

Towards a Broader Understanding of Journal Impact: Measuring Relationships between Journal Characteristics and Scholarly Impact

Authors : X. Gu, K. L. Blackmore

Abstract : The impact factor was introduced to measure the quality of journals. Various impact measures exist from multiple bibliographic databases. In this research, we aim to provide a broader understanding of the relationship between scholarly impact and other characteristics of academic journals. Data used for this research were collected from Ulrich's Periodicals Directory (Ulrichs), Cabell's (Cabells), and SCImago Journal & Country Rank (SJR) from 1999 to 2015. A master journal dataset was consolidated via Journal Title and ISSN. We adopted a two-step analysis process to study the quantitative relationships between scholarly impact and other journal characteristics. Firstly, we conducted a correlation analysis over the data attributes, with results indicating that there are no correlations between any of the identified journal characteristics. Secondly, we examined the quantitative relationship between scholarly impact and other characteristics using quartile analysis. The results show interesting patterns, including some expected and others less anticipated. Results show that higher quartile journals publish more in both frequency and quantity, and charge more for subscription cost. Top quartile journals also have the lowest acceptance rates. Non-English journals are more likely to be categorized in lower quartiles, which are more likely to stop publishing than higher quartiles. Future work is suggested, which includes analysis of the relationship between scholars and their publications, based on the quartile ranking of journals in which they publish.

Keywords : academic journal, acceptance rate, impact factor, journal characteristics

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