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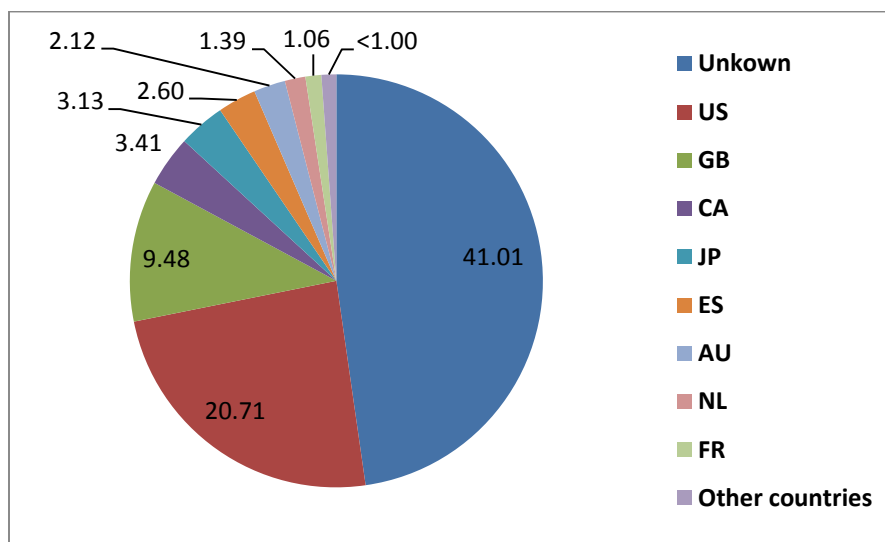
<http://altmetricsconference.com/could-we-start-to-talk-about-an-altmetric-divide-on-the-imbalance-in-the-access-and-use-of-social-media-platforms-across-countries/>

### Could we start to talk about an 'altmetric divide'? On the imbalance in the access and use of social media platforms across countries

There have been many debates in the literature on possible factors that could have an effect on the use and adoption of social media by different communities [1; 2] and particularly by scholars across different countries, specifically by scholars in developing countries [3]. Social media usage differs based on generation, individual characteristics (such as gender, level of education, level of access to technology, level of acquaintance with international languages, information literacy, information behaviour, cultural and technological infrastructure, etc.), as well as the cultural, technological, economical and political situation of countries and regions all over the world. In this blog post, without going into much detail, some of the possible factors that could explain these differences are discussed.

Based on statistics, China, India and the United States concentrate the largest number of social media users in the world [4]. Moreover, the most prominent social media platforms extensively used across the globe are Facebook, Instagram, and Twitter [4]. If we look into altmetric sources, most of the scholarly Twitter users (based on the number of distinct Twitter users from Altmetric.com tweeting about scientific publications in the WoS, see Figure 1) come from large western English speaking countries such as US, GB, and CA . Figure 1 shows that more than 20% of tweets mentioning scholarly papers come from US and about 10% from UK.

Figure1. % of unique Twitter users of WoS publications across top 8 countries



Based on the above arguments, the main question that emerges is why some countries are among the main users of social media platforms in altmetric reception? Is it simply a question of size, or there are more important factors that encourage users from those countries to be active in these

platforms while there are other factors or barriers (e.g., linguistic, educational, cultural, etc.) that hinder the presence of others? And finally, how can be explained the fact that in some countries one platform is sometimes preferred over the others (e.g. Sina Weibo over Twitter in China) and what would be the fundamental reasons for such a preference? Clearly, there are important questions that call for deep investigation on the use and adoption of social media platforms worldwide, mostly needing a focus on the specific and distinctive environments of each country.

It can be suggested that, apart from poor infrastructure and lack of communication technology, digital divide and inequality to access to internet or smart phones; also restrictive policies on access to social media platforms across countries, such as censorship, controlling online environment, or encouraging the use of local tools, can be counted among the factors that could clearly influence and limit the social media usage in some countries. For instance, in countries such as Iran or China access to Facebook is restricted and in some cases it is only available through proxy servers and VPNs. In these cases, local networks (such as Sina Weibo in China) or other social networks (such as Instagram or local tools), are used by the nationals of these countries instead of the other more mainstream international platforms like Twitter. These examples suggest that the benefits of social media platforms, which have the potential to bridge the digital divide between developed and developing countries, are far from being obtained.

In terms of altmetric research, there could be some biases in the collection of altmetric data by the different providers and aggregators. For example, similar to citation databases, coverage of altmetrics sources seems to be mostly biased towards English-language sources and international publications where country's local publications are underrepresented most of the time [5], or only focusing on specific mainstream publishers or just on publications with digital identifiers such as DOIs (which may not have the same level of adoption among all countries). Therefore, we argue that most of the altmetric indicators can be expected to face the same problems as citation indicators in terms of international representation. Juan Alperin has already warned against the fact that these new altmetrics favor developed countries and emphasized that the potential of altmetrics for serving the scholars from developing countries (the so-called 'alternative scholars') is essentially neglected' [6].

It is clear that more research is needed to unravel the important limitations related to geographical, cultural and national biases, as well as to be able to suggest possible solutions for these countries; particularly in order to open the possibility for a proper integration of social media activities of the users from these countries in the altmetric toolset. In addition, the altmetric research community faces the urgency of introducing more local dimensions in their frameworks and studies; otherwise, the important distinctive behaviours of scholars from several countries may end up being neglected, hiding the true social media reception of their scientific outputs.

All in all, it seems clear that apart from just studying correlations between altmetrics and citations, as well as focusing on data quality issues, research on the local specificities of social media, internet divide and internet access limitations need also to be explored and properly understood. Thus, to identify and understand the important barriers and limitations that may have an effect on the usage of scholarly social media platforms by users within developing countries is a critical necessity. Such research should make possible to gain more knowledge and insight on the potential limitations that should be considered in order to be able to develop comprehensive global applications of altmetrics. In summary, ignoring the local specificities of countries in their access to Internet and use of social

media platforms cannot remain anymore ignored, particularly if we expect altmetrics to genuinely contribute to a more “global brain” in the dissemination and understanding of scientific information.

#### References:

- [1]. Sobaih, A. E. E., Moustafa, M. A., Ghandforoush, P., & Khan, M. (2016). To use or not to use? Social media in higher education in developing countries. *Computers in Human Behavior*, 58, 296-305.
- [2]. Nel, P. (2016). Social media usage by academics: some comparisons from a developing country and developed countries’ perspectives. *Proceedings of Annual South Africa Business Research Conference 11 - 12 January 2016, Taj Hotel, Cape Town, South Africa*, ISBN: 978-1-922069-95-5
- [3]. Alperin, J. P. (2015). Geographic variation in social media metrics: an analysis of Latin American journal articles. *Aslib Journal of Information Management*, 67(3), 289–304.
- [4]. [www.statista.com/](http://www.statista.com/)
- [5]. Paul-Hus, A., & Mongeon, P. (2014). The journal coverage of bibliometric databases: A comparison of Scopus and Web of Science. In *Proceeding of METRICS 2014 workshop at ASIS & T. 5*, pp. 1751-1577.
- [6]. Alperin, J. P. (2013). Ask not what altmetrics can do for you, but what altmetrics can do for developing countries. *Bulletin of the American Society for Information Science and Technology*, 39(4), 18-21.