Analyzing thematic clusters and drawing a scientific map of research in the field of big data and online education in the Scopus scientific database

Soheil Dadfar[1]   **Mehdi Alirezanjad*[2]**

Abstract

The development of big data in recent years has led to the production of significant knowledge in this regard in reputable international citation databases. The aim of the present study is to analyze thematic clusters and draw a scientific map of published research to identify the current status of research in the field of big data and online education in Scopus. The present study was a quantitative and applied study and used scientometric methods including synonym analysis and network analysis. The research population was all documents published in the field of big data and online education in the Scopus citation database that were reviewed and analyzed. Vosviewer software was used to analyze the data.Scientometric findings showed that as of November 25, 2023, China (700 documents), the United States (240 documents), and India (110 documents) had the most scientific documents in the field of big data and education in the Scopus database, respectively. Iran was at the lowest level of this ranking with only 8 published documents. The results also showed that the clusters of big data, education, online education, teaching, learning systems, artificial intelligence, data mining, and machine learning were among the most important clusters in the field of big data and education. Finally, given that Iran had the fewest published documents in the field of big data and education, it is essential for researchers to determine research needs and, accordingly, help develop knowledge in the field of big data and education.

Keywords: big data, online education, scientometrics, knowledge map

[1] PhD student in Information and Communication Technology Management, Islamic Azad University, Kish Branch Iran. me.alirezanejad@gmail.com

[2] Assistant Professor, Islamic Azad University, Firouzkouh Branch, Department of Management, Firouzkouh, Iran. (Corresponding Author) dadfarsoheil@gmail.com