We developed and evaluated a set of criteria to standardize the documentation of research synthesis processes and data across various review types and improve reproducibility.

Towards FAIRer Data

Tailored Guidelines for Enhanced Reproducibility of Research Syntheses in Psychology and Education

Review Types Decision Tree Does the review follow systematic methodological guidelines and are those processes transparently documented? **Traditional** YES Review Does the review **simplify the search** and/or **screening process** to produce information in a **short period of time**? **Rapid Review** NO YES Does the review aim at examining the extent, range, and nature of research activity to give an **overview** of topic or area, **without** deeper analysis and structured synthesis of study results? **Scoping/Mapping** NO YES Review Does the review focus on a conceptual contribution of the included literature and not include a quality assessment of empirical studies included? **Critical Review** NO YES What kind of **data** has been collected? Qualitative Quantitative Mixed **Systematic Mixed** Did you use **statistical methods** to **Systematic Method Review Qualitative Review** combine the results of multiple studies for a comprehensive estimate? **Systematic Meta-Analysis Quantitative Review** Fig. 1: Decision tree for determining the type of review.

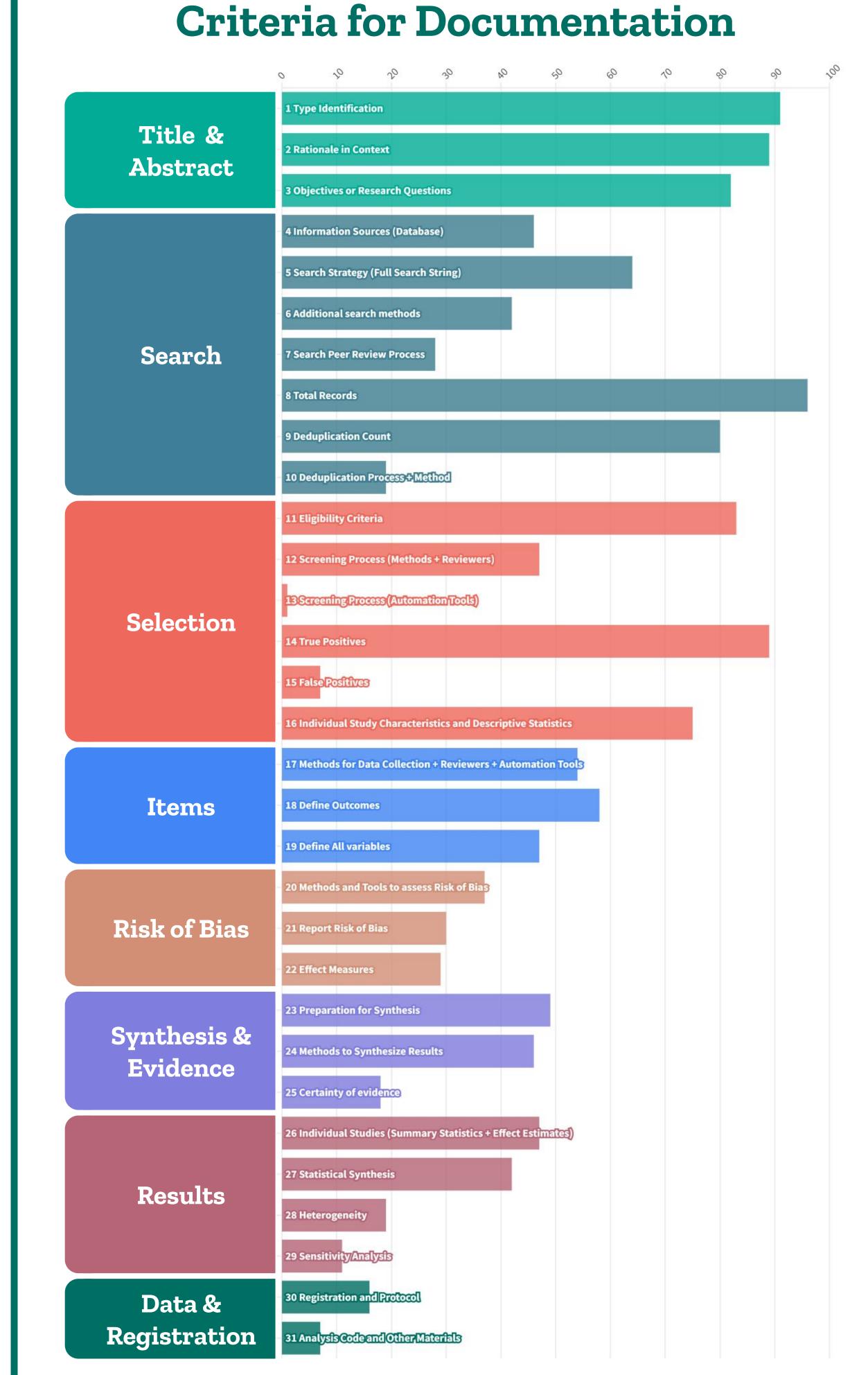
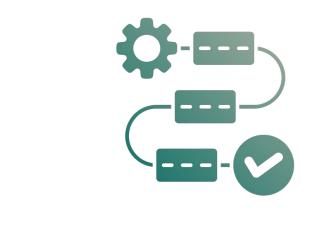


Fig. 2: Adherence to criteria. Percentage of criteria reported.

Advantages of Tailored Guidelines



Increased Reproducibility well documented and curated

synthesis data



Enhanced Reusability

standardized documentation accessible process data

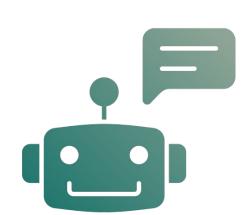


Greater Interoperability standardized process data



Streamlined Peer-Review Process

assessment based on comprehensive documentation



Facilitated Automation

standardized process data enables the use of automation tools

Tailored guidelines go beyond documenting individual processes and focus on comprehensive documentation of process steps and data to enable reproducibility, data reuse, transparency, and interoperability in research synthesis efforts and pave the way for automation.







