

A take on altmetrics and their role in the changing scholarly landscape



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important equity and
social justice role”**

Metrics, and the responsible use of them, remains a hot topic for many institutions, particularly those in the UK who have been gearing up for their REF submissions.

This and other challenges were the focus of discussion at a recent Lis-bibliometrics event held at the University of Manchester earlier in 2020.

We caught up with one of the presenters from the day, Gemma Derrick, to get her take on altmetrics and their role in the changing scholarly landscape.

First steps into altmetrics

Gemma's journey has taken her from medical training to a PhD that focussed on science communication in research evaluation systems, Gemma is keen to bridge the gap between the STEM experience and social science perspective. It's this curiosity that led Gemma to her current role - and her approach to altmetrics has been no different.

Upon learning that such data were available from the scientists around her (Gemma initially started a PhD in Neuroscience), Gemma began to look into the metrics and information relating to the work of the scientists around her - using this a way to get familiar with what was out there and understand how it reflected in the context of the academic contributions of her peers.

The growth of the field of altmetrics meant that suddenly the data required to gather a broader picture of the influence of a piece of research was more accessible than ever before. This, Gemma says, coupled with increased demands for researchers to quantify research outputs, means that researcher like herself are always looking for new ways to demonstrate the outcomes of their work.

“Just as with traditional metrics, such as citations, the value of a piece of research isn’t about putting it into one number and making a comparison, it’s more about offering a fuller picture of the research.”

Their role in the scholarly ecosystem

Altmetrics play an interesting role in our evolving academic landscape. Current assessment methods, Gemma notes, are ‘as much an assessment of how you fit a pre-determined mold as much as/more than how valuable your research actually is’.

Altmetrics, and indeed any form of alternative insights researchers can use to tell the story of their work, play an important equity and social justice role. In a system that is essentially controlled top-down, there is a risk that people who aren’t yet established or don’t fit the white male mould sometimes don’t even value their own contribution.

Should we be trying to measure the outcomes of research at all?

‘Absolutely, that’s a given’ said Gemma, without any hesitation. She went on, “Dissemination is the key. We are all publicly funded one way or another - researchers have a responsibility to disseminate. Not all research has the same value - the more we share and the more we have access to info to help us determine if it’s good quality, important or not is valuable.”

In an age of ‘fake news’, the more open you are about sharing and disseminating, the more open you also are to critique - hopefully reducing the risk of false facts informing policy. Dissemination is important for transparency and ensuring greater robustness - it provides the opportunity to assess the origin and process through which these new ideas were generated, which is key for a functioning democracy. Gemma sees that there are much wider implications here than just within the science system.

Introducing altmetrics to others

Noting that she is fortunate to be in both a leadership role within her institution, and a mentorship role for young researchers, Gemma says she has seen how they regularly undersell how excellent they are; the one thing standing in the way is not a measure of quality, but their own self-belief.

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Altmetrics can be a useful tool for boosting their confidence - they provide evidence to show them where their work is being discussed and used globally; numbers that demonstrate they are really making a difference, being noticed. This level of utility is not usually available through traditional, mainstream metrics and yet for a young researcher, knowing that their work is discussed and appreciated globally is invaluable to their confidence and feeling of worth.

For all researchers, but perhaps particularly those who are open to using social media, making a larger proportion of people aware of their work and open to their arguments is valuable. What’s critical is that this is not about comparing yourself to someone more experienced or more established - it’s about making these emerging researchers realise they are having an impact they likely didn’t realise they were before.

Social media and other forms of online sharing can be integrated into a strategy to build their own narrative, to be used in professional reviews or funding applications. The number alone isn’t powerful, but building an argument and showing evidence to back that up is.

As for the people who are reluctant to consider or give weight to altmetrics? “Not having used something before is not a reason they shouldn’t be used in future. The question should be on how to use them” says Gemma. “Within academia, there are lots of power relationships going on. Using the same metrics and methods of evaluation all the time is just reinforcing the hierarchy, again and again. Research and researchers come in many different guises - rewarding only one and neglecting these others is not a good way to do things.”

And gaming? “Easily gamed? Which metric?! They all can be” states Gemma. “Mainstream metrics are not devoid of this, in fact they are gamed more often - but we are more conscious of this. With altmetrics, a number can be gamed, but the context can’t be. Drill down and see what people are actually saying to understand the context. The more metrics you introduce the more difficult it is to game them all but also, on the other hand, the more difficult it is to make a judgement based on one metric alone!”

Future developments

Altmetrics and other data that can help us understand the dissemination and further use of research are increasing exponentially. That said, “developing and implementing the use of those metrics are two different things”.

This, says Gemma, is where groups like Lis-Bibliometrics have a role to play: scrutinizing both the data itself and how they are applied, and facilitating questioning around the responsible use of metrics.

“It’s really important that we don’t see a metric as evidence of actual change, e.g. patent citation as societal impact - I don’t think such a measure exists. You need then to go on and show how it was used in that patent and what difference it actually made - something I think is impossible to quantify, really.”

For those who are less familiar with altmetrics (or metrics) and wondering where to start, Gemma encourages starting with yourself, or a researcher you know well. Start looking at the data and consider what it’s telling you, and how that compares with your previous perceptions and then question yourself, your assumptions and your biases about what is really valuable to you as a researcher, and what is not.

Develop a critical interest in these metrics and start to understand how they can be used in different ways - and what they are communicating to the world about you and your research.

For more information on altmetrics, please visit www.altmetric.com