

## CITATION NETWORK ANALYSIS OF AN EDUCATIONAL RESEARCH JOURNAL

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The aim of this paper is to discuss the most significant results of a citation analysis conducted on *Magyar Pedagógia*. The current presentation is part of our research project, which consists of three main pillars: metadata analysis (Nagy & Molnár, 2017), citation analysis and content analysis. This paper focuses on the second topic, analysing the variety, quantity and quality of citations. In addition to these results, the present study reveals the visual structure of the citation network of the studied journal. The main goal of scientometrics is to investigate authors' impacts through citations (Smith, 2012); consequently, citation analysis is a vital and acknowledged method in this discipline. The indicators could expose statistics and hidden patterns with analysing the inner and outer references in a selected journal (Yang, Akers, Klose & Yang, 2008). The automatic detection and extraction of citations from the full-text articles on a large sample could only be feasible with using text mining methods (Kumar & Tripathi, 2015). Several international publications have discussed scientometric trends and questions in the area of educational research (e.g. Konur, 2012), but there are just a few with a Hungarian focus. *Magyar Pedagógia*, which is the most significant and the oldest Hungarian educational research journal (Biró, 2009), has provided an outstanding opportunity for identifying citation patterns in the area of educational research in the last 25 years. The journal introduced a unified and consequent reference style in 1991, which is based on the APA citation format. Therefore our sample is based on those scientific articles which had a standard reference list. The period examined included all publications meeting these conditions from 1991 until 2014 (N=429). After the automatic detection of citations (N=14,000) in the text and following the extraction thereof, a structured database was set up, which enabled the investigation. Besides a general statistical analysis about citations, the impact of the most significant authors', their backgrounds and the number of citations by authors are also discussed. Among others, the results show the most cited authors, genres, interdisciplinarity, international and national references, and the freshness of citations. To visualize the scientific connections, an enormous citation graph has been created. This graph, consisting of five connected components, has got 10,335 nodes, and there are 18,890 edges between them. By using this extended graph, a multi-criteria citation analysis has been performed which could yield additional relevant outcomes.