

LANGUAGE BIAS IN EVIDENCE SYNTHESSES IN ENVIRONMENTAL AND AGRICULTURAL SCIENCES

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Introduction

Evidence syntheses aim to capture all of the literature on a topic that meets pre-defined criteria through structured searching and consensus among experts on which studies to include. (1) However, many evidence syntheses explicitly or implicitly exclude studies based on language. (2,3)

Results of studies assessing the impact of excluding studies based on language from evidence syntheses have been mixed. Some claim that those studies would have been excluded on other criteria (4-7), while others have identified significant bias resulting from language-based exclusion criteria, or geographical or cultural differences a single-language evidence synthesis would have missed (8-13).

This study looks at the presence and potential impact of language criteria in a set of environmental evidence syntheses.

Methodology

Searched Center for Environmental Evidence's CEEDER (14) database for Evidence Overviews published 2018-2022.

Exported results to Excel (199 studies after deduplication.)

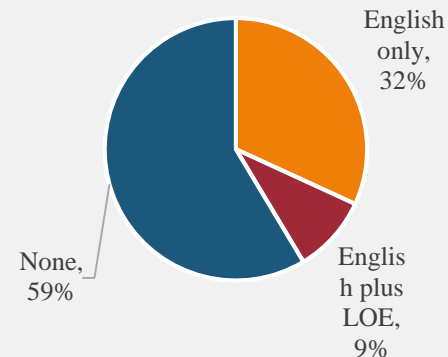
Limited to 157 studies with at least a 2 rating in one of three relevant CEESAT criteria (15).

Identified explicit language requirements for included studies.

Preliminary Results

- 65 (41%) of the studies reviewed explicitly excluded evidence based on language.
- Only 15 (9%) of the studies explicitly included any language other than English (LOE).
- 13 studies acknowledged language as a limitation.
- An initial skim of bibliographies shows that even more studies likely implicitly excluded evidence based on language.

Explicit language criteria



Recommendations

- Evidence synthesis guidelines and author instructions from publishers should require explicit statements of exclusion of evidence by language, including the rationale for any exclusions.
- Evidence syntheses intended for use by practitioners or policymakers in non-English speaking countries should explicitly include non-English language studies.
- Further study is needed to determine the impact of language bias on study conclusions.

References



Search strategies and criteria that limit included evidence by language may introduce bias that can affect practice and policy recommendations.