

Guidance on citation metrics in appraisal and appointment

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Overview and ongoing work

The [UCL bibliometrics policy](#) sets out some principles for the use of citation metrics in research assessment at UCL. The policy was adopted in 2020, and work is underway to ensure these principles are fully embedded into UCL's internal processes. As part of [the overall guidance](#), this paper sets out some general advice on how to use citation metrics for individual assessment, and guidance on where to find those metrics.

For **new appointments**, UCL has committed to ensuring that job advertisements are in keeping with the principles of the policy and of the Declaration on Research Assessment. This means that they should not require publications in specific named journals, or those above a certain rank or impact-factor. Advertisements which do contain such requirements will not be published.

For **appraisals**, it is important to assess work on its own merits and use citation metrics in support of this, rather than over-emphasise the significance of quantitative metrics. Metrics should be avoided for fields where they are known to be inappropriate (eg, many fields in the arts and humanities), and should not be used as simple numerical targets (eg "only papers with more than ten citations"). We recommend that where citation metrics are used, normalised metrics such as category-normalised citation impact or percentile rank are used, rather than simple citation counts. Advice on this is provided in the next section.

In particular, the [UCL Academic Careers Framework](#) explicitly states that UCL rejects the use of "certain quantitative indicators" such as the impact factor and other journal-based metrics. The metrics policy also states that metrics used to rank individual researchers, such as the h-index, should be avoided – see [this guidance](#) for more details on the problems with the h-index.

In the future, UCL HR are planning to develop training modules covering responsible use of metrics and open science principles in an assessment context. These will be made available as part of the training program for members of appointment panels or for those involved in appraisals. Discussions are also underway about incorporating responsible use of metrics into the ongoing internal quality review process. As part of this, we hope to develop more detailed guidance on the use of metrics in these contexts.

If you have concerns about the way metrics are being used in appointments or appraisals, please contact bibliometrics@ucl.ac.uk for advice – this can be given in confidence.

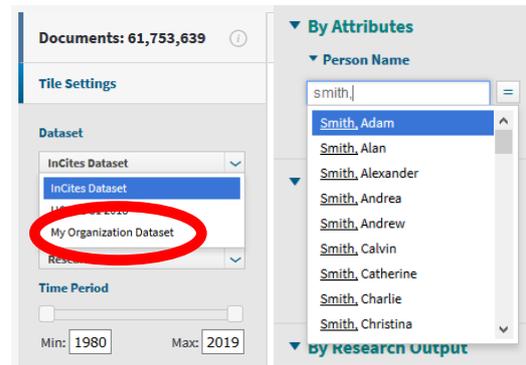
Where can we find appropriate metrics?

To see more advanced metrics than simple citation counts, we recommend you use the InCites tool. This aggregates data from Web of Science, and is available to all UCL users. This walkthrough will focus on the InCites "MyOrganisation" data, which is derived from papers in RPS and thus known to be by UCL authors.

InCites can be accessed through a link in the top bar of Web of Science, or else by going to <https://incites.clarivate.com>. It requires registration when you first use it – we recommend you use

your UCL address here. You will need to be on the UCL network when you first register, so be sure to use a remote desktop or VPN if you are off-site.

To get papers for a particular individual, select "researchers" and then, under "dataset" in the top right, select "My Organization Dataset". Scroll down to the "By Attributes" filter, and enter the name (as "Surname, Forename") - you can enter several names at once here if desired, and you will get a list for each one. Then click "Update Results". You can now view the list of papers and citation information by clicking the number under "Web of Science Documents" in the data results on the right-hand side. Download the list with the arrow icon on the top right of this list.



Name	Rank	Affiliation	Web of Science Documents	% Docs Cited
Smith, Alexander	1	Institute of Ophthalmology	51	58.82%
Smith, Alan	2	Dept of Space & Climate Physics	9	88.89%
Smith, Andrea	3	Behavioural Science and Health	6	100%
Smith, Adam	4	UCL School of Management	2	50%
Smith, Adam	5	Dept of History	1	0%



To get papers for a particular department or other research unit, the approach is very similar - select the "Organisations" button on the front page, and then, under "dataset" in the top right, select "My Organization Dataset". Scroll down to the "By Attributes" filter, and enter the department name - you can enter several units at once here if desired, and you will get a list for each one. Then click "Update Results". You can now view the list of papers and citation information by clicking the number under "Web of Science Documents" in the data results on the right-hand side. Download the list with the arrow icon on the top right of this list.

Once you have this list downloaded, you can manipulate it in Excel to find details for individual papers, or to compare all of the papers from a person/unit.

Interpreting the metrics

The key metrics here are Times Cited (col M), Category Normalised Citation Impact (col R), and Percentile in Subject Area (col S)

- **Times Cited.** This metric is a simple count of the number of times an item has been cited. Bear in mind that the number of citations is heavily influenced by a paper's publication date and subject; the Web of Science subject area(s) are given in Col G, "Research Area". Care should be taken when directly comparing citation counts for two papers in different fields.
- **Category Normalised Citation Impact (CNCI).** This is a relative citation ratio, comparing the number of cites this paper has received to the mean of all papers in the same field and same publication year. (The mean is shown as "Category Expected Citations", col P). A CNCI of 1 is equal to the world average; the overall CNCI for most UCL publications is around 2, varying by subject area.
- **Percentile in Subject Area.** This is an indication of where the paper sits in relation to all the others of the same field and same publication year. This is a reverse percentile, where the lower the value, the more highly ranked the paper - for example, a value below 10 would indicate it is in the top 10% of comparable outputs. Papers with no citations will be shown with a percentile of 100, and due to rounding, some papers which are incredibly highly cited may be shown as zero.

The CNCI and percentile, taken together, can give a good sense of where a paper fits in comparison to the rest of the field. We recommend looking at both to help avoid anomalies – for example, if a field contains a small cluster of incredibly highly-cited papers, this may mean that others which are still in the top 10% appear to have an unusually low CNCI, because the CNCI is driven by a simple arithmetical average.

For assessment of recent papers, it is important to bear in mind that the small number of citations involved can make statistics over a short period (the past 1-2 years) unreliable. In particular, for papers less than a year old, relative citation numbers can be very strongly affected by unrelated factors like the exact month of publication.

If your list of papers includes unusual material like editorials or book reviews, be alert for individual anomalies. Including all records can produce problems for normalised metrics by introducing dramatic outliers – for example, documents classed as “editorial material” are very rarely cited. The vast majority will have zero citations, and the rare items that are cited will have improbably high normalised values – if the average is only one editorial in twenty being cited, then an editorial with just one citation can shoot up to a CNCI of 20, vastly more than most research articles will receive.

FAQS:

1. *My paper isn't in here!*

Not all papers are included in InCites. Generally speaking, it only covers papers that are indexed in Web of Science - if a paper is in RPS but not in Web of Science, it won't be imported. This most commonly affects things like conference papers and book chapters.

If the paper has been added to RPS very recently, it may take a while to show up as it has to be manually imported. We are aiming to update InCites regularly, but it does take time to process the data.

If the paper was added to RPS some time ago, and you would expect it to be covered in Web of Science, please get in touch (bibliometrics@ucl.ac.uk) and we can look into it.

2. This download includes the Journal Impact Factor and something called the "Journal Normalized Citation Impact" - what about those metrics?

We recommend you **do not** use these. The Journal Normalised Citation Impact shows how a paper compares to others in the same journal, not the field as a whole; this is not very informative. The Journal Impact Factor is an averaged measure of citations for all papers in the journal, and does not necessarily indicate anything about that one paper. UCL has committed to not using the impact factor, or other journal metrics, for assessment purposes. See the [UCL Metrics Policy](#) for more information.

3. The metrics are very low for a paper but I know it is really important - what should I do?

Metrics are never perfect - some very significant work can have few indexed citations, and conversely some work can be highly cited simply through being famously wrong. We recommend you treat them purely as supporting information to help make your decisions. If you are wanting to highlight a particular paper as significant in eg an appraisal, but are worried it has a low number of citations, consider writing a short note explaining its significance, rather than relying simply on the citation count.

If you would like to know more about the underlying citations for a particular item, the "link" field (col N) will take you to a Web of Science record for that paper, where you can look at the individual citing papers.