

Using Google Scholar in research evaluation of SSH programs



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Bibliometrics for SSH Programs?

- Coverage in WoS hampers bibliometric analyses in SSH
- Experiment for a bibliometric study in two formal research assessments in SSH
- Google Scholar (GS) based for two fields
 - Education and Pedagogical Sciences (Ed/Ped)
 - Anthropology



Selection of Data

- Ed/Ped: 13 programs of six universities, 6 years
- Anthropology: 5 programs of 5 universities, 9 years
- Selection of publications
 - Ed/Ped: directors send in 10 publications per year
 - Anthr.: 5-10 most cited publications per year depending on size of program



Google Scholar Data Retrieval and Validity test

Scholar

6 resultaten (0,03 sec)

Elke periode

Sinds 2012
Sinds 2011
Sinds 2008
Aangepast bereik...

Sorteren op relevantie

Sorteren op datum

Het internet doorzoeken

Zoeken in pagina's in het Nederlands

inclusief patenten

inclusief citaten

Melding maken

[Developmental changes in semantic verbal fluency: Analyses of word productivity as a function...](#)

Zoeken in citerende artikelen

[Executive strategic processing during verbal fluency performance in children with phenylketonuria](#)

[P Banerjee, DK Grange, RD Steiner... - Child ..., 2011 - Taylor & Francis](#)

In the current study, we examined a specific aspect of executive abilities, strategic processing, in 32 children with early-treated phenylketonuria (PKU) and 41 typically-developing control children. To do so, clustering and switching were assessed during ...

Geciteerd door 4 [Verwante artikelen](#) [Alle 7 versies](#)

[Verbale vloeiendheidstaken bij kinderen Petra Hurks](#)

[P Hurks - tvn.boomtijdschriften.nl](#)

In de klinische praktijk alsmede in wetenschappelijk onderzoek wordt veelvuldig gebruikgemaakt van zogenaamde verbale vloeiendheidstaken: taken die ook wel bekendstaan onder de noemer van 'Verbal Fluency', 'Freelisting' en/of 'Category production'. ...

[Verwante artikelen](#) [In cache](#)

[Sex differences in arithmetical performance scores: Central tendency and variability](#)

[R Martens, PPM Hurks, C Meijs, R Wassenberg... - Learning and Individual ..., 2011 - Elsevier](#)

The present study aimed to analyze sex differences in arithmetical performance in a large-scale sample of 390 children (193 boys) frequenting grades 1-9. Past research in this field has focused primarily on average performance, implicitly assuming homogeneity of ...

[Verwante artikelen](#) [Alle 5 versies](#)

[Does Instruction in Semantic Clustering and Switching Enhance Verbal Fluency in Children?](#)

[PPM Hurks - The Clinical Neuropsychologist, 2012 - Taylor & Francis](#)

This study investigated (1) test-retest reliabilities of Verbal Fluency (VF) outcome measures (ie, word productivity, clustering, and switching) and (2) the effects of a brief training on semantic clustering to improve performance on a VF task. A total of 81 children enrolled in ...

[Verwante artikelen](#) [Alle 3 versies](#)

1st order data

2nd order data, stored in database



Cleaning for Data quality

	Total number of verifiable citations	Percentage of total found citations
Ed/Ped	22887	89,8%
Anthropology	8092	89,7%

Verifiable (2nd order) citation data in GS:

Proper internet address (URL) to journal, academic publisher, university library, acknowledged repository (Mendeley, SSRN, Academia.edu etc), academic societies etc.



Citing sources in Scholar

Source	Anthro- pology #	Anthro- pology %	Ed/Ped #	Ed/Ped %
Academic sources	4573	56.5%	14470	63.2%
University Libraries	1677	20.7%	4573	20.0%
Repositories other than ULs	616	7.6%	1236	5.4%
Other Sources	327	4.0%	1085	4.7%
Unknown	899	11.1%	1523	6.7%
Total	8092	100.0%	22887	100.0%

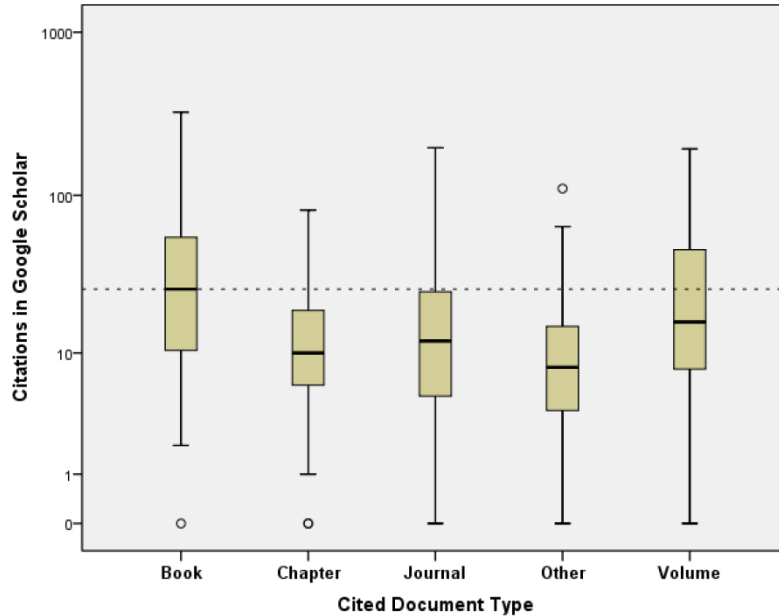
56% to 63% of total volume of citations is found in academic sources (scientific journals and academic publishers)

About 20% of the citations are located in University Libraries

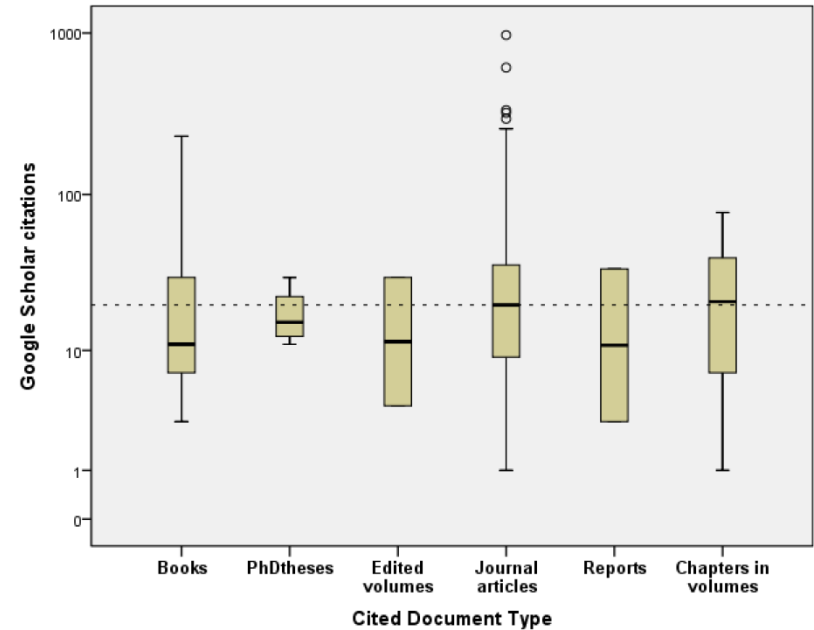


Cited documents

Variations of citations per document type, Anthropology

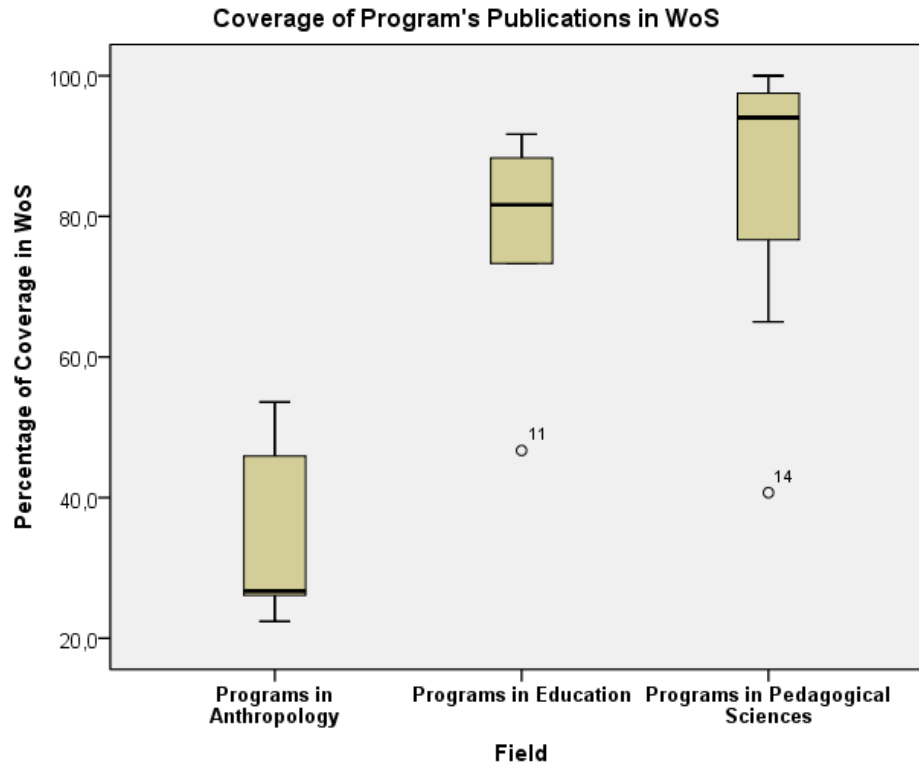


Variations of citations per document type in Ed/Ped





Representation in WoS





Comparing GS and WoS (1)

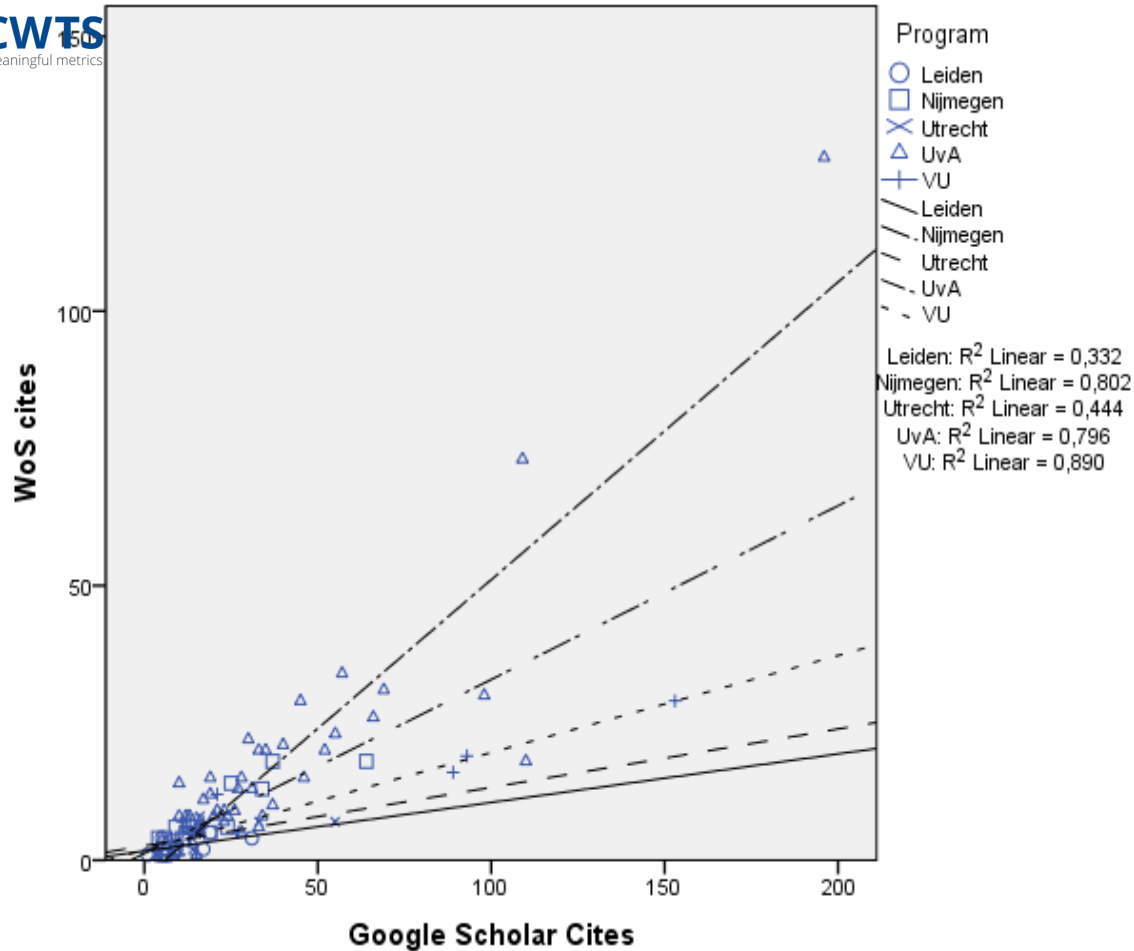


	Citations in GS	Citations in GS, Academic sources	Citations in WoS
Anthropology	8092	4573	1097
Education & Pedagogical Sciences	22887	14470	8870

- Information in GS exceeds that of WoS even when limited to academic sources (scientific journals and academic publishers)



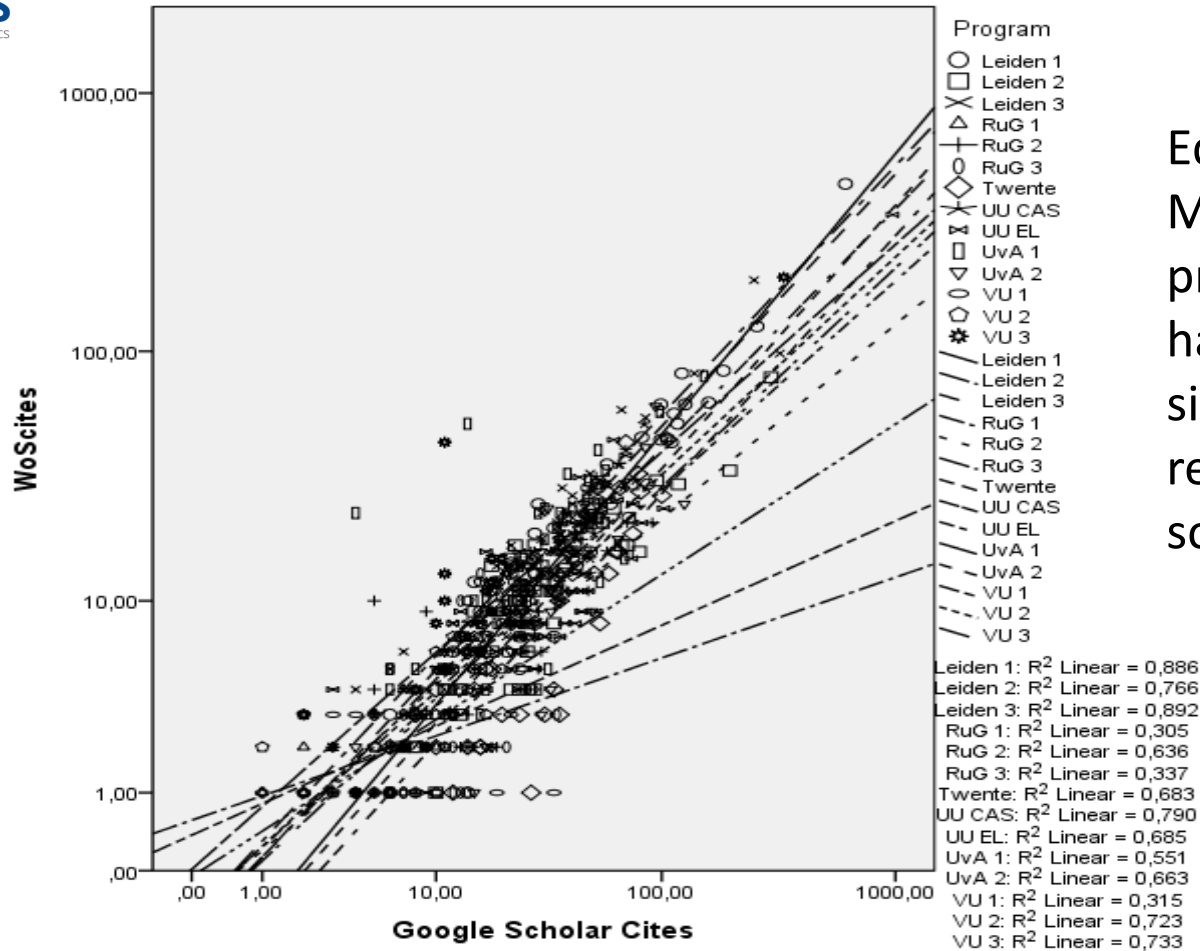
Comparing GS and WoS (2)



Anthropology:
programs differ
in benefitting
from using GS



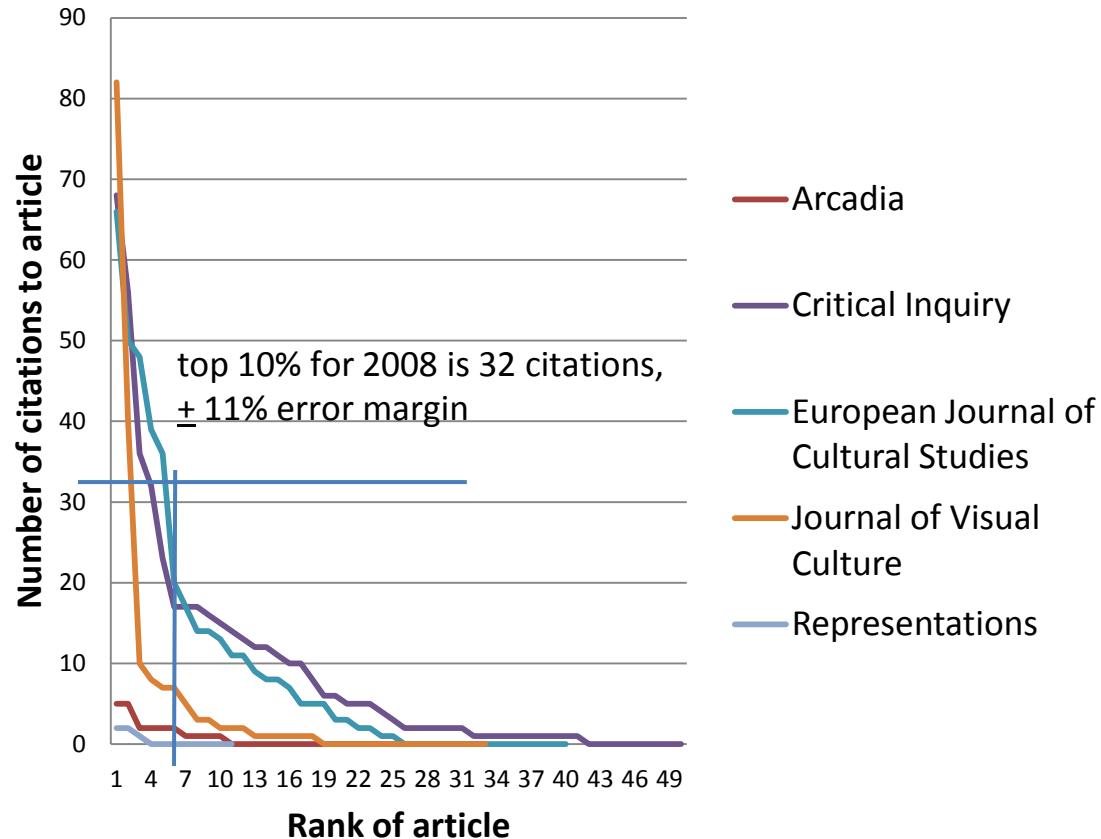
Comparing GS and WoS (3)



Ed/Ped:
Most
programs
have
similar
results, but
some don't

μ Possibilities of benchmarking in GS?

Stratifying Citation levels based on articles in
5 Humanities journals for 2008



- Journal statistics available...
- What about Books, volumes?, Conference papers?, Catalogues?



Issues in using GS



- Workload and important data limitations
- Possibilities for field normalization
- What is a citation? Shifting definition.
- Choosing a proper selection base
- The place of bibliometrics in research evaluations

Conclusions

- Google Scholar is a valuable resource:
 - The amount of information in Google Scholar is much larger than in WoS: 2,5 to 8 times *esp. in SSH*
- But in using Google Scholar...
 - Only small/medium-scale studies are currently possible, due to access (and data reliability control)
 - New forms for field normalization are necessary
 - How much is Google Scholar indexing from the total output?



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