

# Characteristics of Publications in Political Science

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## Abstract

This study investigates the publication, citation, and reference characteristics of items in political science with special attention to journal articles. By analyzing the complete 2003-2007 publication list of two top-ranking departments of political science in Germany, this study explores the publication behavior of German political scientists and also analyzes their citation and reference characteristics. According to the results of the study, we will be able to provide important knowledge to the process of evaluating research performance in such a local language oriented subfield in the social sciences.

## Data and Methods

This study concentrates on political science, for it is a relatively empirical field and among the top three fields with the largest increase in citations caused by the inclusion of non-source items (Butler & Visser, 2006). Citation windows of at least three years (Glänzel, 2008) were applied in this study. The five year publication output (2003-2007) of two top-ranking German institutions, Department of Political Science at Mannheim University and Institute of Political Science at University of Muenster (CHE, 2010; Hix, 2004), were chosen as research samples. The 1,018 publications of 33 professors in these two institutions were collected from researchers' official websites, institutional repositories, and German Social Science Literature Information System. After data collection, all publications were sent to the professors for verification. References and citations of these items were obtained in March 2012 from the WoS in-house database of the Competence Centre for Bibliometrics for the German Science System.

## Preliminary Results

### Publication characteristics

Among these 1,018 published items, 57% were in German and 40% in English. In terms of document type, 39% of these publications are *book chapters* and 22% are *journal articles* (in peer reviewed and non peer reviewed journals). The dominating position of German is also prevalent in other publication types, such as Edited Book, Book, and non peer reviewed Journal Article. However, English is used more often than German in peer reviewed journal articles and conference papers which serve more international communication purposes. As shown in Table 1, most

of 221 *journal articles* are published in peer reviewed journals (73%). Among the 161 peer reviewed journal articles, 70 are indexed by WoS and 56 of them (80%) are published in English. Thus, the overall coverage German political science in WoS is about 7%. The other 91 peer reviewed papers are published rather in German (60%) than in English (37%).

**Table 1.** Composition of all journal articles.

		Journal Article (Peer Reviewed)	Journal Article (non-PR)	Total
ISI	German	14	0	14
	English	56	0	56
	Subtotal	70	0	70
non- ISI	German	55	48	103
	English	34	6	40
	Others	2	6	8
	Subtotal	91	60	151
Total		161	60	221

### Citation characteristics

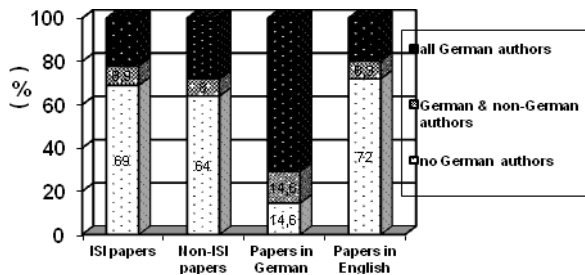
Table 2 shows the 70 ISI articles got 498 citations in total (7.1 citations on average), whereas the 151 non-ISI articles received 197 citations (1.3 citations on average). English ISI journal articles reach 8.32 citations on average, while the average citation rate of German ISI journal articles is 2.29. About half of the German journal articles are cited by other German articles, while English ISI journal articles are mostly cited by English articles.

**Table 2.** Citation statistics of journal articles.

	No. of Paper	No. of Citations			CPP
ISI papers in German	14	32	By papers in G.	16	2.29
			By papers in E.	16	
non-ISI papers in German	103	26	By papers in G.	12	0.25
			By papers in E.	13	
			By papers in other L.	1	
ISI papers in English	56	466	By papers in G.	32	8.32
			By papers in E.	427	
			By papers in other L.	7	
non-ISI papers in English	40	171	By papers in G.	11	4.28
			By papers in E.	154	
			By papers in other L.	6	
Total ISI	70		498	7.11	
Total non- ISI	151		197	1.30	

Furthermore, the top five journals that contain citations to the ISI indexed journal articles are European oriented and almost the same as the top five journals that publish the ISI journal articles.

Concerning the countries affiliated with the citations of these 221 journal articles, Figure 1 shows that ISI papers and non-ISI papers have similar ratio of citations from all German and all non-German authors (Chi-squared test non-significant). Even though the citation per paper of non-ISI papers (1.3) is much lower than for ISI papers (7.1), non-ISI papers do not have less influence than ISI papers in terms of their international vs. national impact ratio. The situation is totally different with regard to languages. The difference between the two groups is extremely significant (Chi-squared test,  $p < 0.0001$ ). Journal articles published in German are cited by articles only from Germany in the about 70% of cases, and cited by articles from other countries in the ratio around 15%. English papers have a bigger international influence, with 72% citations from other countries except for Germany.



**Figure 1.** Share of citations of journal articles.

#### Reference characteristics

Table 3 shows there are 2,593 references cited by the 70 ISI indexed articles, including 1,378 ISI indexed items and 1,215 non-ISI indexed items. The internal WoS coverage is therefore 53%, and the average number of references of these 70 articles is 37.04, which is close to the aggregated average of references in the political science category in the Journal Citation Reports (JCR) of 2010. The Citing Half-Life is 10.08 years, and the most cited year of reference is 2000 for the papers in the sample (2003-2007). Among the 1,378 ISI indexed references, political scientists cited two journals the most (and only two reach the 100 times threshold), *American Journal of Political Science* and *American Political Science Review*.

#### Discussion and Further Research

German political scientists use German in their local communication circles to publish in books and regional oriented journals, but prefer English as a

communicating mean in more international channels such as peer review journals and conference papers. 51% of all publications are books and book chapters, while all journal articles combined arrive only at 22%. These results imply that books and book chapters should be included in evaluations of political scientists. The weighting method and design based on document types will be a further step of study.

**Table 3.** Reference statistics of ISI indexed articles.

	Source Ref.	Non-source Ref.	Total	2010JCR Pol. Sci.
No. of Ref.	1,378	1,215	2,593	-
Ratio (Ref. per paper)	19.69	17.36	37.04	38.5
Citing Half-Life	10.07	10.09	10.08	8.5
Peak Year	2000	2002	2000	-

Furthermore, it is obvious that papers in English are perceived by a broader audience, resulting in substantially more citations. It suggests to weight German papers when they are compared with English papers in terms of citation numbers obtained from ISI databases. Papers in English also attract more citations from other countries. This study shows as well that the publishing language will make a significant difference in international impact, whereas being indexed by WoS or not doesn't differ so much.

Another interesting fact shown in this study is that although German political scientists publish papers in German or European journals frequently and receive most of their citations from these journals, this does not mean that they neglect American journals or are not aware of international issues. In fact, they cite American journal articles very often.

#### References

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