Library Short Workshops

How to calculate your h-index

Dr. Fintan Bracken

For links to resources used in this workshop go to: http://www.symbaloo.com/mix/ullibraryresearch
Presentation outline

• What is the h-index?
• Advantages
• How to calculate your h-index using:
  - Web of Science
  - Scopus
  - Google Scholar (Publish or Perish)
• Exercise: Calculate your own h-index
The h-index is a simple metric to quantify the scientific output of an individual (Hirsch, 2005).

A h-index of 10 means that of all of the papers written by this author, 10 papers have been cited at least 10 times each.

Only meaningful when compared to others within the same discipline area & at the same career stage.

<table>
<thead>
<tr>
<th>Title</th>
<th>Journal Title</th>
<th>Year</th>
<th>Google Scholar Citations</th>
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<tbody>
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<td>Effects of set-aside management on birds breeding in lowland Ireland</td>
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<td>The diversity of birds and butterflies in Irish lowland landscapes with special reference to the effects of set-aside management on birds in the breeding season</td>
<td>PhD Thesis</td>
<td>2004</td>
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<td>Lowland bogs, fens and reedswamps</td>
<td>Bird Habitats in Ireland</td>
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The h-index is 3 as 3 publications have at least 3 citations each. In order to obtain a h-index of 4, the 4th ranked publication (the PhD thesis) would need to receive 3 more citations.
Advantages of the h-index

- Seen as a fairer alternative to simply counting total papers or times cited.
- It is a popular performance indicator used widely by scientists.
- As a metric it is considered fair as it discounts the disproportionate weight of highly cited papers or papers that have yet to be cited.
- It is easy to compute!
Limitations & cautions

- Academic disciplines differ in the average number of references per paper & papers published per author.
- Length of academic career will impact the number of papers published & the amount of time papers have had to be cited.
- Different patterns of co-authorship in different disciplines.
- Individual highly cited papers may not be accurately reflected in an h-index.
How to calculate your h-index

• There are 3 main tools to use:
  - Web of Science
  - Scopus
  - Google Scholar (Publish or Perish).

• Each tool may give a different answer as the content (sources) covered by each tool varies as does the depth of coverage & discipline coverage.
Scopus (www.scopus.com)
This author’s $h$-index is 59
Publish or Perish

- Free software created by Anne-Wil Harzing
  [http://www.harzing.com/pop.htm](http://www.harzing.com/pop.htm)
- Uses Google Scholar data (can also select Microsoft Academic Search data in Version 4 and above)
- Google Scholar covers more books, conference papers, technical reports, etc. than Web of Science & Scopus
- Coverage is uncontrolled
Google Scholar / Publish or Perish
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Exercise

• Calculate your own h-index using one or more of the three main citation tools
Summary

- The h-index is a combined measure of both productivity and impact.
- The h-index can be calculated by using Web of Science, Scopus and Publish or Perish (Google Scholar).
- For more information on the h-index and each tool see MyRI including this h-index datasheet.
- **Acknowledgement:** Some of the material in this presentation has been modified from MyRI (http://www.ndlr.ie/myri/index.html) under an Open Access NDLR Licence (Creative Commons Attribution-Non-Commercial-Share Alike 3.0 Unported) & from UCD Library’s Bibliometrics LibGuide http://libguides.ucd.ie/bibliometrics/researcherimpact.
Research Services Guide http://libguides.ul.ie/research

Getting Published and Maximising Your Research Impact

This recorded lecture examines how to maximise the impact of your published research and summarises much of the content of this LibGuide.

Maximising Your Research Impact 1

- Attend and present at conferences – communicate the results of your research & meet potential collaborators
- Seek to collaborate with researchers in other institutions especially internationally
- Carefully select title & keywords - search engine optimisation
- Make your work available on Open Access (OA)

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- Provide support on measuring your research impact and tracking your citations
- Advise on how to increase the visibility of your research and maximise the impact of your research
- Advise on open access publishing including funding agency policies
- Advise on author/publisher copyright permissions regarding open access publishing
- Provide training and support on the use of the University of Limerick Institutional Repository (ULIR)
- Provide EndNote training and support

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