

User Profiling in Altmetrics: the need to enrich altmetric data

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Motivations for studying user profiles

- Altmetrics is anticipated to reveal societal impact. Does it really reveal societal impact? On which segment of the society does the research has the impact on?
- Bornmann (2014) puts it: “[w]here the broader impact of research is concerned, it is much more important to learn who has used an actual research product and why, than to simply know how many people have in total” (p. 901).

Who are tweeting research articles?

Do all tweeters should be counted equally?

Data Collection

- 133 articles with the highest number of tweets, published in 2008-2013 in top 70 psychology journals (SSCI)
- Twitter profiles of 1472 tweeters of 2,016 tweets (English only, no duplicates but retweet included)

User Categories

Users manually categorized into:

- individual vs organization (based on description in Twitter profile)
- academic vs non-academic (based on description in Twitter profile)
- gender (derived from name and profile picture)
- geographic location (derived from time zone)

Findings

Geographic Location

Geographic Region	No. of users
North America	566 (48.5%)
Europe	439 (37.6%)
Australia-Oceania	55 (4.7%)
South America	44 (3.8%)
Africa	34 (2.9%)
Asia	23 (2.0%)
Middle East	5 (0.4%)
Central America and Caribbean	1 (0.1%)
Total	1167

- 86% of users from North America and Europe
- Follows Twitter population at global level
- Since articles are written in English, they may be inaccessible to non-English speaking general public.
- Good to publish in official language of the country or in multiple languages (medical papers)

Individual/Organization Academic/Non-academic

	No. of Tweets	No. of Tweeters
Individual	1512 (77%) (62% - non academic)	1199 (83%) (67%- non-academic)
Organization	456 (23%) (61% - academic)	251 (17%) (45% - academic)
Total	1968	1450

Often, tweets by organizations do not reflect genuine interest and usage of research output.

Gender

	No. of Tweets	No. of Tweeters
Female	469 (32%)	393 (34%)
Male	986 (68%)	758 (66%)
Total	1455	1151