Analysis of Academic Influence of Core Periodicals Based on CSSCI, SCI and SSCI

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Abstract: On the one hand, some scholars pay more attention to the CSSCI, SCI and SSCI level than that of authoritative core journals; on the other hand, the current international academic circles have the awareness of non-English academic value, which is respected by a single domestic published papers and periodicals to pay attention to the country's practical application value in transition. Scientists in different countries have different knowledge background and the application demand, conduct most of the national scientific research projects, study the problem of domestic scientific resource environment and sustainable development. Compared with other subjects, it is not easy to appear blind worship for the CSSCI, SCI and SSCI. Therefore, taking the scientific workers as an example, the paper studies the structural equation authoritative core journals academic recognition of the value of the construction, researches the influence factors on the academic recognition of the value of the competitiveness of academic quality, academic influence and enhance the international authority of core journals, promote scientific and technological innovation and Chinese academic prosperity.

1. Introduction

CSSCI, SCI and SSCI are the most important and authoritative retrieval and evaluation tool internationally recognized today. Research papers are cited or cited by CSSCI, SCI and SSCI, to a certain extent, representing the recognition of research achievements by international academic circles, which helps to enhance international academic exchanges and enhance academic status. Therefore, publishing CSSCI, SCI AND SSCI papers in recent years has become an important assessment index for academic influence evaluation and academic status identification of Chinese researchers, and also an important criterion for measuring the strength of universities and research institutions [1]. In 2011, the Ministry of science and technology for the first time in China (CSSCI, SCI and SSCI) published papers and citations included in the national development strategy of science and technology; the specific goal to the international scientific papers in 2015 by the world total fifth rise to second, cited by the thirteenth rise to eighth. Influenced by the CSSCI, SCI and SSCI baton, a considerable number of high - quality domestic academic achievements have been exported to CSSCI, SCI and SSCI journals in the form of English papers. In 2016, the number of SCI papers in China broke through 200 thousand articles. Compared with 2010, it increased by more than 40 thousand, accounting for 9.8% of the world's share, ranking the second in the world [2-3]. It can be seen that the number of SCI papers in China is increasing very significantly.

2. Influence of core periodicals and academic periodicals

A Book of British anthropologist Taylor in 1871 published the "original culture" in the definition of culture is very representative: "culture is a complex whole which

Objectively speaking, those influential academic journals, certainly by all kinds of "core journals" production unit which included, and the introduction of "core journals" of the mind, but also want to through a variety of technical indicators, dynamically reflect the quality change of a scholarly journal trajectory and radiation force. Because of the introduction of the "core journal" mechanism, many academic journals have shifted from the past lack of external evaluation and self-feeling to the pursuit of improving academic quality, attracting high-quality papers, optimizing
subject selection and enhancing editorial responsibilities. Of course, due to the lagging nature of data, not all influential academic journals can find their proper place in the core journals [4]. This is also the need for continuous improvement of core journals in the future. Judging the academic influence of an academic journal, besides the ranking order of core journals, there are two other points that cannot be ignored. That is peer evaluation and management evaluation.

The so-called peer evaluation mainly refers to the evaluation of the overall quality and overall editorial level of the articles issued by the peers of the academic circles and the periodicals. See a year to the overall quality of an academic journal, it is mainly to see the year issued by the number of high quality papers. Through a variety of bound volumes of periodicals, both influence the size of core journals and non-core journals, always find several good articles. However, it is not difficult for an academic journal to produce one or two high-quality papers in one year, but it is difficult for one academic year or a few years [5]. Every period is a high-quality paper with no poor quality. Therefore, the number of high quality papers should be an important basis for judging the influence of an academic journal. Look at the overall level of an academic journal editor, editor and editor is the academic journals in the topics of planning, optimization, editing, proofreading in many links in the discovery of new, new, launched to promote academic innovation, it plays a big role, how much work to do.

The so-called management evaluation mainly depends on whether the journal deviated from or abandoned the purpose of running the journal when it was founded, and whether it seriously fulfilled the commitments made when it was founded, and whether it was improving in publishing quality. Here said the "publication quality", does not refer to how beautifully printed periodical itself, but each of these articles, columns, size, layout and design in how to comply with academic standards, reflect the visual aesthetic feeling, to show the Chinese academic charm, and high quality articles without a body, it reflects the cost of how much effort to meet the aesthetic needs of readers [6]. In short, the academic quality of an academic journal is external, and the quality of editing and publishing is intrinsic, which is complementary to each other, representing the general level of a journal.

3. Model building

3.1 Hypothesis model construction and research hypothesis

![Figure 1. A hypothesis model of academic value recognition](image)

On the basis of exploratory factor analysis, a hypothetical model of academic value recognition of Chinese authoritative core periodicals is constructed, as shown in Figure 1. The model includes 4 latent variables and 13 variables, the academic recognition of the value of internal latent variables, the evaluation of research and academic status of that policy, academic achievement and academic influence evaluation for the external influence of latent variables, are the main factors that influence
the research of Chinese authoritative core journals and academic recognition of the value of the [7].

According to the hypothesis model, the following hypothesis is proposed, as shown in Figure 1. The hypothesized relation H1: the scientific research appraisal and the academic status recognition policy has the direct influence to the recognition degree; H2: the academic achievement influence has the direct influence to the recognition degree; H3: the academic influence appraisal has the direct influence to the recognition degree directly.

3.2 Research method

In this study, SPSS 21 and AMOS 21 were used to analyze and verify the data. First of all, SPSS 21 is used to test the reliability of the measurement model through Cronbach's alpha. The validity of the measurement model is tested by KMO statistics and P value of Butler sphericity test. Secondly, using AMOS 21 software, confirmatory factor analysis (CFA) was used to test the reliability and validity of the established dimensions. The goodness of fit index was used to examine the fitting degree of the model, and the hypothesis model was corrected [8-9]. Finally, the maximum likelihood estimation (ML) is used to estimate the parameters of the hypothesis.

3.3 Test and correction of measurement model

First of all, in order to ensure the reliability of the scale, SPSS software is used to analyze the reliability of the measurement index. The results show that the Cronbach's alpha of the total amount meter is 0.849, indicating that the scale has a better internal consistency. The Cronbach's alpha of the 4 basic dimensions in the model between 0.732–0.968, as shown in Table 1, is greater than the 0.51 standard, indicating that the items of the measurement are credible. The minimum combination reliability is 0.7940, which is greater than 0.71, indicating that the observation variables are heterogeneous internally, and the average variation extraction amount is near the standard value 0.51, which indicates that the observed variables can better explain the corresponding latent variables. Secondly, the use of AMOS 21 on the measurement model of confirmatory factor analysis, the 4 measurement models of all the observed variables standardized load value between 0.46~0.95, with more than 0.41 standard; t test values were significant at the 0.001 level, indicating the observed variables can explain well the corresponding latent variables, the observation model of formation the 13 observed variables.

Table 1. Hypothesis test results of model verification

<table>
<thead>
<tr>
<th>Basic dimensions</th>
<th>Cronbach'α</th>
<th>Average variation decimation(AVE)</th>
<th>Composite reliability(CR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The policy of scientific research evaluation and the identification of academic status</td>
<td>0.968</td>
<td>0.8256</td>
<td>0.9634</td>
</tr>
<tr>
<td>Influence of academic achievements</td>
<td>0.758</td>
<td>0.6292</td>
<td>0.8388</td>
</tr>
<tr>
<td>Evaluation of academic influence</td>
<td>0.732</td>
<td>0.5034</td>
<td>0.8051</td>
</tr>
<tr>
<td>Academic value recognition</td>
<td>0.787</td>
<td>0.7285</td>
<td>0.8466</td>
</tr>
</tbody>
</table>

4. The relationship between influence factors and academic influence of Periodicals

Impact factor is a quantitative indicator of the magnitude of a journal. That is to say, the average number of cited papers per journal is actually the number of papers published in the first two years by a magazine in a year, which is compared with the number of papers published in the first two years. The impact factor is generally referred to as JCR, which is cited annually from the world's journals every year since 1975. JCR is a world authoritative comprehensive database. Its reference data comes from more than 7000 periodicals from more than 3000 publishing institutions in the
world. The scope of the profession includes science, technology and social sciences. JCR is the only comprehensive tool of the world's evaluation journals. Because it only collected the citation data of various professional journals all over the world, the JCR disc has many good interfaces, showing the relationship between citation and citation among journals [10-11]. You can tell people which are the most influential periodicals, which are the most popular journals, and which are the hottest ones. In addition to the impact factor is given: the latest journal ranking, Journal of international unified abbreviation, serial number, total citations, timeliness index, the total number of articles and cited half-life.

The influence factor is the important index of evaluating the academic influence of papers and periodicals in China. The greater the influence factor, the greater the academic influence of journal and the higher academic quality of paper. The score of paper authors in scientific research and talent evaluation system is higher. The formation of many factors impact factor, affected by subjective factors and objective factors, using the impact factor of Academic Journal Comprehensive Evaluation or assessment level and the author of the thesis published in the level, there are some limitations and shortcomings, and even cause deviation and injustice. The overall academic quality of the 3 core journals is increasing year by year, and the academic influence is increasing [12]. However, the development of various scientific journals shows diversity and imbalance due to the different degrees of development in different areas. There are many factors that influence the academic influence of sci-tech periodicals. There are some limitations in the current evaluation system. Therefore, it is not the only criterion to evaluate the quality of journals that we should treat them objectively. The ultimate goal of journal evaluation is to recognize and understand the deficiencies of journals, and urge the management departments and staff of sci-tech periodicals to continuously strengthen the quality construction of periodicals, promote the development of journals, and improve the academic influence of journals.

5. Summary

To sum up, open access can improve the influence factors of periodicals to varying degrees and the commonly used academic influence indexes, such as frequency and frequency. There is still a certain distance away from the goal of domestic journals. Therefore, we should change the concept of publication as soon as possible, improve the scope and depth of open access, and vigorously promote open access under the premise of ensuring the quality of journals. In order to make the periodicals of our country be able to disseminate the information more quickly, it can give full play to its social benefits and meet the needs of the users.

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References


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