Altmetrics: Unlocking opportunities for discovery

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Some definitions
“alt”-metrics/web-based metrics
Any trace or indicator of online behavior
Altmetric.com

Data science company dedicated to tracking and analyzing the online activity around scholarly research outputs
Research output

Any digital object produced in the research life-cycle
Online activity

Any form of engagement with scholarly research
Origins for the need for new measures

Journal metrics lag time

Niche fields with small journals

Research areas with no publishing focus

Grant funders calls for “broader impacts” evidence

Early career researchers with small research history
Who uses web-based metrics?

Journal publishers
Non-profits
Research libraries
Government agencies
Corporate/pharmaceuticals
Grant funders
Early career researchers
Foundations
Why?

Web-based metrics unearth...

New audiences of engagement, collaborators, trends, sentiment, red-flags, green-flags

...who, what, where, when...WHY?
Some numbers/reminders to consider...
20-25%
Most articles have very little or no online attention.
Altmetrics speak to attention not quality.
Attention can be positive, negative, or neutral.
Only a qualitative assessment of the actual mention uncovers new audiences, collaborators, and opportunities...
Meet Terri
Nannerl O. Keohane University Professor, Duke University

Chair in Social Behaviour and Development, Kings College London

Terrie is best known for her *pioneering research on the development of antisocial behavior* and for her collaboration with colleague and partner Avshalom Caspi in research on gene-environment interactions in mental disorders.

Grant funder demands taking weeks of lab time…

There had to be a better way….
She learned overnight…

…of her overwhelming reach
She learned overnight...

She was in the top 1%
She learned overnight...

Her top article had **global** engagement.
She learned overnight...

Her work was positively received...
In the news...blogs...social media...research commentary platforms...
In the news...blogs...social media...research commentary platforms...
Persistent cannabis users show neuropsychological decline from childhood to midlife, says a study in PNAS. (Free full text available)

Persistent cannabis users show neuropsychological decline from childhood to midlife
User: In the subreddit, 15 Feb 2015

Persistent cannabis users show neuropsychological decline from childhood to midlife
User: In the Wead Health subreddit, 26 Dec 2014

This scares the shit out of me, and I want to hear from everyone about this. Study demonstrates clear neurological decline going into adulthood from adolescent cannabis use.
User: lightshayde, in the r/trees - home of the ents subreddit, 12 Jun 2014

Hate to harsh your mellow but "Persistent cannabis users show neuropsychological decline from childhood to midlife" says Duke Neuroscientists.
User: righteousness, in the r/trees - home of the ents subreddit, 19 Jul 2013

This is what we are up against. Poorly done cannabis research with predetermined conclusions.
User: gingerzilla, in the Time to finally legalize trees subreddit, 30 Aug 2012

Study Shows Marijuana Use In Teens Correlates To Decreasing IQ
User: SpellingPhilhar, in the r/trees - home of the ents subreddit, 29 Aug 2012

A study on how cannabis affects long-term users, with an average IQ change of 2.182 points over 25 to 31 years. This is being advertised as "Persistent cannabis users show
Relative to the other research outputs Altmetric tracks...

Her research was amongst the most mentioned...in the entire database.
Relative to the other research outputs, Altmetric tracks...

Her research was amongst the most mentioned... by journal.
Relative to the other research outputs, Altmetric tracks...

Her research was amongst the most mentioned... by articles of the same age.
Relative to the other research outputs, Altmetric tracks...

Her research was amongst the most mentioned by articles of the same age in PNAS.
Beyond grants…what else did Terri do with this data?
Her lab was looking to listen and amplify.
She provided new web-based metrics for her grad students and post-docs. Facilitating recognition early career researchers rarely get.
Her team anticipated negative reactions to controversial findings…
They actively monitored specific blogs, tracking commenters’ feedback. Quickly identifying another lab critiquing their data and methods...
“Qualitative Altmetric data gave us the opportunity to be collegial by bringing these critiques to our attention.”
Terri’s lab has since reached out.
Offering to share data

And collaborate on a future paper...
She’s not the only one...
Review grant applications

Evaluate quality of outreach efforts

Augment tenure & promotion

Discover trending content

Uncover potential new collaborators

Stay ahead of potential PR fires

Demonstrate “broader” or “societal” impact

Evaluate gaps in reach

Determine new channels for reaching stakeholders

Understand engaging audiences
What can these new metrics do for your organization, your members, your readers, and your stakeholders?

Learn more at altmetric.com, @altmetric, or info@altmetric.com
Thanks for listening!

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