Tracking researchers and their outputs: New insights from ORCID IDs: Extended Abstract

Author name disambiguation is problematic despite advances in algorithms and national and organizational programs to register scholars. The rise of scholarship from China, as well as South Korea, has contributed to difficulties in linking names with publications because of duplications occurring in anglicized versions of the names. Aiming to address the problem of linking authors to their publications in this context, some publishers have developed unique author identifiers. One identification system that has been promoted for its open source and cross-national approach is ORCID, the Open Researcher and Contributor ID system. ORCID has been in operation since October, 2012, and its adoption has the potential to give hope to bibliometric researchers (among others) who seek to conduct studies that require better connections between scholars and their publications.

The aim of this paper is to advance understanding of the usefulness of ORCID for bibliometric research. We use data from the Web of Science (WoS) Core Collection to understand where ORCID adoption is stronger and weaker. The analysis is conducted at two levels. First, we perform macro-level analyses, through searches of WoS aggregated to the country, organization, and journal levels. Second, we focus on the thorny problem of name disambiguation of scholars with the anglicized Chinese name of "Wang" by focusing on those who have received the "Highly Cited Researcher" designation based on Web of Science citations and on one of these Researchers who provided us with a verified list of publications. The results suggest that ORCID adoption is uneven at the country level: stronger in Europe and weaker in Asia, where the need for author identification is perhaps the greatest. This regional

difference also filters down to the organization level, with research organizations in Europe generally having higher ORCID penetration at the article level than those in Asia or the US. Our review of highly cited researchers with the surname "Wang" found that most of these researchers did not have an ORCID iD. These results suggest that bibliometricians may use the identifier as one of many search tools, but do so with care until its use has diffused more widely into the scholarly population, especially in Asia.