

Some Indicators on Portuguese Science

A comparison of Scopus and Web of Science for a typical university



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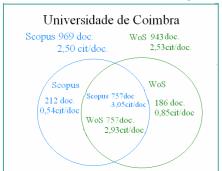
This study identifies the major differences between Scopus and WoS (ISI Web of Science) and how far they should be considered as complementary to one another from the point of view of a multidisciplinary university. To achieve this, the scientific production referenced in Scopus and WoS from Portuguese universities in 2000 through 2007 is considered. A particular document is associated with a university when one of the author addresses in the database makes a clear reference to that university, to one of its subunits or to one of its research entities. The results obtained with this relatively simple methodology compare well with other published results. The differences are typically of 1%, with larger variations associated with specially difficult cases of definition of the institutional contour.

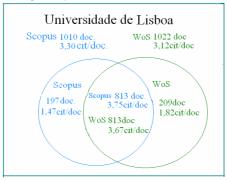
Table 1. Number of documents referenced in Scopus and in WoS for the larger Portuguese universities

Institution	(2000-2007), total			2000	2001	2002	2003	2004	2005	2006	2007
	Scopus	WoS	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %	(Scopus/WoS) in %
Univ Algarve	1606	1622	99,0	94,7	87,4	85,9	99,0	93,0	97,6	103,4	103,9
Univ Aveiro	5003	4445	112,6	101,1	104,7	94,8	112,1	112,0	119,2	111,5	129,0
Univ Coimbra	5757	5615	102,5	103,7	91,8	86,9	103,1	108,2	110,1	102,8	109,3
Univ Lisboa	5604	5728	97,8	80,8	84,8	85,1	100,0	120,1	107,0	98,8	112,4
Univ Minho	3338	2996	111,4	98,4	92,0	96,3	112,1	118,4	111,3	110,8	136,8
Univ Nova Lisboa	4018	4105	97,9	84,6	75,2	87,0	105,0	109,3	101,9	102,1	112,9
Univ Porto	8423	8410	100,2	93,3	89,3	82,1	101,4	122,8	103,2	103,0	111,6
Univ Técnica Lisboa	9052	8260	109,6	105,1	93,5	98,8	106,2	106,2	114,8	109,2	126,5

Scopus has a wider coverage, representing, on average, 104% of WoS. In the latter years, the relative coverage of Scopus appears to have increased further, reaching ca. 110% in the last three years.

Figure 1. Number of documents identified in Scopus and in WoS for 2006, as well as in only one and the other and in both and number of citations per documents respectively





A more detailed analysis of the universities of *Coimbra* and *Lisboa* shows that about 80% of the documents are present in Scopus and WoS while 20% are only referenced in one of them and another 20% are referenced in the other. The counting differences are explained by different abstracting policies and apparent errors in the process of constructing the databases (see Table 2).

Table 2. Explaining the different counts of referenced documents in Scopus and WoS for the *Universidade de Coimbra* and *Universidade de Lisboa* in 2006

	Universidad	e de Coimbra	Universidade de Lisboa		
Comments	WoS	Scopus	WoS	Scopus	
Absence of journal, book series or conference proc. (A1)	137	6	122	3	
Scopus referenced documents only in the ISI Proc. (A2)	57	0	20	0	
Only reference to the conference (A3)	0	87	0	87	
Errors of address or date (B1)	14	21	50	41	
Documents unidentified (B2)	3	25	5	33	
Volume, issue or supplement of journal not found (B3)	0	47	0	43	
Duplicate documents (B4)	0	0	0	-2	

The core 80% of the documents referenced in both WoS and Scopus are those with higher impact but some of those left out are still very relevant.

Table 3. Distribution of the Scopus documents by scientific area for the *Universidade de Coimbra* and *Universidade de Lisboa* in 2006, considering the top level Scopus classification

	Uni	iversidade de Co	oimbra	Universidade de Lisboa			
Scientific Area (Scopus)	Scopus doc. not in WoS	Scopus doc. also in WoS	Scopus doc. not in WoS, in %	Scopus doc. not in WoS	Scopus doc. also in WoS	Scopus doc. not in WoS, in %	
Physical Sciences	137	465	23%	102	448	19%	
Health Sciences	50	57	49%	49	88	36%	
Social Sciences	10	38	21%	28	25	53%	
Life Sciences	16	197	8%	18	249	7%	
Multidisciplinary	0	0	0%	0	3	0%	

The analysis by scientific area shows that the Health Sciences are responsible for a high percentage of documents not found in WoS.

http://www.fc.up.pt/pessoas/jfgomes http://www.requimte.pt/metrics

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