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# Measuring the Visibility of the European Open Access Journals with Bibliometric Indicators

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**Abstract :** Peer review journals, as the main communication channel among researchers, fully achieve their objective if they are available to the global research community, which is accomplished through open access. In the EU countries, the idea of open access has spread over the years through various projects, initiatives, and strategic documents. Consequently, in this paper we want to analyze, using various bibliometric indicators, visibility, and significance of open access peer review journals compared to the conventional (non-open access) ones. We examine the sample of open access (OA) journals in 28 EU countries in addition to open access journals in three EU candidate countries (Bosnia and Herzegovina, FYR Macedonia and Serbia), all indexed by Scopus (N=1,522). These journals comprise 42% of the total number of OA journals indexed by Scopus. The distribution of OA journals in our sample according to the subject fields indicates that the largest share has OA journals in Health Sciences, 29% followed by Social Sciences and Physical Sciences with 25%, and 21% in Life Sciences. At the same time, the distribution according to countries (N=31) shows the dominance of EU15 countries with the share of 68.3% (N=1041) while post-socialist European countries (EU11 plus three candidate EU countries) have the share of 31.6% (N=481). Bibliometric indicators are derived from the SCImago Journal Ranking database. The analysis of OA journals according to their quartile scores (that reflect the relation between number of articles and their citations) shows that the largest number of OA journals from our sample was in the third quartile in 2015. For comparison, the majority of all academic journals indexed in Scopus from the countries in our sample were in the same year in the first quartile. The median of SJR indicator (SCImago Journal Rankings) for 2015 that measures the journal's prestige, amounted 0.297 for OA journals from the sample, while it was modestly lower for all OA journals, 0.284. The value of the same indicator for all journals indexed by Scopus (N=11,086) from our group of countries was 0.358, which is significantly different from the one for OA journals. Apart from the number of OA journals we also confirm significant differences between EU15 and post-socialist countries in bibliometric status of OA journals. The median SJR indicator for 2015 for EU15 countries was 0.394, while for post-socialist countries it amounted to 0.226. The changes in bibliometric indicators: quartile score, SJR (SCImago Journal Rankings), SNIP (Sources Normalised Impact by Paper) and IPP (Impact per Publication) of OA journals during 2012-2015 period, as well as H-index for the main four subject fields (Life Sciences, Physical Sciences, Social Sciences and Health Sciences) in the whole sample as well as in two main groups of European countries, show increasing trend of acceptance and visibility of OA journals within the academic community. More comprehensive insights into the visibility of OA journals could be reached by using additional qualitative research methods such as for example, interviews with researchers.

**Keywords :** bibliometric analysis, European countries, journal evaluation, open access journals
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