

## Letter to the editor

# Publication trends in social psychology journals: A long-term bibliometric analysis

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### INTRODUCTION

As a supplement to the EJSP Agenda article 2013 written by Naomi Ellemers (2013) I conducted a bibliometric analysis of publication trends in social psychology journals. This analysis focuses on the number of articles published from 1991–2010, and considers how various characteristics of articles (length, citation numbers, referencing) changed over this period.

### DATA AND METHODOLOGY

The data used for this study were retrieved from the in-house version of the Web of Science (WoS) at the Center for Science & Technology Studies (CWTS) at Leiden University, the Netherlands. The major difference is that the CWTS database is purely bibliometric in essence, while the online version is a bibliographic search tool with some light metrics included. Social psychology in the study is defined as all journals processed under that heading in the WoS database.

### RESULTS

First we analyzed the overall number of publications in social psychology. Figure 1 shows the total number of publications in social psychology journals in WoS, combined with the number of journals covered in social psychology in WoS. The output development displays a steady increase over the years, with a 'sudden' change in 2004/2005.

By comparison, the annual development over time of the number of Social Psychology journals in WoS shows a trend that increases much more gradually. WoS covered more journals from 2007 on, as a change in policy by the producer Thomson Reuters to include more journals in the social sciences.

When we focus on the various types of publications (articles, letters, and reviews), we find that increases in the numbers of *reviews* (increasing from roughly 40 to 60 per year over this period) and *letters* (some 10 per year) are to be neglected, given the annual number of occurrences, while the number of *articles* clearly shows the sudden increase described above for

the whole field from 2004/2005 onwards. We can detect a small change in the number of *reviews*, but it is mainly the *articles* that are responsible for the increased output in the field.

Given this finding, we next focus on *article length*. We distinguished between articles in four classes, denoted by A (articles with less than 10 pages), B (articles with 11–20 pages), C (articles with 21–30 pages), and finally D (articles with over 31 pages). The results of this analysis are presented in Figure 2.

Panel A in Figure 2 shows that the sharp increase in output numbers in 2004–2005 and following years are predominantly caused by an increase of relatively short publications. Although the number of Type B publication (page length between 11–20 pages) also increases, the shorter publications explode from 400 per year in 2004 to 1,200 per year in 2010. This phenomenon is not visible in all psychology research in the WoS database, as the two types containing the shorter publications show an increasing trend over a longer time, with a change from 2004 onwards (see Panel B in Figure 2). Interestingly, comparison of panel A and B suggests that, since 2004, social psychology has become more similar to the rest of psychology.

From a somewhat different perspective, the composition of the set of normal articles based on page length typology is presented in Figure 3. Here the year to year composition according to the four types distinguished is shown. Figure 5 clearly shows that the shorter articles cover 40% of the publications in the field in the final years of the analysis, which increased from below 20% in 2004 to over 40% in 2010. This is mainly at the expense of the longer publications (over 21 pages long). Also interesting is to note that the proportion of shorter articles gradually shrunk from the start of the investigation period, but that the opposite trend is most recent years was much more dramatic.

A breakdown to country level showed that 66% of all publications in Social Psychology come from the USA in 1991, while this share is reduced to 54% in 2010. This is indicative of a much larger trend of growing output numbers of European social scientists publishing in international journal literature (van Leeuwen, 2006).

We now turn to changes in reference behavior in social psychology journals. We examine the average length of reference lists at three points in time (1991, 2001, and 2011). The

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average trend is for the length of the reference lists to increase from 36 in 1991, to 45 in 2001 and 50 in 2011.

Next we address the citation histories of the field, again for three points in time (1991, 2001, and 2011). Figure 4 indicates the distribution of the references given over the previous period. This is analyzed the three points in time 1991, 2001, and 2011, for the ten years previous to each of these three years (so, for 1991 publications, references going back to 1982 are analyzed). This analysis clearly shows that publications in social psychology tend to show similar reference histories for publications appearing at these different points in time.

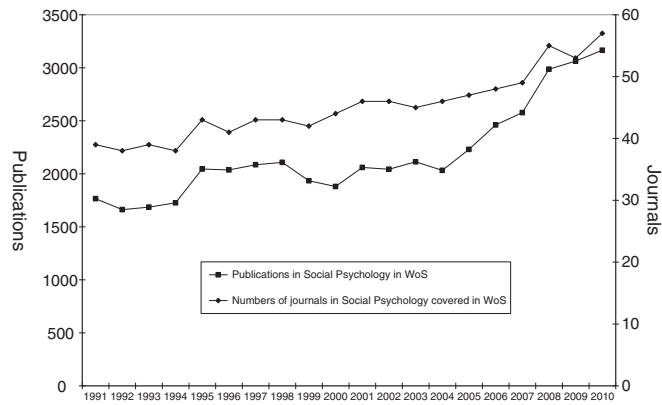


Figure 1. Annual output numbers and journals covered in Social Psychology.

Finally, in the slipstream of this analysis, we focus on the coverage of the field in WoS. This analysis establishes the proportion of references to other publications covered in WoS. The higher this proportion, the more important the journal literature appears to be among scholars in the field who publish in journals. Consequently, this indicates the relevance of the journal literature in the scientific communication process in a field. The analysis shows that the coverage percentages are increasing, which indicates that social psychologists consider journal literature more and more as highly relevant for their scientific communication process. The average coverage percentage changes from 55% in 1991, through 59% in 2001, to 68% in 2011. These findings are similar to observations made for the broader field of psychology (van Raan et al., 2007).

### SUMMARY AND CONCLUSIONS

In this descriptive bibliometric analysis we have found some interesting developments in the communication processes in the field of social psychology. We compared publication traditions in social psychology with the wider context. The analysis showed that while the number of journals in the WoS database is slowly increasing, publication numbers suddenly increased from 2003/2004 onwards. This upward

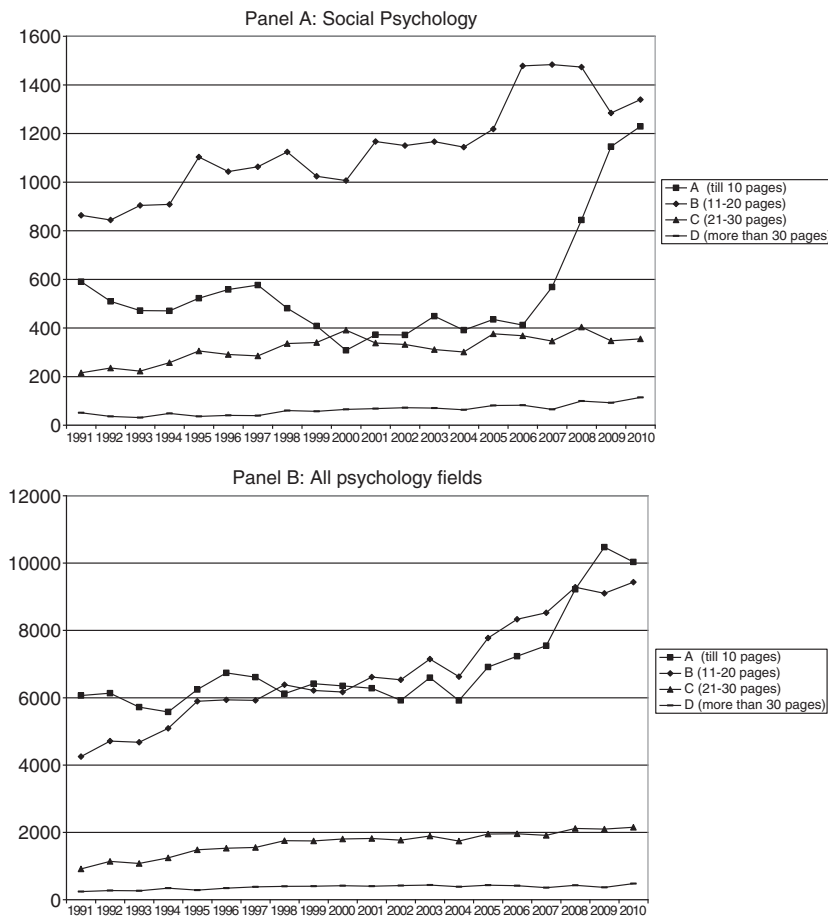


Figure 2. Annual number of articles with various page length, processed in journals in Social Psychology (Panel A) and in journals in all WoS Psychology fields (Panel B).

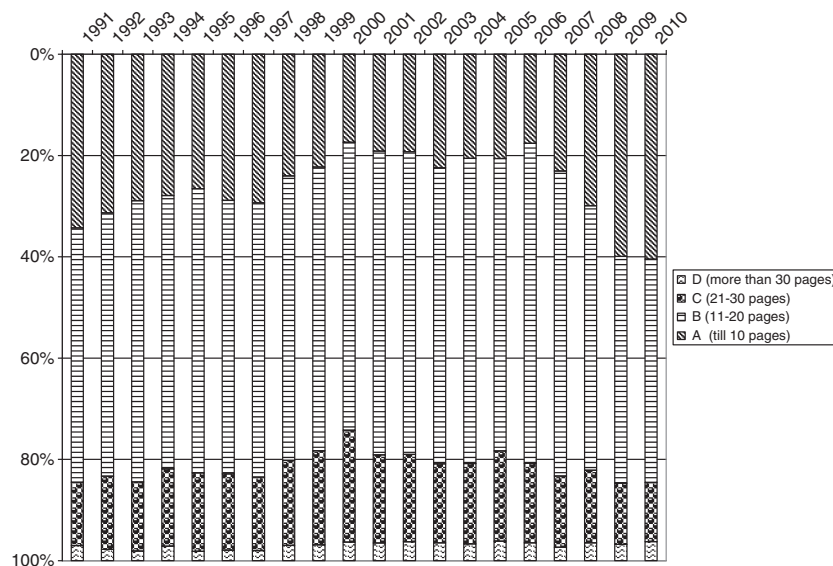


Figure 3. Annual composition of the set of articles with various page length, processed in journals in WoS field Social Psychology.

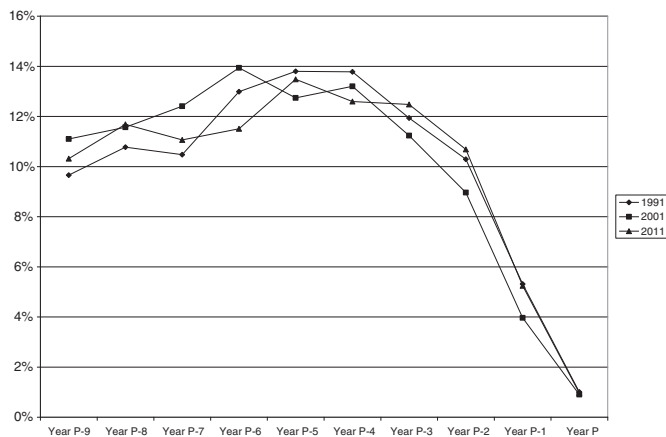


Figure 4. Reference histories of publications in journals in Social Psychology (1991-2001-2011).

trend coincides with a strong increase of relatively short publications. There is no corresponding increase in the number of review articles. The analysis further showed the dominant position of the USA in the field of social psychology, as is observed in other fields of social sciences research as well.

Another dimension of the analysis focused on reference behavior of researchers publishing in social psychology journals. We observed longer reference lists in time. On the other hand, these reference lists had similar shapes, when we made comparisons in time, with roughly 13% of all references going back in time. When we looked at the nature of the references, we observed that social psychologists tend to focus more and more on journal literature covered in WoS database as well.

One could wonder to what extent the observed changes are due to the changed coverage of the WoS database itself. Noteworthy is that whilst the major development in output numbers in the field of social psychology in the WoS database seem to have taken place in the last years we analyzed, other developments in the field of social psychology (such as expanding journal numbers) have taken place more gradually. Yet other changes occurred in the first ten years covered by our analysis. For example the number of covered journals increases particularly between 2006 and 2010, while the largest change in the length of the reference list and the coverage percentages mainly taking place in the first ten years of the analysis. Whilst this does not rule out the possibility that some of these changes may be part-due to a change in coverage of the WoS database itself, the analysis shows enough ‘proof’ for the hypothesis and argumentation that the field is going through some major changes in recent years.

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