

AltMetrics

Carl G. Mattacola, PhD, ATC
College of Health Sciences,
University of Kentucky, Lexington KY

Perception

- Naïve Faculty Member & Scholar
- Administrator
- Editor



**JOURNAL OF
SPORT REHABILITATION**
The Scientific Source for Clinically Based Evidence to Advance Rehabilitation for the Physically Active

Altmetrics

- Data and knowledge bases refer to it,
- Article views,
- Downloads, or
- Mentions in [social media](#) and news media.^{[5][6]}

Transition for old dogs

- Blogs
- Tweets
- Social Media
- Linked-In



- Most common metric for evaluating research impact has been the number of times a research article is cited by other articles.
- The number of citations received by the journal that published the article, summarized using a formula called the *journal impact factor*.

- *Journal Impact Factor*
VS. **alternative metrics** of impact.

- A = the number of times that articles published in a two year span were cited by articles in indexed journals .
- B = the total number of "citable items" in a two year plan. ("Citable items" are usually articles, reviews, proceedings, or notes; not editorials or letters to the editor.)
- Impact factor = A/B .

PROS

- Reviewed by Peers
- Specialized area of study
- Studies that are referenced more are considered more impactful
 - Sound familiar

CONS

- The more prestigious most read journals are higher ranked
- Can Be manipulated (review papers)
 - Sound familiar
- More financially viable have higher impacts

- Of importance for Administrators is the

Determination of a Faculty Members
Expertise and Impact

- How do you combine all the various metrics that are available to best present a faculty members expertise?
- Possibility of only rewarding the most promising of studies. *Journal of non-significant results*

Temporal Issues

- How to gauge long term success via altmetrics
 - Longevity of conversations.....length of threads

Typical Considerations of the Current Publication Process

- Distribution of the Research that you publish versus where did you publish
- Peer Review provides a basis for examination by experts in your field

Electronic CV

- What will it look like?
- Will your links be automatically updated?
- Will it be more like a web page with current publications, tweets, social links, and links to previous and current conversations
- Links to all the companies that assess metrics
 - This has the potential to be very confusing
- Bibliography will be live

How are all these scores calculate?

- <https://www.researchgate.net/publicprofile.RGScoreFAQ.html>



What I can't grasp is how and with how many metrics?

- Impact Story: <http://impactstory.org/>
- PLOS Article-Level Metrics Application: <http://api.plos.org/alm/using-the-alm-api/>
- Altmetric.com: <http://www.altmetric.com/>
- Plum Analytics: <http://plumanalytics.com/>

ResearchGate

- [Research Gate](https://www.researchgate.net/aboutus>AboutUs.html)
<https://www.researchgate.net/aboutus>AboutUs.html>

Journals

- How do they get involved?
- Will the journal with the most money be most successful in disseminating data?
- Will journals need to be the repositories for data?
- What is the role of journal editor to determine PR and impact ?

Is the researcher with the most altmetrics the most impactful?

- Encouraging researchers to tell their own impact stories on their CVs, using broad sources of data, will help spur a much-needed conversation about how research evaluation is done and should be done in the future.

The Power of Altmetrics on a CV, *Heather Piwowar and Jason Priem, Bulletin, April/May 2013*

- Supplement existing usage statistics to provide a broader range and interpretation of research-output impact for the benefit of authors



How do you train the next generation of Faculty

- Trained as scholars and teachers
- Trained to disseminate research and use social media??
- Is or will this be a product of a good department/college??
- Who pays for such a service? Altmetric
- www.altmetric.com

- I think the argument is not the use of metrics, like journal impact factors nor their importance of establishing (some form of) assessment of a broad range of scientists and scholars. Similar to “a Z score” how can you compare different people, metrics, and scales, respectively.
- I think what is most important is how do you capture and paint a comprehensive picture of the dissemination of information using all the technological tools that are available to us.



Carl G. Mattacola, PhD, ATC, FNATA

Professor – Director Division of Athletic Training,
 Rehabilitation Sciences Doctoral Program
 University of Kentucky
 College of Health Sciences
 Wethington Building, Room 210E
 900 South Limestone
 Lexington, KY 40536-0200

Office: (859) 218-0860

E-Mail: carlmat@uky.edu
http://www.mc.uky.edu/athletic_training/