

Raising the Journal Impact Factor in Social Sciences after at Least Four Years of Continuous Decreases

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was less than 20 during at least four years in the years studied.

Introduction

The Journal Impact Factor (JIF) is computed for each year (Y) according to the following equation (Glanzel & Moed, 2002):

$$IF(Y) = \frac{\text{Cit in Y to Y1 and Y2}}{\text{Items published in Y1 and Y2}}$$

Y1 and Y2 are the previous years. Increasing the JIF is a desirable goal for editors of scientific journals because this number is usually considered an indicator of quality. Consequently, a decrease in the JIF is a bad new for a journal editor. The JIF can be raised by increasing the journal self-citations (Falagas & Alexiou, 2007). Another strategy is to change publishing patterns and publishing less papers but better ones (Opthof, Coronel & Janse, 2002).

The goal of this study was to investigate the possible patterns in citations, journal self-citations and citable items that might contribute to recovery of the JIF after a period of continuous decreases in journals included in the Social Sciences Citation Index. We also studied the effect of journal self-citations on the total number of citations that contributed to the JIF.

Method

We studied the evolution of the JIF in the Science Citation Index from 1998 to 2007 using data published in the JCR database (Social Sciences Citation Index) and included in the web interface available to Spanish universities. We identified journals for which at least four years of consecutive decreases in the JIF were followed by an increase. Only journals for which data were available in the JCR database for all years studied were included. We only included journals with no changes in the abbreviated journal title. We identified 63 journals that met these criteria. We excluded 9 journals from analysis because the absolute number of citations

Results

We classified all journals according the factors that contributed to the increase in the JIF in the year of change of tendency:

- a) Type 1: Journals in which citations increased or did not changed and the number of citable items decreased or did not changed. The JIF increased because both factors contributed or at least did not counteract each other (35,3% of journals)
- b) Type 2: Journals in which both the citations and the citable items increased. The JIF increased because the proportionately greater increase in citations offset the negative effect of the increase in the number of citable items (57,4% of journals).
- c) Type 3: Journals in which both citations and citable items decreased. The JIF increased because the decrease in citations was offset by the proportionately larger decrease in the citable items (7,4% of journals).

We studied the contribution of journal self citations to the JIF in type 1 and type 2 journals. For a given journal, a high percentage of self-citations may be the norm from year to year. We compared the variable JSCIF/CIF (journal self citations that contribute to impact factor over citations that contribute to impact factor) for the year of change (B) against the average value of this variable during the four previous years during which the JIF decreased (A). Only in 5 journals we found increases greater than 1,2 between these two variables ($C=B/A$) (see table 1).

Conclusions

In most journals (about 93%), the increase in JIF after a decrease of several years' duration was associated with an increase in CIF, although in 57% of the journals this increase was also influenced by an increase in the number of citable items.

We found no proof of widespread dependence on journal self-citations to improve the JIF.

Table 1. Increase of journal self-citations in 5 journals. A=Average percent of journal self citations during the 4 previous years during which the JIF decreased. B=Percentage of journal self-citations the year of change. C=Rate of increase (B/A)

Journal	A	B	C
ETHICS BEBA	20,6	26,9	1,3
J DOC	16,3	22,1	1,4
MED SCI LAW	17,5	34,3	2,0
PHILOS PUBLIC AFF	13,7	35,3	2,6
RES TEACH ENGL	31,8	42,9	1,3

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