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How reliable is Google Scholar for Bibliometrics?

A summary of the literature

BAR-ILAN, Judit 2008. Which h-index? — A comparison of WoS, Scopus and Google Scholar. *Scientometrics*, 74, 257-271.

- Compared metrics from Israeli authors from HighlyCited.com and Israeli Nobel Prize Winners in 2004/5 (not in the latter)
- Excluded authors difficult to disambiguate or had no pubs in date range
- Analysis from 1996-2006
- found significant differences when compared to Web of Science and Scopus
- whether metrics are higher depends on the discipline - maths/computing are higher, physics lower
- Need for data cleansing in GS – errors in Year & Inexact matching of authors ("J Smith" finds SJ Smith)

JACSO, Peter 2008. The pros and cons of computing the h-index using Google Scholar. *Online Information Review,* 32**,** 437-452.

* data incomplete or work (unsurprising as the data is not validated by humans)

- F PASSWORD = FORGOTTEN PASSWORD
- M Profile = My Profile
- Errors in author names e.g.Julie M Still > Julie M
- Duplicates – from A&I Databases (Eric etc.) can cause errors in citation counts
- Some specific errors have been resolved (i.e. Google read the article!)

FRANCESCHET, Massimo 2009. A comparison of bibliometric indicators for computer science scholars and journals on Web of Science and Google Scholar. *Scientometrics*, 83, 243-258.

- Academics at University of Udine
- Top 20 computer science journals + top 20 in the 'theory and methods" category
- h-indexes about 3x higher

- Best correlation – citation based metrics (cites, cites/yr, etc.) + g
- Moderate – paper based metrics (e.g. cites/paper), h
- Metrics are higher because of the discipline's use of nigh-quality, very competitive conferences as a mode of primary publication
- Correlation between ranking of academics so highly ranked academics in Google Scholar are generally also highly ranked in Web of Science even if the numerical value of the metrics differs

LEVINE-CLARK, Michael. & GIL, Esther 2009. A comparative analysis of social sciences citation tools. Online Information Review, 33, 986-996.

- Highly downloaded articles from Elsevier social sciences journals
- Articles have more citations in GS – increased coverage of books, conferences & preprints & some duplication
- Monograph publication, both sole authors and chapter in edited books

LEE, Janet, KRAUS, K. L. & COULDWELL, W. T. 2009. Use of the hindex in neurosurgery. *Journal of Neurosurgery,* 111**,** 387-392.

- Random sample of academic neurosurgeons
- Significant correlation with academic rank
- H-index tends to be higher in GS, with small differences at low academic rank & increasing differences at higher rankings

MINGERS, John & LIPITAKIS, E. A. E. C. G. 2010. Counting the citations: a comparison of Web of Science and Google Scholar in the field of business and management. *Scientometrics,* 85**,** 613-625.

- Research outputs from 3 UK Business schools
- Broad coverage picks up fringes of subject
- Higher metrics in GS
- Monograph coverage
- But lack of transparency as to what is actually indexed and what may be missing