

Analysis the Scientific productions of Payame Noor University (Iran), using scientometrics and altmetrics approach

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Statement of the Problem: Payame Noor University is the largest governmental higher education network in Iran and is the second largest open university in Asia and the sixth largest in the world. In addition, social sciences as one of the main scientific and research fields of this university need more and more special attention in the field of science production and increasing its citations. Therefore, the status of science production by the researchers of this university in the field of social sciences is always one of the most important indicators in its quantitative and qualitative evaluations. Therefore, this study will review and analyze the quality of scientific products in the field of social sciences at Payame Noor University based on scientometric and Altmetrics indicators in Dimensions and Scopus during the years 2010 to 2020. Current research is based on the mentioned goals to answer the following questions:

1. What is the quality of scientific productions in the field of social sciences at Payame Noor University based on citation criteria in the Scopus during the years 2010 to 2020?
2. What is the quality of scientific products in the field of social sciences at Payame Noor University based on Altmetrics indicators in the Scopus during the years 2010 to 2020?

Methodology & Theoretical Orientation: This descriptive survey study was conducted with scientometric and Altmetric approaches. The study population of all scientific productions in the field of social sciences of Payame Noor University includes 602 degrees, from 2010 to 2020. For data gathering, Scopus, Scival and Dimensions were used. The following command was used to search for articles in the field of Social Sciences at Payame Noor University in Scopus:

(AFFIL (payam* AND noor) OR AFFIL (payam* AND nour)) AND (LIMIT-TO (SUBJAREA, "SOCI"))

In Scival, Payame Noor University was selected in the Institutions and Groups section and the Subject area: Social Science filter was applied to retrieve related information. In Dimension, Altmetrics information for each 602 articles retrieved in Scopus was searched and recorded. T-test and Pearson correlation coefficient were used to analyse the data on the relationship between citation indices and Altmetrics indices. In current study, quantitative indicators of scientific productions including the amount of international cooperation, number of authors' articles, and the amount of scientific cooperation with researchers of Payame Noor University were used. Also, the Field-Weighted Citation Impact (FWCI) and the trend of citation rate per article were used in scientific productions. The number of scientific productions was calculated based on the percentage of citation points, the number of scientific productions based on Source Normalized Impact Per Paper (SNIP) and the

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number of scientific productions based on SJR: Scientific Journal Rankings.

In the field of using Altmetrics indicator, four basic and general application indices including: Usage, Capture, Social Media and Mention were studied.

Findings: The results of current study showed that the rate of science production of Payame Noor University scholars in the field of Social Sciences is very low and needs to change policies and create incentives for science production in this field. Payame Noor University, as one of the largest universities in Iran, is always considered in terms of various indicators. In the field of science production and scientific leadership, the results of this study showed that the rate of science production of researchers at this university is very low compared to national statistics in the field of social sciences and needs to change policies and create incentives for science production in this sector. In examining the correlation between the amount of citation to documents by observing the abstract, it was found that there is a weak and direct correlation ($r = 0.20$, $p = 0.002$). There was a weak and direct correlation between the rate of citation of documents and external links, but this correlation was not significant ($r = 0.08$, $P = 0.32$). It was found that there is a direct and significant correlation between these two indicators ($r = 0.54$, $P > 0.000$). It was found that there was a weak correlation, but this correlation was not significant. ($r = 0.08$, $P = 0.31$).

Conclusion & Significance: Regarding the relationship between Altmetrics indices based on the results of this study and also the findings presented in the previous section, we still see uncertainty in the relationship between these two measuring instruments of science. Therefore, in addition to strengthening the traditional infrastructure of science assessment indicators as well as strengthening the infrastructure of Altmetrics, one should be very careful about prescribing it as an alternative way to evaluate scientific products. Altmetrics indicators should be considered only as a complement to Scientometrics indicators.

Biography

Amir Reza Asnafi is faculty member of Information Science and Knowledge Department at Shahid Beheshti University, Tehran, I.R.Iran. He is head of department now. His research interests include informetrics, webometrics, altmetrics, social media, archival studies, Library 2.0 and archival software. For these topics, He has published some and held several talks, presentations, organized courses, and workshops for universities, libraries and other organizations.