

Defining Preprints: Integrating New Reference Types in a Large Bibliographic Collection

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Motivation

The ICPSR Bibliography team is investigating the primary characteristics of preprints using a scoping review in order to formulate a definition that will more effectively describe the works compiled in the Bibliography.

Introduction

For over 25 years, the Bibliography team at the Inter-University Consortium for Political and Social Research (ICPSR) has highlighted the use and impact of data in scholarly publications, constructing a freely available, searchable bibliography for social science research datalinked literature. As information sharing has become easier, less formal publication forms, like preprints, have grown popular across various disciplines and are now part of the scholarly record. The rise of DOI registration services, preprint servers, and the publication demands of the COVID-19 pandemic underscore the changing nature of scholarly communication.

In response, the Bibliography team is reassessing its policy for collecting materials, aiming to develop a unified definition of preprints to ensure accurate bibliographic records. This includes preserving the authenticity of previous classifications while establishing guidelines for future practices. Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, we examined definitions from peer-reviewed and non-peer-reviewed publications to understand preprints comprehensively. The preliminary results of this qualitative research project are presented in this poster.

Methodology

We created a definition of "Social Sciences" based on ICPSR's broad definition and the University of Michigan Libraries Collecting Areas for the Social Sciences. We searched EBSCOhost, ProQuest, Scopus, and Web of Science for relevant publications, yielding 983 results to screen. Exclusions were made for items outside the collecting areas or not peer-reviewed/preprints (e.g., opinion pieces, Letters to the Editor). The items were imported into Covidence, a review management software used by the University of Michigan. (Figure 1).

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was first designed and published in 2009 to aid researchers in presenting their systematic review process in a clear, standardized way (<u>Page, M. et</u> al., 2021). The PRISMA 2020 statement, which is the latest update on the checklist, is primarily focused on systematic reviews of studies evaluating health interventions, but many of the items are applicable in a case of different types of reviews, such as a scoping review in our present

Using Covidence, we screened 983 items from database searches for original preprint definitions in social science publications. References to existing definitions were tracked and added to Covidence. Two coders reviewed the articles, with a third making final inclusion decisions. The final sample included 53 social science articles with original preprint definitions.

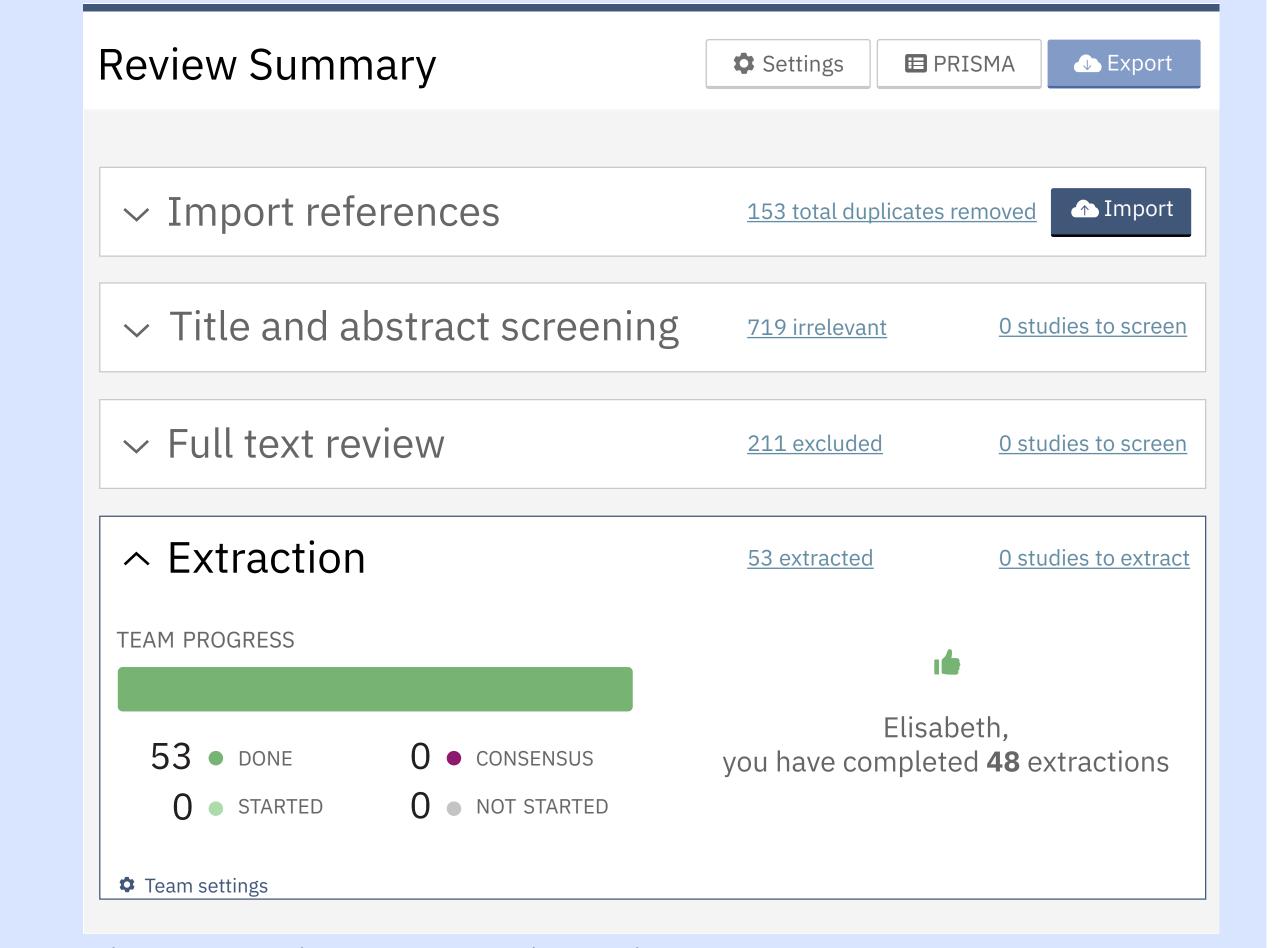


Figure 1. Review Summary in Covidence

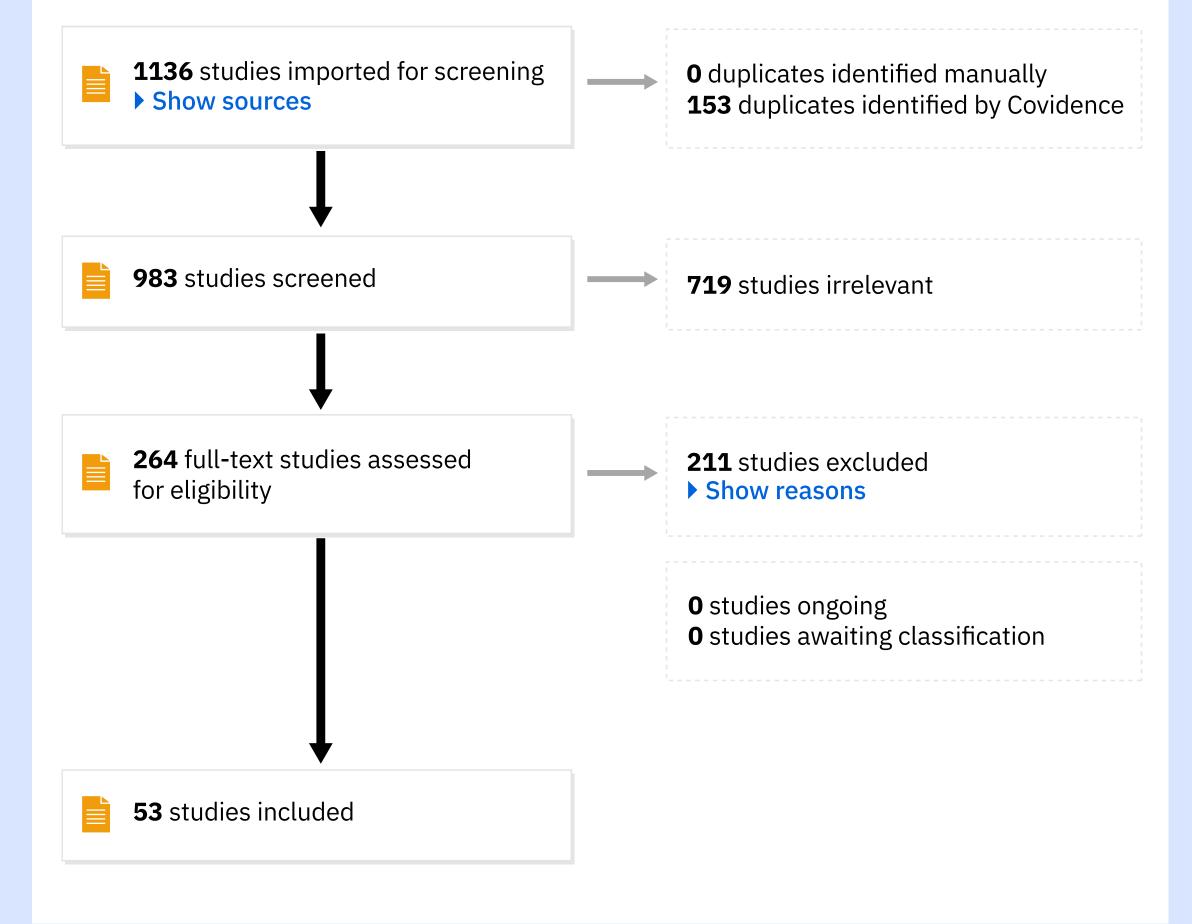


Figure 2. Flowchart of the Covidence Review Process

Results

This investigation revealed the major characteristic of preprints in the social sciences is that of the manuscript being shared prior to peer-review (Figure 3 and Figure 4). As seen on Figure 4, 85% of sources in the review conclude that a preprint is a final manuscript shared before peer-review. Another major characteristic of preprints according to social science literature is the manuscript's state of being unpublished at the time of submission to either a preprint repository or some other platform. Of our social science sources, 75% identify a preprint as being unpublished at the time of being made available to readers. Open access and the manuscript's availability on a preprint server were also identified as important characteristics, at 64% and 60% respectively. Providing a manuscript a Digital Object Identifier (DOI) was not seen as a vital characteristic, with only 9% of sources citing a DOI as a characteristic of a preprint. The other category, as seen in 28% of the sources in the review, identified other characteristics important to identifying a manuscript as a preprint. For example, one paper provided a definition that stated a preprint should be self-published with no publisher involvement, regardless of its peer-review status.

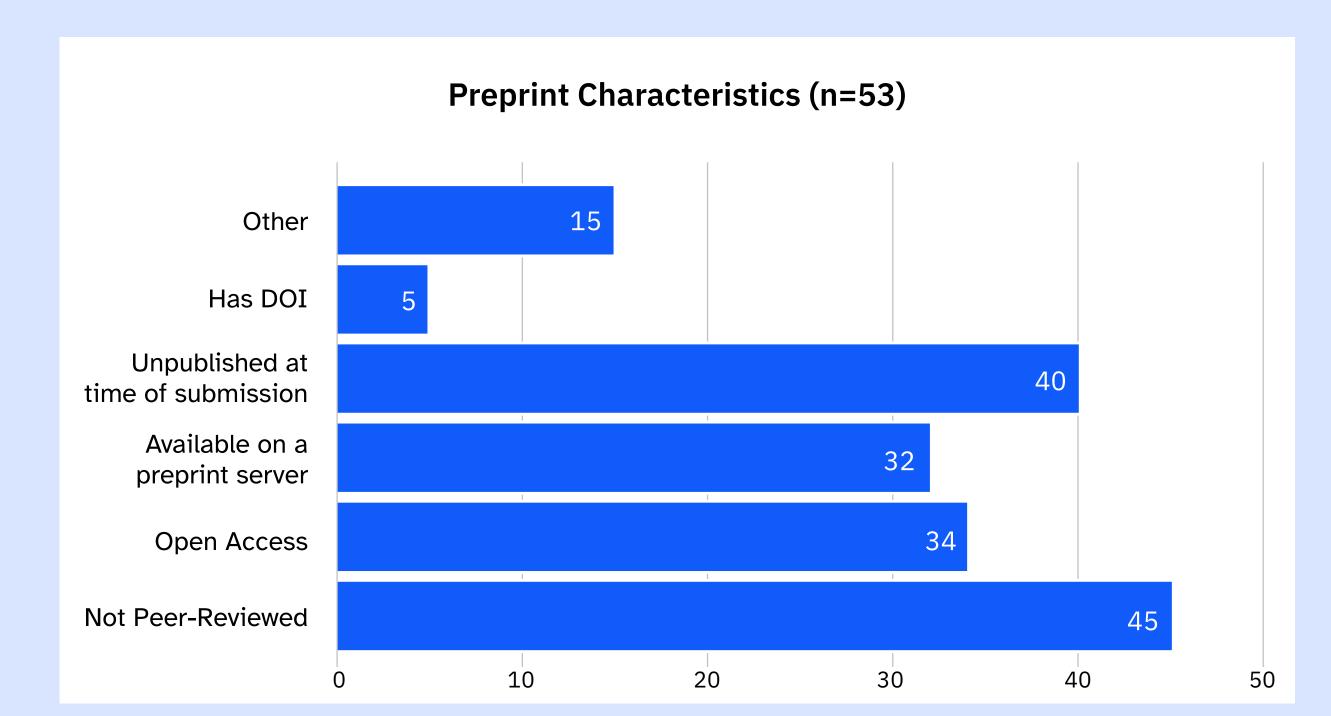


Figure 3. Number of Sources Citing Characteristics of Preprints (n=53)

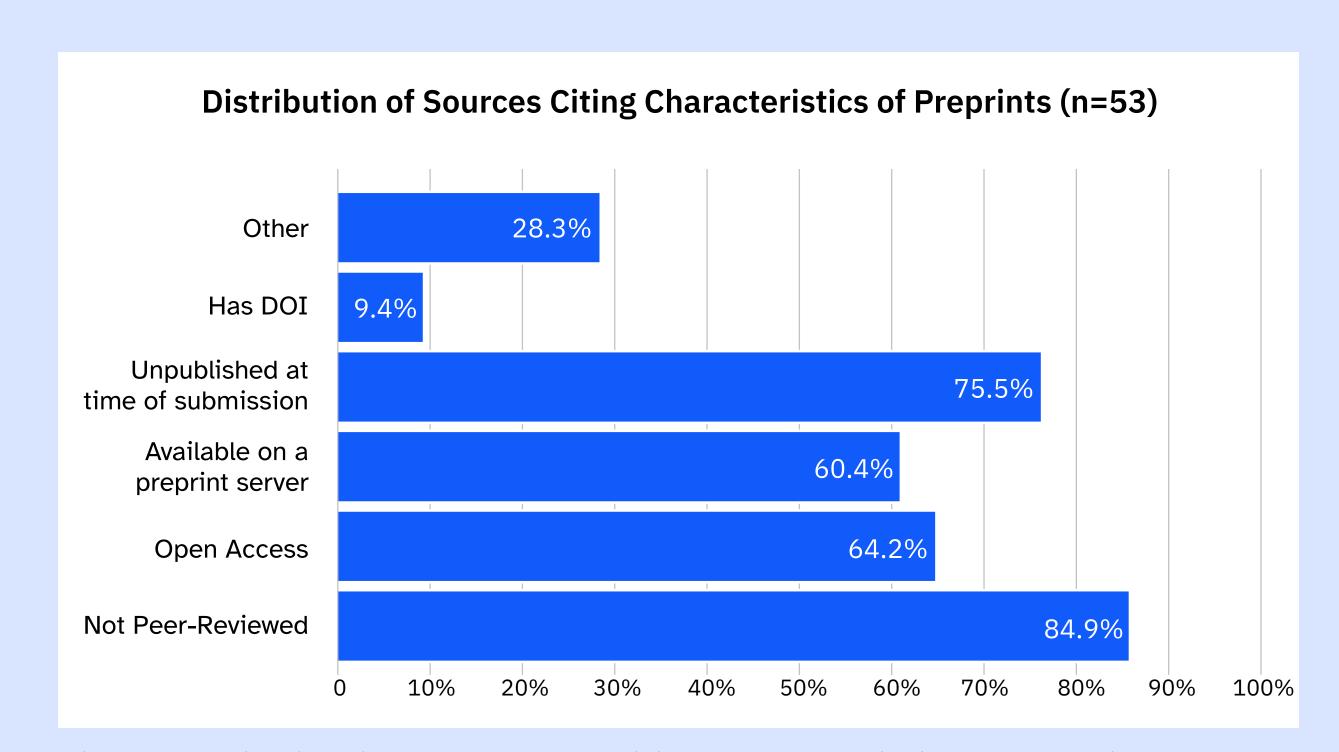


Figure 4. Distribution of Sources Citing Characteristics of Preprints (n=53)

Evaluate

Evaluate the effectiveness of

Conclusion and Future Work

The scoping review of social science research papers on preprint definitions highlights the need for a unified term. Most papers agree that preprints are completed manuscripts available on dedicated servers before peer review, but there is no consensus on all necessary characteristics. The majority emphasize open access, enhancing accessibility for a broader audience, including practitioners and policymakers. The role of dedicated servers in promoting collaboration and feedback is also underscored.

Several articles pointed out the disconnect between publishers' and academics' definitions of preprints, suggesting different stakeholder needs. From the perspective of an accurate bibliographic representation, a consensus on preprint definition is necessary.

Given these findings, a clear definition remains elusive. To complement the original definitions, we will explore non-database sources, such as policies from social science preprint archives and related societies. These definitions will be analyzed using natural language processing tools to create a concise preprint definition to guide the Bibliography team's work.

Learn more! https://myumi.ch/1bg9V



References

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372, n71. https://doi. org/10.1136/bmj.n71

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Learning Objectives

Understand

Summarize

Summarize the evolving role of preprints in scholarly communication in the context of social sciences.

Understand the ICPSR Bibliography team's approach to integrating preprints into bibliographic records while preserving document

the PRISMA framework in improving the inclusion and analysis of preprints in bibliographic databases. classification integrity.