

Dennis M. Gorman

Availability of Research Data in High-Impact Alcohol & Drug Journals with Data Sharing Policies

*Department of Epidemiology & Biostatistics,
Texas A&M University*

(Conflicts of Interest: None)

Data Sharing

- Vast majority of published results are positive and cannot be replicated^{1,2}
- Most are chance findings produced through use of flexible data analysis practices & selective reporting³
- Data sharing is one of the main proposed solutions to this “replication crisis”^{4,5}

Present Study

- Builds on an earlier study that examined 38 addiction journals' use of procedures to improve the quality of publications⁶
 - (e.g., Col disclosure, use of guidelines such as CONSORT, study registration, data sharing)
- 28 out of 38 encouraged data sharing
 - (0 required it as a condition of publication)

Selection of Journals

- 13 high-impact journals with data sharing policies were selected from those included in the substance abuse category of the 2018 Clarivate Analytics' Journal Citation Report (JCR)
- Those with the top 10 highest 2018 JCR Impact Factor and/or the top 10 highest 2018 Scimago h-index scores

| Journals (n=13) | JCR Impact Factor (Rank) | Scimago h-index (Rank) |
|---|--------------------------|------------------------|
| Top 10 JCR Impact Factor & Scimago h-index | | |
| <i>Addiction</i> | 6.851 (1) | 174 (1) |
| <i>Addiction Biology</i> | 4.223 (3) | 70 (10) |
| <i>Nicotine & Tobacco Research</i> | 3.786 (4) | 102 (5) |
| <i>Drug & Alcohol Dependence</i> | 3.466 (5) | 151 (2) |
| <i>Psychology of Addictive Behaviors</i> | 2.970 (7) | 94 (6) |
| <i>Addictive Behaviors</i> | 2.963 (8) | 114 (4) |
| <i>Journal of Studies on Alcohol & Drugs</i> | 2.584 (10) | 116 (3) |
| Top 10 JCR Impact Factor Only | | |
| <i>International Journal of Drug Policy</i> | 4.528 (2) | 66 (-) |
| <i>Substance Abuse</i> | 2.986 (6) | 39 (-) |
| <i>Drug & Alcohol Review</i> | 2.789 (9) | 66 (-) |
| Top 10 Scimago h-index Only | | |
| <i>Journal of Substance Abuse Treatment</i> | 2.542 (-) | 93 (7) |
| <i>Alcohol</i> | 2.039 (-) | 74 (8) |
| <i>Substance Use & Misuse</i> | 1.383 (-) | 71 (9) |

Data Extracted from the 13 Journals

- 10 most recent full or short original research reports that included empirical data collected by the investigators in the most recent complete issue
- Each of the 130 papers was electronically searched & reviewed for: (1) reference to where data can be obtained; (2) a formal data sharing statement

Results

- Only 8 of the 130 papers contained a data sharing statement in their text or supplementary online materials
 - 7 published in *Alcohol* & 1 in *International Journal of Drug Policy*
- Only 1 of the 130 papers contained a direct link to the data analyzed
 - Published in *International Journal of Drug Policy*

Discussion

- Results support Vidal-Infer et al. (2019) who found only 7.7% of the supplementary materials from 697 papers published in 39 addiction journals contained spreadsheets & data⁷
- This level of data sharing is lower than that reported in studies of articles published in journals from neurosurgery, biomedicine, chemistry and biology⁸⁻¹¹

Conclusions

- Data Sharing policies of addiction journals result in very little data sharing
- Addiction journals should focus on implementing other procedures to improve research quality & integrity
 - Detailed pre-registration that locks-in study design, measures & analyses is more likely to reduce analytic flexibility & selective reporting than data sharing

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