# How to Determine Impact

**Article Impact**
- One form of measuring an individual article’s impact.
- Determines how many times an article has been cited and by whom.
- See Altmetrics (to the right).

**Journal Impact**
- One form of measuring of a journal’s impact.
- Measure reflecting the average number of citations to recent articles published in the journal.
- Used for relative importance in the field with journals with higher impact factors deemed to be more important.

**Book Impact**
- Number of times a book is downloaded and/or read.
- Availability of the book (libraries)
- Number of citations
- Recognition / Awards
- Textbook usage
- Book signings
- Translations
- Sales

**Researcher Impact**
- Attempts to measure both the productivity and impact of a published work of a scholar.
- Based on the scholar’s most cited papers and the number of citations that they have received in other publications.
- Can be applied to a group of researchers or scholarly journal.

**Altmetrics**
- More recent methodologies for measuring the use and importance of research.
- Based on information such as social media activity, number of downloads, and page views.
- Still an evolving field of measures.
- Looks at the broad picture of research.

## Why?

- Evaluate scholarly worth of an individual article.
- Indicates if an article is widely read and perhaps well-respected.
- Can be valuable for research leads.

- Evaluate scholarly worth of a journal.
- Rank journals within a discipline.
- Help scholar’s decide where to publish an article for maximum impact.
- Evaluation for promotion, tenure, and/or grants.
- Used by librarians during cancellations or new purchases.
- Journal editors may formulate policies to improve their impact factors.

- Evaluate scholarly worth and popularity of a book.
- Evaluation for promotion, tenure, and/or grants.
- Used by librarians during book purchases.

- Proposed by J.E. Hirsch as an index to quantify an individual’s scientific research output.
- Combines an assessment of both quantity (number of papers) and quality (impact or citations to these papers).

- Ability to combine different kinds of data from multiple sources can give a fine-grained picture of an article’s influence.
- Slow pace of academic publishing means citations can take months or years to appear.
- Relevant speed of altmetrics means it can be a useful guide to current literature.
- New technologies mean new ways of disseminating research.
## How to Determine Impact

### Researcher Support Services
Fall 2018

### Article Impact
- Google Scholar
- Web of Science
- ScienceDirect
- SciFinder Scholar
- ProQuest Databases
- Publons Score
- Pubpeer Comments
- PubMed iCite

### Journal Impact
- Journal Citation Reports (JCR)
- SCImago Journal & Country Rank
- Eigenfactor
- Cabell’s
- Harzing.com
- CiteScore
- Google Scholar Metrics
- Ranking lists by discipline

### Book Impact
- Online reviews
- WorldCat
- Google Scholar
- Information from the publisher
- Best seller lists

### Researcher Impact
- Web of Science
- Google Scholar
- Scopus (via ScienceDirect)
- Publish or Perish

### Altmetrics
- Altmetric.com
- ImpactStory
- PlumX
- Social media

### Where?
- Downloads / reads in databases
- Page views
- Social media mentions
- Media mentions

### How is Altmetrics related?
- Downloads / reads
- Views
- Social media mentions
- Media mentions

### Problems?
- Only one form of impact.
- Self-citing.

### Problems?
- Basic ideas might be cited over and over while “new” ideas aren’t cited as often.
- Impact factor is one quantitative metric amongst others.
- Self-citing.
- Primarily journals in English and from English speaking countries.

- Downloads does not indicate a book was read.
- Mentions does not equal quality.

- Calculation is not exact as an author can have a number of articles with few citations each.

- Might get a number, but difficult to compare against others sometimes.
- Weight of specific items (e.g. blogs, press releases, etc.) can be difficult.