Harzing's 'Publish or Perish 4' (draws on google scholar, covers books and articles)
* Citation compiled by RA, late 2013.
* Compilation has errors (several in my case, a balance of wrong inclusions and wrong omissions).
* Only items with more than 5 citations are included.
* Carsten's preferred measures: cites per author, hi-norm, AWCR per author.
Below all SOSC faculty. Selected metrics. Definitions on next page. Note how the relative performance of individuals varies from metric to metric.
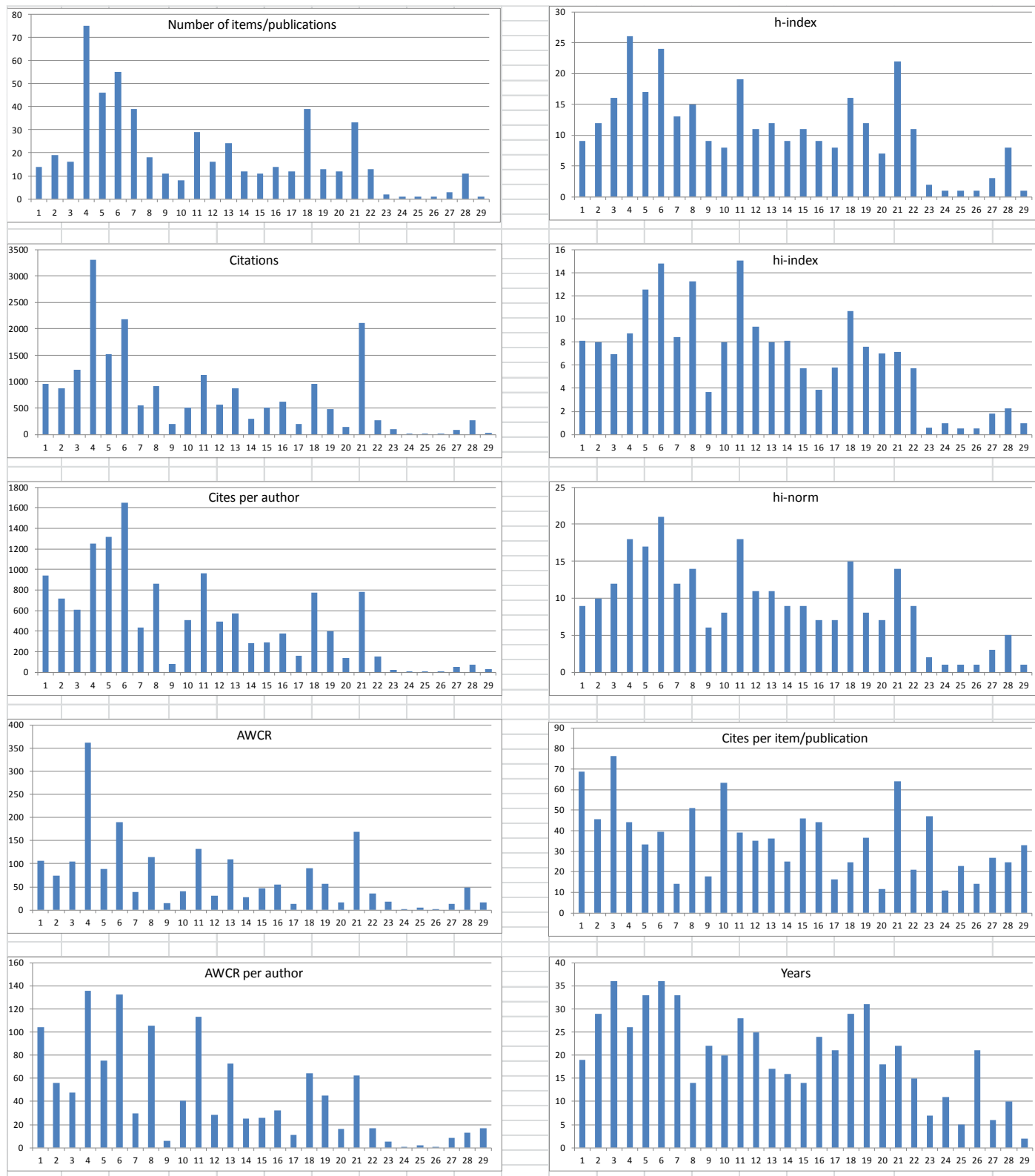
Publish or Perish 4 User's Manual
Citation metrics [some omitted by CH, also some details omitted]

Basic metrics

The basic metrics are quite straightforward and are calculated as follows in Publish or Perish.

Total number of papers

This is simply the number of papers returned by Google Scholar or Microsoft Academic Search in reply to a query.

Total number of citations

The sum of the citation counts across all papers.

Average number of citations per paper

The sum of the citation counts across all papers, divided by the total number of papers. The median and mode are also calculated.

Average number of citations per author

For each paper, its citation count is divided by the number of authors for that paper to give the normalized citation count for the paper. The normalized citation counts are then summed across all papers to give the average number of citations per author.

Average number of citations per author per year

This is the average number of citations per author as above, divided by the number of years covered by the result set.

Average number of papers per author

For each paper, 1/author_count is calculated to give the normalized author count for the paper. The normalized author counts are then summed across all papers to give the average number of papers per author.

Average number of authors per paper

The sum of the author counts across all papers, divided by the total number of papers. The median and mode are also calculated.

h-index

The h-index was proposed by J.E. Hirsch in his paper **An index to quantify an individual's scientific research output**, *arXiv:physics/0508025 v5 29 Sep 2005*. It is defined as follows: A scientist has index h if h of his/her N_p papers have at least h citations each, and the other (N_p-h) papers have no more than h citations each. […]

Individual h-index (3 variations)

[…] It divides the standard h-index by the average number of authors in the articles that contribute to the h-index, in order to reduce the effects of co-authorship; the resulting index is called h_I.

Publish or Perish also implements an alternative individual h-index, $h_{I,norm}$, that takes a different approach: instead of dividing the total h-index, it first normalizes the number of citations for each paper by dividing the number of citations by the number of authors for that paper, then calculates $h_{I,norm}$ as the h-index of the *normalized* citation counts. This approach is much more fine-grained than Batista et al.'s; we believe that it more accurately accounts for any co-authorship effects that might be present and that it is a better approximation of the per-author impact, which is what the original h-index set out to provide. […] -> $h_{I - Norm}$

Age-weighted citation rate (AWCR, AWCRpA) and AW-index

The AWCR measures the number of citations to an entire body of work, adjusted for the age of each individual paper. It is an age-weighted citation rate, where the number of citations to a given paper is divided by the age of that paper. Jin defines the AR-index as the square root of the sum of all age-weighted citation counts over all papers that contribute to the h-index.

However, in the Publish or Perish implementation we sum over all papers instead, because we feel that this represents the impact of the total body of work more accurately. (In particular, it allows younger and as yet less cited papers to contribute to the AWCR, even though they may not yet contribute to the h-index.)

The per-author age-weighted citation rate is similar to the plain AWCR, but is normalized to the number of authors for each paper.