Probabilistic estimation of gender composition across references

Recent evidence suggests that publications with female names at prominent positions in the author list are cited less often in the field of neuroscience than should be expected [1]. To raise awareness and to work towards more equitable research practices, we here report our own citation practices. As done by Dworkin et al. (2020), gender estimates (F = female; M = male) were extracted for the names of the first and last authors across all references (n = X) through an automated service (https://gender-api.com) and the cleanBib toolbox [2]. In case of low assignment accuracy (<.80), publicly available pronouns were manually searched for. Following the exclusion of self-citations (i.e. citing the first and/or last author of this work; n = X) and the exclusion of those where a manual search failed (n = X), our reference list encompassed X% (n = X) FF (first author/ last author), X% (n = X) MF, X% (n = X) FM, and X% (n = X) MM categorization. As in [1], citations with singular authors (X) F, X M) were subsumed under FF or MM respectively.

To note, the applied procedure falls short of two aspects: 1) gender estimates and openly accessible pronouns may not be, in full, reflective of the respective individuals' gender identities, and 2) gender is taken as dichotomous variable only, and thus, the procedure does not allow for monitoring gender representation in its full variety. We thank Lioba Enk and the Diversity and Inclusion Committee of the Max Planck Institute for Human Cognitive and Brain Sciences (Leipzig, Germany) for their support.

References

[1] Dworkin, J. D., Linn, K. A., Teich, E. G., Zurn, P., Shinohara, R. T., & Bassett, D. S. (2020). The extent and drivers of gender imbalance in neuroscience reference lists. Nature Neuroscience, 23(8), 918-926. https://doi.org/10.1038/s41593-020-0658-y

[2] Zhou, D., Stiso, J., Bertolero, M., Cornblath, E., Teich, E., Sizemore Blevins, A., ... & Bassett, D. (2022). dalejn/cleanBib: v1.1.3 (v1.1.3). Zenodo. https://doi.org/10.5281/zenodo.7375250

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