## RESEARCH OUTPUT AND IMPACT FACT SHEETS



# WHAT IS THE H-INDEX?

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The h-index was first proposed in 2005 by JE Hirsh as a measure of the research impact of a scientist.

'The index h, defined as the number of papers with citation number greater than or equal to h, is a useful index to characterise the scientific output of a researcher.'

An index to quantify an individual's scientific research output

### HOW DO I CALCULATE THE h-index OF MY SEARCH RESULTS?

Web of Science	Citation reports
Scopus	Citation Tracker

You can search for the publications of an author, research group, or institution and calculate the h-index.

No database lists all articles. You must be aware of the difficulties of comprehensively searching for the publications of an author or group.

Help is available in both databases.

### **HOW DO I CALCULATE THE h-index OF MY SEARCH RESULTS?**

## Consider the following 3 researchers

Even in the same discipline, the h-index should not be used as a measure of research quality. The following 3 researchers have all published 10 papers and all have a h-index of 5, that is, 5 papers cited 5 times or more.

	Researcher 1 CITES PER PAPER	Researcher 2 CITES PER PAPER	Researcher 3 CITES PER PAPER
Paper 1	100	50	15
Paper 2	90	50	15
Paper 3	70	45	14
Paper 4	50	45	14
Paper 5	35	45	14
Paper 6	4	5	5
Paper 7	4	4	0
Paper 8	0	0	0
Paper 9	0	0	0
Paper 10	0	0	0
Average cites per paper	35.3	22.9	7.5

### Use the h-index measure with care.

Citation patterns vary across disciplines.
h-indices in Medicine are much higher than in Mathematics for example. It would not be fair to use the h-index to compare researchers working in different disciplines.

# PRODUCTIVITY + IMPACT = INFLUENCE

If your h-index is 15, you have 15 papers cited 15 times or more.

If your h-index is 20, you have 20 papers cited 20 times or more.

The h-index is a measure of the number of publications published (productivity) as well as how often they are cited (**impact**).

