

Main text

Inclusion of predatory journals in Scopus is inflating scholars' metrics and advancing careers

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We read with great interest the Editorial by Severin and Low (Severin and Low 2019) which aimed to raise awareness about the infiltration of citation databases by predatory journals (Manca et al. 2017; Cortegiani et al. 2019). We would like to add some insights on other risks associated with this phenomenon, focusing on Scopus.

Scopus is used in many countries as a journal *whitelist* for academic advancement, bonus systems or evaluation for funding by institutions (Hedding 2019).

The journals' inclusion process in Scopus is based on the judgment by an advisory board that considers several criteria about journal policy, content and standing, editorial

board, publishing regularity and online availability of information (<https://www.elsevier.com/solutions/scopus/how-scopus-works/content/content-policy-and-selection>). The listed journals are re-evaluated annually to check if they maintain these standards. Beginning in 2017, this annual re-evaluation has been conducted by using a data analytics algorithm. Of note, users and stakeholders can raise concerns about the practice of journals and publishers leading to an immediate re-evaluation by the advisory board. These processes can lead to discontinuation of journal coverage by Scopus, with no further articles being included in the database. As of May 2019, 560 journals (of x) have been delisted from Scopus, 348 (62%) for publication concerns. Although these actions collectively aim to contain the number of questionable journals that are retrieved in Scopus, unfortunately the articles added up to the date of delisting remain displayed in the database. This results in these items receiving citations, eventually inflating author-level metrics, such as the *h*-index, which is one of the main descriptors of productivity and scientific impact along with citations' and articles' counts. A recent study evaluating curricula of researchers who applied for the national scientific qualification to associate or full professor in Italy, which uses Scopus as one of the main sources for metrics, found that approximately 2,300 (of 46,000) researchers seeking promotion in Italian academia have published in questionable journals (Bagues et al. 2019). Due to severe lack of information and awareness of scientific evaluators, publications in questionable journals may be rewarded in the same way as legitimate publications, thus polluting the scientific records and perversely advancing the careers of researchers.

Academics should raise concerns every time they notice low quality editorial processes and should avoid their involvement as authors, reviewers or editorial board members since it is crucial for predatory journals' indexing (and profit). The goal is to break the vicious cycle of *inclusion-citation-promotion*.

By this correspondence we wish to stimulate a debate on the opportunity not only to delist questionable journals but also to limit (or eventually to label) the possibility for associated articles to continue to receive citations and increase their metrics, despite the source title being delisted.

Conflict of interest statement: The authors declare they have no conflict of interest.

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