Making online attention visible with Altmetric

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Head of Product, Altmetric

Researchfish
Strategy of Impact Conference 2018
ACADEMIC IMPACT

- Journal Impact Factor
- Citation counts
- H-index
- Number of publications

Traditional metrics

SOCIO-TECHNICAL IMPACT

- References in public policy
- Mentions in news reports
- Mentions in social media
- Mentions in blogs
- References in Wikipedia
... etc.

Alternative metrics or altmetrics

…”multiple digital indicators related to scholarly work…”
We think “alternative” means:

Alternative to only using citations.
Our mission is to track and analyze the online activity around scholarly research outputs.
attention → engagement → impact
attention $\rightarrow$ engagement $\rightarrow$ impact

- News
- Blogs
- Social media

- Citations
- Patents
- Policy
Advantages of altmetrics

- (Near) instant feedback for some attention sources
- Showcase many “flavours” of attention and impact that research can have
- Can be tracked for many different research output types, not just articles or books
Where research lives
Where research lives

PubMed
Scopus
Taylor & Francis
arXiv.org
Bloomsbury
Wiley Online Library
BMJ Journals
Oxford University Press
Nature
RePEc
etc.

Where it’s being talked about

YouTube
Q & A
Pinterest
Policy Documents
News
Blogs
Twitter
Faculty1000
F1000
Reddit
LinkedIn
Google+
Wikipedia
Facebook
Post-publication Peer Review

ALTMETRIC ATTENTION SCORE
The onward march of GWAS around cognitive function. Note some SNPs are also associated with brain structure (gives rise to a testable hypothesis about whether those brain structures mediate the effect of these SNPs - likely - and whether other variance of those brain structures).
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Gail Davies, Max Lam, [...] Ian J. Deary
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Nature Communications 9, Article number: 2098 (2018) | Download Citation &
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Effect on the NHS of the UK leaving the EU

Summary
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1/3 of staff in the figures do not have a known nationality. There are no equivalent figures for Northern Ireland, although some have argued, including a 2017 report in the Lancet, that Health and Social Care in Northern Ireland would be particularly vulnerable to a loss of labour as it “effectively shares a health and social care workforce with an EU country”, i.e. the Republic of Ireland.
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The Lancet, How will Brexit affect health and health services in the UK? Evaluating three possible scenarios, 28 September 2017
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Altmetric Badges
The starting point
Genetic variants associated with subjective well-being, depressive symptoms, and neuroticism identified through genome-wide analyses.
<table>
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<th>Select All</th>
<th>Description</th>
<th>In this award</th>
<th>In personal portfolio</th>
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- PubMed  
- DOI  
- Repository
Top 10 of 78 papers in September 2018

Challenges For Commercializing Perovskite Solar Cells
Science
Yao-Guang Rong, Hong-Wei Han

Dynamic DNA Methyltransferase 1
Science
Chongyuan Luo, Joseph R. Ecker

Clearance Of Senescent Glial Cells Prevents Tau-Dependent Pathology And Cognitive Decline
Nature
Taro Horiguchi, Ronnie J. Baker
Who uses Altmetric Badges?

- Author: 5,943
- Researcher: 4,566
- Publisher: 269
- Librarian: 492
- Other: 1,545

Anonymous responses captured from pop-up surveys on Altmetric details pages for 4 publishers. $n = 12,815$, data retrieved in July 2018.
Altmetric Details Pages
An output-level report
Study of 300,486 individuals identifies 148 independent genetic loci influencing general cognitive function

Overview of attention for article published in Nature Communications, May 2018

So far, Altmetric has seen 68 news stories from 58 outlets.

Chi ha bisogno degli occhiali è più intelligente: è scientifico
Focus.it, 19 Jun 2018
La figura del secchione che si rifugia dietro lenti spesse e si consuma la vista sui libri è ben scolpita nell'immaginario...

Faktatjek: Er folk med briller klogere end andre?
DR, 08 Jun 2018
Brillebrer er klogere end andre. Sådan har det lydt i danske og internationale medier i løbet af ugen på baggrund af ny...

Are more educated people more likely to be short-sighted?
MSN, 08 Jun 2018
New UK research has found that individuals who spend more time in education could have a greater risk of becoming short-sighted.

Educated People More Likely to Be Short-Sighted: Study
newsmax.com, 07 Jun 2018
New UK research has found that individuals who spend more time in education could have a greater risk of becoming short-sighted.
The Altmetric Attention Score

The Altmetric Attention Score for an output rises the more people or sources mention it.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Sources</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
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<td>The Altmetric Attention Score for an output rises the more people or sources mention it.</td>
<td>Each mention source contributes a different amount to the Score based on the relative reach of source.</td>
<td>Who mentioned the research item? The author of record? The publishing journal?</td>
</tr>
</tbody>
</table>

- Tweeted by 293
- Blogged by 4
- On 200 Facebook pages
- Mentioned in 6 Google+ posts
- Picked up by 1 news outlet
- Mentioned in 1 LinkedIn forum
- Reddited by 2
- On 1 video
- 166 readers on Mendeley
- 1 reader on Connotea
- 3 readers on CiteULike
Study of 300,486 individuals identifies 148 independent genetic loci influencing general cognitive function

Overview of attention for article published in Nature Communications, May 2018

This research output has an Altmetric Attention Score of 1500. This is our high-level measure of the quality and quantity of online attention that it has received. This Attention Score, as well as the ranking and number of research outputs shown below, was calculated when the research output was last mentioned on 01 September 2018.

Altmetric has tracked 11,713,715 research outputs across all sources so far. Compared to these this one has done particularly well and is in the 99th percentile: it's in the top 5% of all research outputs ever tracked by Altmetric.

New UK research has found that individuals who spend more time in education could have a greater risk of becoming short-sighted.

Educated People More Likely to Be Short-Sighted: Study

Newsmax.com, 07 Jun 2018

New UK research has found that individuals who spend more time in education could have a greater risk of becoming short-sighted.
An end goal: a high Altmetric Attention Score is not necessarily a good thing.

Indicators of quality

A replacement for peer review or citation-based metrics

A good grasp of the qualitative data is critical!
Altmetric Explorer
Trends across outputs
90.8 M

total mentions
12.1 M
mentioned outputs
Who uses Altmetric Explorer?
Researchers & Academic Institutions

**Researchers**
- Grant funding
- Tenure and Promotion
- Early career support

**Library**
- Collections development
- Researcher support
- Open access
- Institutional repository

**Public Relations**
- Efficacy of outreach
- Channel and audience analysis

**Development Fundraising**
- Best stories to make case for donating

**Research Office**
- Mission/Vision corroboration
- Competitive analysis
- Peer and government assessment
Who is engaging with my work?
Am I having an impact?
How can I improve?
Altmetric Explorer surfaces interesting insights for impact reporting.
Social media: 1,119,261 mentions
News and blogs: 100,904 mentions
Policy and patents: 46,770 mentions
Other sources: 12,659 mentions
Academic sources: 4,650 mentions
Patent attention

Recordable CD and DVD for Archiving
Overview of attention for article published in Microscopy Today, March 2018

- So far, Altmetric has seen 3 patents that reference this research output.

Policy attention

Cost of depression among adults in England in 2000
Overview of attention for article published in British Journal of Psychiatry, January 2018

- So far, Altmetric has seen 6 policy documents that reference this research output.

About this Attention Score
Good Attention Score compared to outputs of the same age 66th percentile.

Mentioned by
2 policy sources
Evidence of: Broader public awareness

The relationship between adiposity and cognitive function in a large community-dwelling population: data from the Trinity Ulster Department of Agriculture (TUDA) ageing cohort study

Overview of attention for article published in British Journal of Nutrition, July 2018

SUMMARY

So far, Altmetric has seen 40 news stories from 39 outlets.

Almost two-thirds of Americans have this sign of an unhealthy brain

Sign of the Times, 16 Aug 2018

There's even more evidence that your waistline is one of the best ways to tell if you're healthy as you age

BUSINESS INSIDER

THE IRISH TIMES

Elderly with high BMI at risk of cognitive decline: Study

Thu, Aug 2 2018 05:25:16 PM

Belly fat linked to cognitive impairment in older adults, study finds

Cross-Border research suggests location of fat deposits could influence brain health
Evidence of: Broader public awareness
Evidence of: Broader public awareness
Evidence of: Educational usage
What’s next for us?

• Can we make it easier to identify “what’s interesting”?
• Can we make it easier to save and share what’s interesting?

See what’s interesting

• More context
• More visualizations
• Comparisons

Save & share insights

• More flexible reporting
• Visuals in reports
• Save specific mentions
• Add a narrative
Thank you for listening!

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@portablebrain   @altmetric