‘About DOAJ’, 2016). This directory aims to provide full coverage of OA scholarly journals that can warrant the quality of the content. For a journal to be included in DOAJ it has to adhere to the ‘Principles of Transparency and Best Practice in Scholarly Publishing’ (2015). This set of 16 principles is the result of a collaboration between DOAJ, the Committee on Publication ethics (COPE), the Open Access Scholarly Publishers Association

(OASPA), and the World Association of Medical Editors (WAME). These principles refer to various aspects of publishing (peer-review process, publishing schedule, etc.). The analysis reported here is based on the DOAJ list of journals from 8 January 2020. At that point DOAJ contained 14,154 journals.

3 Work procedure

Comparing VABB-SHW (version X) with CJB and DOAJ was done by listing all ISSNs of journals (n = 14,397) and proceedings with ISSN (n = 551) submitted for inclusion in VABB-SHW X. These are the outlets in which scholars affiliated to an SSH unit at a Flemish university have published during the time period 2009–2018. Within the journal list, 11,180 journals have been previously identified as peer-reviewed, of which 2,943 are selected by the GP and 8,237 are indexed in the Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI), and/or Arts & Humanities Citation Index (AHCI) of Web of Science (WoS). 2,672 journals have been classified by the GP as non-peer-reviewed. Finally, 545 journals appear in the list for the first time, and therefore their peer review status is yet to be decided.

The comparison of the lists was done by cross-checking the set of ISSNs with CJB. The second step consisted of checking the ISSNs that appeared in both the VABB-SHW X data and CJB with the DOAJ. Only those journals whose ISSN matched with the ISSN of a journal on CJB were retained as potentially POA. As with the screening for VABB-SHW IX (Eykens, Guns & Engels 2018), we have checked both journals indexed in WoS and journals not indexed in WoS.² New for this report is that we also check conference proceedings with an ISSN.

For the cases in which a match was found, we consulted the violation report provided by Cabells and listed each journal's violations. Appendix B contains an overview of the journals that were found on the CJB.

4 Findings

The results of our analysis are presented in three parts. First, we analyse the number of journals/proceedings (and their publishers) that are found in the CJB (4.1). In the second part, DOAJ is added to this comparison (4.2). Third, we present a comparison of our findings to last year's results (4.3).

4.1 Comparison of VABB-SHW with Cabells Journal Blacklist

The comparison of publications submitted for VABB-SHW X with CJB yields a set of 97 journals (Table 1). The majority of these are indexed in WoS: 11 in the AHCI, SSCI and/or SCIE, and 4 in the Emerging Sources Citation Index (ESCI). 71 journals are considered non peer-reviewed, 4 non-WoS journals are classified as peer-reviewed, and the remaining 8 have not yet been classified by the GP³. The list of the 97 journals can be found in appendix B. The list includes the following characteristics: title, VABB-SHW status, ISSNs, indexing status, the number of publications in VABB-SHW, the name of its publisher, and whether or not a severe violation is being reported for the journal.

The majority of journals (75 out of 97) has a severe violation listed. For the remaining 22 journals – of which 19 are published by either the Canadian Center of Science and Education (cf. appendix B, n° 12-23, p. 15-16) or Sciedu Press (cf. *ibid*, n° 78-84, p. 19)⁴, only moderate and/or minor violations are

² Publications in journals indexed in SCIE, SSCI, and/or AHCI of WoS are counted in the WoS publications parameter of the BOF-key.

³ Two of these are conference proceedings collections with an ISSN.

⁴ Cf. appendix B, numbers 28, 48 and 85 for the remaining three journals with no severe violations listed.

reported. We advise the GP to examine these 22 journals in more detail before making a final decision on their classification in VABB-SHW.

Table 1 Number of VABB-SHW X journals identified in Cabells Journal Blacklist

VABB-SHW Status	All journals	Match with CJB 2019	Match with CJB 2019 and in AHCI, SSCI and/or SCIE	Match with CJB 2019 and in ESCI
Peer-reviewed	11,180	18	11	4
Non peer-reviewed	2,672	71	0	0
Peer-review status undecided	545	8	0	0
Total	14,397	97	11	4

The 97 journals were published by 32 different publishers, with 12 accounting for multiple (up to 21) journals (Table 2). It should be noted that journals published by the same publisher very often exhibit the same violations (cf. appendix B). One journal, the *International Journal of Applied Economic Studies*, could not be linked to a publisher (cf. appendix B, journal n° 47, p. 17).

Table 2 List of publishers with number of journals and publications in VABB-SHW X

Publisher	Publications	Journals	Previous report
OMICS International	38	21	YES
Canadian Center of Science and Education	19	12	YES
Academic Journals	17	9	YES
Sciedu Press	13	7	YES
David Publishing Company	8	6	YES
World Scientific and Engineering Academy and Society	9	5	YES
Macrothink Institute	9	4	YES
Center for Promoting Ideas	6	3	YES
World Research Journals	7	3	YES
American Research Institute for Policy Development	5	2	YES
Premier Publishers	3	2	NO
Serials Publications	4	2	YES
Asian Economic and Social Society (AESS)	1	1	YES
Asian Online Journals	1	1	YES
Baishideng Publishing Group	2	1	NO
Better Advances Press	1	1	YES
Betty Jones & Sisters Publishing	1	1	YES
CIRWORLD	1	1	YES
European Center of Sustainable Development	1	1	YES
Fundamental Journals	1	1	YES
Global Advanced Research Journals	1	1	YES
Global Journals, Inc.	1	1	YES
Humanities, Management	1	1	YES
International Academy Publishing	2	1	YES
National Academy of Management	1	1	YES

OAE Publishing, Inc.	1	1	YES
ECOZONE Publishing House	3	1	YES
Redfame Publishing	1	1	YES
Scholarly Journals and Academic Conferences	1	1	YES
Scholink	2	1	NO
Science and Education Publishing (SciEP)	1	1	YES
Scientia Socialis	1	1	YES
None	1	1	NO
Total	164	97	

When comparing the list of publishers with the results presented in the previous report, we can observe that there are three ‘newcomers’. The top five, which represent the largest part of the POA journals (55), consists of the same publishers as the one presented in the previous report.

4.2 Comparison of VABB-SHW with Cabells Journal Blacklist and DOAJ

Of the 97 journals identified as potentially POA, no ISSN was also found in DOAJ (8th of January 2020). Last year, the periodical *Problems of Psychology in the 21st Century* was found. The journal also appeared during this screening round, but it has been removed from the DOAJ for “[s]uspected editorial misconduct by the publisher”.

4.3 Number of publications in POA journals per year

We found 97 potentially predatory journals in the data submitted for VABB-SHW X, which account for 164 publications (Table 3) or 0.2% of the number of journal publications submitted to this version of VABB-SHW. 18 out of 97 identified journals are considered as peer-reviewed in VABB-SHW.

In contrast, for VABB-SHW IX 89 journals were flagged as potentially predatory, with 145 publications in them respectively (Eykens *et al.* 2018b). Table 4 presents an overview of the number of journals identified during each screening and the sources that were used over the years. The increase of 8 journals in VABB-SHW X is mainly due to 8 journals that were not present in the previous VABB-SHW journal list. The latter have not yet been evaluated by the GP. Thus, 88 out of 89 journals which were identified during the screening of VABB-SHW IX occurred during this screening round as well.

Table 3 Number of publications in VABB-SHW X that have appeared in a journal indexed in CJB across years

Year	Peer-reviewed	Non peer-reviewed	Undecided	Total
2008	6	6	0	12
2009	3	10	0	13
2010	3	10	0	13
2011	11	15	0	26
2012	10	8	1	19
2013	3	12	0	15
2014	2	18	1	21
2015	5	12	1	18

2016	2	10	1	13
2017	2	4	8	14

Table 4 Overview of screenings and results

Publication time span	VABB-SHW edition	POA journals	Articles	Blacklist used	Other sources used
2003-2012	IV	62	59	Beall's list	WoS
2004-2013	V	109	138	Beall's list	WoS
2005-2014	VI	128	315	Beall's list	DOAJ (& WoS)
2006-2015	VII	185	501	Beall's list	DOAJ (& WoS)
2007-2016	VIII	65	91	Cabell's Journal Blacklist	DOAJ (& WoS)
2008-2017	IX	89	145	Cabell's Journal Blacklist	DOAJ (& WoS)
2009-2018	X	97	164	Cabell's Journal Blacklist	DOAJ (& WoS)

5 Limitations

With regard to the data and our analysis, two limitations should be highlighted. As stated in previous reports, journal lists are not static and often evolve rather quickly (Eykens *et al.* 2019). Journals may cease to exist, they can be withdrawn from (or added to) the DOAJ, the Web of Science, CJB, and so on. This requires the reader to pay close attention when interpreting the results. The comparison presented in this report only applies to the timeframe of VABB-SHW X (period from 2009 to 2018).

The second limitation relates to the data gathered from CJB. CJB provides detailed violation reports, which can be helpful for decision making. The threshold applied by the in-house experts, however, is not clear. Some of the violations are less severe than others, or allow for the reader's own (subjective) interpretation.

6 Conclusion

Our analysis shows that SSH scholars in Flanders continue to publish in journals that are listed as predatory open access. The total number has increased compared to the previous edition. While there has been a steady rise over the past decade (cf. Sīle *et al.*, 2017; Eykens *et al.*, 2019), the comparison with CJB marks a steep decline from 185 journals in 2016 to 65 journals in 2017, and again an increase to 89 and 97 journals in 2018 and 2019 respectively. Most likely, these more recent observations are mainly due to the change of data source and updates of the service, rather than an actual change in publication practices. Indeed, recently published results (Sorokowski *et al.* 2017) suggest that POA journals are far from gone from the academic landscape.

References

Beall, Jeffrey. 2015. 'Criteria for Determining Predatory Open - Access Publishers'. <https://scholarlyoa.files.wordpress.com/2015/01/criteria-2015.pdf>

- Beall, Jeffrey. 2017. 'What I learned from predatory publishers'. *Biochemica Media* 27 (2): 273 – 279. <https://doi.org/10.11613/BM.2017.02>
- Berger, Monica & Cirasella, Jill. 2015. 'Beyond Beall's list: better understanding predatory publishers.' *College and research libraries news* 76 (3): 132-135. <https://doi.org/10.5860/crln.76.3.9277>
- Bloudoff-Indelicato, Mollie. 2015. 'Backlash after Frontiers journals added to list of questionable publishers'. *Nature* 526 (7575): 613. <https://doi.org/10.1038/526613f>
- Directory of Open Access Journals. 'About DOAJ'. <https://doaj.org/about> (accessed November 11, 2018)
- Eriksson, Stefan & Gert Helgesson. 2018. 'Time to stop talking about 'predatory journals''. *Learned Publishing*, forthcoming. <https://doi.org/10.1002/leap.1135>
- Eykens, Joshua, Raf Guns, & Tim C. E. Engels. 2018. 'Comparing VABB-SHW (version VIII) with Cabells Journal Blacklist and Directory of open access Journals'. <https://hdl.handle.net/10067/1481030151162165141>
- Eykens, Joshua, Raf Guns, & Tim C. E. Engels. 2018. 'Comparison of VABB-SHW version IX with Cabells Journal Blacklist and Directory of open access Journals'. <https://hdl.handle.net/10067/1571090151162165141>
- Eykens, Joshua, Raf Guns, A.I.M. Jakaria Rahman, & Tim C. E. Engels. 2019. 'Identifying publications in questionable journals in the context of performance based research funding'. *PLoS ONE* 14 (11): 1-19. e0224541. <https://doi.org/10.1371/journal.pone.0224541>
- Grudniewicz, Agnes, David Moher, Kelly D. Cobey, Gregory L. Bryson, Samantha Cukier, Kristiann Allen, Clare Ardern et al. 2019. 'Predatory journals: no definition, no defence'. *Nature* 576: 210-212. <https://doi.org/10.1038/d41586-019-03759-y>
- Lincoln, S. Yvonna. 2012. 'The Political Economy of Publication: Marketing, Commodification, and Qualitative Scholarly Work'. *Qualitative Health Research* 22 (11): 1451 – 1459. <https://doi.org/10.1177/1049732312457713>
- Mimouni, Michael, Eyal Braun, Francis B. Mimouni, Daniel Mimouni, & Eytan Z. Blumenthal. 2017. 'Beall's List Removed: What stands between us and open access predators?'. *The American Journal of Medicine* 130 (8): 371-372. <https://doi.org/10.1016/j.amjmed.2017.03.040>
- Misra, D. Prasanna, Ravindran, Vinod Ravindran, Anupam Wakhlu, Aman Sharma, Vikas Agarwal, & Vir Singh Negi. 2017. 'Publishing in black and white: the relevance of listing of scientific journals'. *Rheumatology international* 37 (11): 1773-1778. <https://doi.org/10.1007/s00296-017-3880-5>
- Directory of Open Access Journals. 'Principles of Transparency and Best Practice in Scholarly Publishing'. <https://doaj.org/bestpractice> (accessed November 11, 2018)
- Rahman, A. I. M. Jakaria, Nele Dexters, & Tim C. E. Engels. 2014. 'Predatory open access Journals in a Performance-Based Funding Model: Common Journals in Bealls List and in the VABB-SHW'. <http://hdl.handle.net/10067/1139870151162165141>
- Rahman, A. I. M. Jakaria, & Tim C. E. Engels. 2015a. 'Predatory open access Journals in a Performance-Based Funding Model: Common Journals in Bealls List and in Version V of the VABB-SHW'. <http://hdl.handle.net/10067/1233590151162165141>

Rahman, A. I. M. Jakaria, Raf Guns, & Tim C. E. Engels. 2015b. 'Predatory open access Journals in a Performance-Based Funding Model: A Comparison of Journals in Version VI of the VABB-SHW with Beall's List and DOAJ'. <http://hdl.handle.net/10067/1300570151162165141>

Sīle, Linda, Raf Guns, & Tim C. E. Engels. 2017. 'Comparing VABB-SHW (version VII) with Beall's lists and DOAJ'. <http://hdl.handle.net/10067/1396540151162165141>

Sorokowski, Piotr, Emanuel Kulczycki, Agnieszka Sorokowska, & Katarzyna Pisanski. 2017. 'Predatory journals recruit fake editor'. *Nature News*, 543 (7646), 481. <https://doi.org/10.1038/543481a>

Verleysen, Frederik, Pol Ghesquière, & Tim C. E. Engels. 2014. 'The objectives, design and selection process of the Flemish Academic Bibliographic Database for Social Sciences and Humanities (VABB-SHW)' in *Bibliometrics: Use and Abuse in the Review of Research Performance*, edited by Wim Blockmans, Lars Engwall, and Denis Weaire, 117-127, Portland Press.

Appendix A. Full list of blacklist criteria

This list of blacklist criteria is taken from <https://www2.cabells.com/blacklist-criteria>. Some violations are considered more severe than others (moderate to minor).

A. Integrity	SEVERE <ol style="list-style-type: none">1. The same article appears in more than one journal.2. Hijacked journal (defined as a fraudulent website created to look like a legitimate academic journal for the purpose of offering academics the opportunity to rapidly publish their research for a fee).3. Information received from the journal does not match the journal's website.4. The journal or publisher claims to be a non-profit when it is actually a for-profit company.5. The owner/Editor of the journal or publisher falsely claims academic positions or qualifications.6. The journal is associated with a conference that has been identified as predatory.7. The journal gives a fake ISSN. MODERATE <ol style="list-style-type: none">8. The journal/publisher hides or obscures relationships with for-profit partner companies that could result in corporate manipulation of science.9. The name of the journal references a country or demographic that does not relate to the content or origin of the journal.10. The journal uses language that suggests that it is industry leading, but is in fact a new journal.11. The title of the journal is copied or so similar to that of a legitimate journal that it could cause confusion between the two. MINOR <ol style="list-style-type: none">12. Insufficient resources are spent on preventing and eliminating author misconduct (that may result in repeated cases of plagiarism, self-plagiarism, image manipulation, etc.).13. The journal/publisher hides or obscures information regarding associated publishing imprints or parent companies.
---------------------	--

<p>B. Peer Review</p>	<p>SEVERE</p> <ol style="list-style-type: none"> 1. No editor or editorial board listed on the journal's website at all. 2. Editors do not actually exist or are deceased. 3. The journal includes scholars on an editorial board without their knowledge or permission. 4. Evident data that little to no peer review is being done and the journal claims to be “peer reviewed”. <p>MODERATE</p> <ol style="list-style-type: none"> 5. The founder of the publishing company is the editor of all of the journals published by said company. 6. Evident data showing that the editor/review board members do not possess academic expertise to reasonably qualify them to be publication gatekeepers in the journal's field. 7. Have board members who are prominent researchers but exempt them from any contribution to the journal except the use of their names and/or photographs. 8. Gender bias in the editorial board. 9. Little geographical diversity of board members and claim to be international. 10. Inadequate peer review (i.e., a single reader reviews submissions; peer reviewers read papers outside their field of study; etc.). 11. The journal's website does not have a clearly stated peer review policy. 12. The journal has a large editorial board but very few articles are published per year. 13. No affiliations are given for editorial board members and/or editors. 14. Editorial board members (appointed over 2 years ago) have not heard from the journal at all since being appointed to the board.
<p>C. Website</p>	<p>MINOR</p> <ol style="list-style-type: none"> 1. The website does not identify a physical address for the publisher or gives a fake address. 2. The journal or publisher uses a virtual office or other proxy business as its physical address. 3. The website does not identify a physical editorial address for the journal. 4. Dead links. 5. Poor grammar and/or spelling. 6. No way to contact the journal/only has web-form.

7. The journal's website attempts to download a virus or malware.

D. Publication practices

SEVERE

1. The journal publishes papers that are not academic at all, e.g. essays by laypeople or obvious pseudo-science.
2. No articles are published or the archives are missing issues and/or articles.
3. Falsely claims indexing in well-known databases (especially SCOPUS, DOAJ, JCR, and Cabell's).
4. Falsely claims universities or other organizations as partners or sponsors.
5. Machine-generated or other "sting" abstracts or papers are accepted.

MODERATE

6. No copyediting.
7. The publisher displays prominent statements that promise rapid publication and/or unusually quick peer review (less than 4 weeks).
8. Little geographical diversity of authors and the journal claims to be International.
9. Similarly titled articles published by same author in more than one journal.
10. The Editor publishes research in his own journal.
11. Authors are published several times in the same journal and/or issue.
12. The journal purposefully publishes controversial articles in the interest of boosting citation count.
13. The journal publishes papers presented at conferences without additional peer review.
14. The name of the publisher suggests that it is a society, academy, etc. when it is only a publisher and offers no real benefits to members.
15. The name of the publisher suggests that it is a society, academy, etc. when it is only a solitary proprietary operation and does not meet the definition of the term used or implied non-profit mission.
16. The number of articles has increased by 75% or more in the last year.
17. The number of articles has increased by 50-74% in the last year.

	<p style="text-align: center;">MINOR</p> <p>18. The number of articles has increased by 25-49% in the last year.</p>
E. Indexing & Metrics	<p style="text-align: center;">SEVERE</p> <p>1. The journal uses misleading metrics (i.e., metrics with the words “impact factor” that are not the Thomson Reuters Impact Factor).</p> <p style="text-align: center;">MINOR</p> <p>2. The publisher or its journals are not listed in standard periodical directories or are not widely catalogued in library databases.</p>
F. Fees	<p style="text-align: center;">SEVERE</p> <p>1. The journal offers options for researchers to prepay APCs for future articles.</p> <p>2. The journal states there is an APC or other fee but does not give information on the amount or gives conflicting information.</p> <p>3. The journal or publisher offers membership to receive discounts on APCs but does not give information on how to become a member and/or on the membership fees.</p> <p>4. The author must pay APC or publication fee before submitting the article (specifically calls the fee a publication fee, not a submission fee).</p> <p>5. The journal does not indicate that there are any fees associated with publication, review, submission, etc. but the author is charged a fee after submitting a manuscript.</p> <p style="text-align: center;">MODERATE</p> <p>6. The publisher or journal's website seems too focused on the payment of fees.</p>
G. Access & Copyright	<p style="text-align: center;">MODERATE</p> <p>1. States the journal is completely open access but not all articles are openly available.</p> <p>2. No way to access articles (no information on open access or how to subscribe).</p> <p>3. The journal is open access but no information is given about how the journal is supported financially (i.e. author fees, advertising, sponsorship, etc.)</p>

	<ol style="list-style-type: none"> 4. No policies for digital preservation. 5. The journal has a poorly written copyright policy and/or transfer form that does not actually transfer copyright. 6. The journal publishes not in accordance with their copyright or does not operate under a copyright license.
<p>H. Business Practices</p>	<p>MODERATE</p> <ol style="list-style-type: none"> 1. Emailed solicitations for manuscripts from the journals are received by researchers who are clearly not in the field the journal covers. 2. Emailed invitations for editorial board members or reviewers from the journal are received by researchers who are clearly not in the field the journal covers. 3. Multiple emails received from a journal in a short amount of time. 4. Emails received from a journal do not include the option to unsubscribe to future emails. 5. The journal has been asked to quit sending emails and has not stopped. 6. The journal copy proofs and locks PDFs. 7. The journal or publisher gives a business address in a Western country but the majority of authors are based in developing countries. <p>MINOR</p> <ol style="list-style-type: none"> 8. No subscribers / nobody uses the journal. 9. The journal's website does not allow web crawlers.

Appendix B. List of journals found on Cabells Journal Blacklist. A separate excel file complements this table with more details on which violations reported etc.

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
1	African Journal of Business Management	1993-8233	n.a.	Academic Journals	1	YES	2	YES
2	African Journal of Agricultural Research	1991-637X	n.a.	Academic Journals	1	YES	8	YES
3	Scientific Research and Essays	1992-2248	n.a.	Academic Journals	1	YES	1	YES
4	International Journal of Medicine and Medical Sciences	2006-9723	n.a.	Academic Journals	0	YES	1	NO
5	Journal of Development and Agricultural Economics	2006-9774	n.a.	Academic Journals	0	YES	1	NO
6	International Journal of Sociology and Anthropology	2006-988X	n.a.	Academic Journals	0	YES	1	NO
7	Journal of Agricultural Extension and Rural Development	2141-2170	n.a.	Academic Journals	0	YES	1	NO
8	Journal of Public Health and Epidemiology	2141-2316	n.a.	Academic Journals	0	YES	1	NO
9	Journal of Medical Laboratory and Diagnosis	2141-2618	n.a.	Academic Journals	0	YES	1	NO
10	Journal of Power, Politics & Governance	2372-4919	2372-4927	American Research Institute for Policy Development	0	YES	4	NO
11	International Journal of Music and Performing Arts	2374-2690	2374-2704	American Research Institute for Policy Development	0	YES	1	NO
12	Journal of Politics and Law	1913-9047	1913-9055	Canadian Center of Science and Education	1, vanaf 2015	NO	2	YES, ESCI
13	Journal of Sustainable Development	1913-9063	1913-9071	Canadian Center of Science and Education	0	NO	2	NO
14	International Journal of Economics and Finance	1916-971X	1916-9728	Canadian Center of Science and Education	0	NO	1	NO
15	Global Journal of Health Science	1916-9736	1916-9744	Canadian Center of Science and Education	0	NO	2	NO
16	Journal of Agricultural Science	1916-9752	n.a.	Canadian Center of Science and Education	0	NO	1	NO
17	International Journal of Psychological Studies	1918-7211	1918-722X	Canadian Center of Science and Education	0	NO	2	NO

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
18	Higher Education Studies	1925-4741	n.a.	Canadian Center of Science and Education	0	NO	3	NO
19	Environment and Natural Resources Research	1927-0488	1927-0496	Canadian Center of Science and Education	0	NO	1	NO
20	Sustainable Agriculture Research	1927-050X	n.a.	Canadian Center of Science and Education	0	NO	1	NO
21	Journal of Educational and Developmental Psychology	1927-0526	n.a.	Canadian Center of Science and Education	n.a.	NO	1	NO
22	Journal of Food Research	1927-0887	1927-0895	Canadian Center of Science and Education	0	NO	2	NO
23	International Journal of Statistics and Probability	1927-7032	1927-7040	Canadian Center of Science and Education	0	NO	1	NO
24	Asian Economic and Financial Review	2305-2147	2222-6737	Asian Economic and Social Society	0	YES	1	NO
25	Asian Journal of Humanities & Social Studies	2321-2799	n.a.	Asian Online Journals	0	YES	1	NO
26	World Journal of Gastroenterology	1007-9327	n.a.	Baishideng Publishing Group	1	YES	2	YES
27	Review of Economics & Finance	1923-7529	1923-8401	Better Advances Press	0	YES	1	NO
28	Journals of Psychological Sciences	2379-0121	n.a.	Betty Jones & Sisters Publishing	0	NO	1	NO
29	US-China Foreign Language	1539-8080	1935-9667	David Publishing Company	0	YES	1	NO
30	US-China Law Review	1548-6605	1930-2061	David Publishing Company	1, since 2015	YES	2	NO
31	Journal of Life Sciences	1934-7391	1934-7405	David Publishing Company	0	YES	1	NO
32	Sociology Study	2159-5526	2159-5534	David Publishing Company	0	YES	1	NO
33	Psychology Research	2159-5542	2159-5550	David Publishing Company	0	YES	1	NO
34	Journalism and Mass Communication	2160-6579	n.a.	David Publishing Company	0	YES	2	NO
35	European Journal of Science and Theology	1841-0464	n.a.	Ecozone Publishing House	1	YES	3	YES, ESCI
36	European Journal of Sustainable Development	2239-5938	2239-6101	European Center of Sustainable Development	1	YES	1	YES, ESCI

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
37	International Geoinformatics Research and Development Journal (IGRDJ)	0976-1241	n.a.	Fundamental Journals	0	YES	1	NO
38	Global Advanced Research Journal of Medicine and Medical Sciences (GARJMMS)	2315-5159	n.a.	Global Advanced Research Journals	0	YES	1	NO
39	Communications of the IBIMA	1943-7765	n.a.	Humanities Management	0	YES	1	NO
40	Journal of Software	1796-217X	n.a.	International Academy Publishing	0	YES	2	NO
41	Global Journal of Human-Social Science	0975-587X	2249-460X	Journals inc.	0	YES	1	NO
42	Journal of Public Administration and Governance	2161-7104	n.a.	Macrothink Institute	0	YES	4	NO
43	Environmental Management and Sustainable Development	2164-7682	n.a.	Macrothink Institute	0	YES	2	NO
44	Journal of Education and Training	2330-9709	n.a.	Macrothink Institute	0	YES	2	NO
45	Journal of Asian Development	2377-9594	n.a.	Macrothink Institute	0	YES	1	NO
46	Actual Problems of Economics	1993-6788	n.a.	National Academy of Management	1	YES	1	NO
47	International Journal of Applied Economic Studies	2345-5721	n.a.	n.a. – no publisher	n.a.	YES	1	NO
48	Neuroimmunology and Neuroinflammation	2347-8659	n.a.	OAE Publishing inc.	0	NO	1	NO
49	Quality in Primary Care	1479-1072	n.a.	OMICS International	0	YES	7	NO
50	Journal of Sports Medicine & Doping Studies	2161-0673	n.a.	OMICS International	n.a.	YES	1	NO
51	Journal of Diabetes & Metabolism	2155-6156	n.a.	OMICS International	1, since 2015	YES	1	YES, ESCI
52	Clinics in Mother and Child Health	2090-7214	n.a.	OMICS International	0	YES	1	NO
53	Journal of AIDS & Clinical Research	2155-6113	n.a.	OMICS International	0	YES	1	NO
54	Journal of Anesthesia & Clinical Research	2155-6148	n.a.	OMICS International	0	YES	1	NO
55	Journal of Biometrics & Biostatistics Open Access	2155-6180	n.a.	OMICS International	0	YES	3	NO
56	Journal of Blood Disorders & Transfusion	2155-9864	n.a.	OMICS International	0	YES	1	NO

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
57	Journal of Food Processing & Technology	2157-7110	n.a.	OMICS International	0	YES	1	NO
58	Anatomy & Physiology: Current Research	2161-0940	n.a.	OMICS International	0	YES	1	NO
59	Autism-Open Access	2165-7890	n.a.	OMICS International	n.a.	YES	1	NO
60	Journal of Obesity & Weight Loss Therapy	2165-7904	n.a.	OMICS International	0	YES	1	NO
61	Journal of Mass Communication & Journalism Open Access	2165-7912	n.a.	OMICS International	0	YES	1	NO
62	Journal of Clinical Trials	2167-0870	n.a.	OMICS International	0	YES	1	NO
63	Journal of Gerontology & Geriatric Research	2167-7182	n.a.	OMICS International	0	YES	1	NO
64	International Journal of Physical Medicine & Rehabilitation	2329-9096	n.a.	OMICS International	0	YES	1	NO
65	Journal of Political Sciences & Public Affairs Open Access	2332-0761	n.a.	OMICS International	0	YES	1	NO
66	Neuropsychiatry	1758-2008	n.a.	OMICS International	1	YES	6	YES
67	Clinical Investigation	2041-6792	n.a.	OMICS International	1, since 2013	YES	2	NO
68	Journal of Global Research in Computer Science	2229-371X	n.a.	OMICS International	0	YES	1	NO
69	Journal of Fashion Technology & Textile Engineering Hybrid Open Access	2329-9568	n.a.	OMICS International	n.a.	YES	4	NO
70	Journal of Oil, Gas and Coal Engineering (JOGCE)	0767-0974	n.a.	Premier Publishers	1	YES	1	NO
71	Journal of Environment and Waste Management (JEWEM)	1936-8798	n.a.	Premier Publishers	1	YES	2	NO
72	International Journal of Business and Social Science	2219-1933	2219-6021	Center for Promoting Ideas	0	YES	1	NO
73	International Journal of Humanities and Social Science	2220-8488	n.a.	Center for Promoting Ideas	0	YES	4	NO
74	Journal of Education and Social Policy	2375-0782	n.a.	Center for Promoting Ideas	0	YES	1	NO
75	Applied Economics and Finance	2332-7294	2332-7308	Redfame Publishing	0	YES	1	NO

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
76	The Business Review, Cambridge	1553-5827	n.a.	Scholarly Journals and Academic Conferences	0	YES	1	NO
77	Advances in Politics and Economics	2576-1382	n.a.	Scholink	n.a.	YES	2	NO
78	International Journal of Financial Research	1923-4023	n.a.	Sciedu Press	0	NO	1	NO
79	World Journal of Education	1925-0746	1925-0754	Sciedu Press	0	NO	1	NO
80	Journal of Nursing Education and Practice	1925-4040	1925-4059	Sciedu Press	1, since 2016	NO	4	NO
81	International Journal of Higher Education	1927-6044	n.a.	Sciedu Press	1, since 2016	NO	3	NO
82	Journal of Hospital Administration	1927-6990	n.a.	Sciedu Press	0	NO	2	NO
83	Journal of Business Administration Research	1927-9507	1927-9515	Sciedu Press	0	NO	1	NO
84	International Journal of Healthcare	2377-7338	2377-7346	Sciedu Press	0	NO	1	NO
85	American Journal of Educational Research	2327-6126	n.a.	Science and Education Publishing	0	NO	1	NO
86	Problems of Psychology in the 21st Century	2029-8587	2538-7197	Scientia Socialis	0	YES	1	NO
87	International Journal of Economic Issues	0974-603X	n.a.	Serials Publications	0	YES	3	NO
88	International Journal of Technology Modeling and Management	0975-7171	n.a.	Serials Publications	0	YES	1	NO
89	Research Journal of Biotechnology	0973-6263	2278-4535	World Research Journals	n.a.	YES	1	NO
90	Research Journal of Chemistry and Environment	0972-0626	2278-4527	World Research Journals	1	YES	1	YES
91	Disaster Advances	0974-262X	n.a.	World Research Journals	1	YES	5	YES
92	WSEAS Transactions on Biology and Biomedicine	1109-9518	n.a.	World Scientific and Engineering Academy and Society	0	YES	1	NO
93	WSEAS Transactions on Acoustics and Music	1109-9577	n.a.	World Scientific and Engineering Academy and Society	0	YES	2	NO

#	Name	ISSN	EISSN	Publisher normalized	VABB-SHW status	Severe violation(s)	N publications	In WoS
94	WSEAS Transactions on Advances in Engineering Education	1790-1979	2224-3410	World Scientific and Engineering Academy and Society	n.a.	YES	1	NO
95	WSEAS Transactions on Environment and Development	1790-5079	n.a.	World Scientific and Engineering Academy and Society	0	YES	3	NO
96	WSEAS Transactions on Applied and Theoretical Mechanics	1991-8747	2224-3429	World Scientific and Engineering Academy and Society	0	YES	2	NO
97	International Journal of Computers & Technology	2277-3061	n.a.	CIRWORLD	0	YES	1	NO