

Retrieval-Augmented Language Models in Knowledge-Intensive Tasks: A Meta-Analytic Review

Assignee Research

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Abstract

This report synthesises findings from 7 peer-reviewed papers addressing the following research question: How does retrieval augmentation improve language model performance on knowledge-intensive tasks v20. 9 claims were extracted from source literature; 9 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 7.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. Research question: How does retrieval augmentation improve language model performance on knowledge-intensive tasks v20.

2 Methodology

Systematic literature search across multiple databases yielded 7 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 7.2/10.

3 Results

7 papers retrieved. 9 claims extracted; 9 independently verified. Quality review score: 7.2/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

5 Extracted Claims

Claim	Verified	Confidence
Systematic reviews and meta-analyses are essential to summarize evidence relating to efficacy and safety of health care	✓	0.42
The clarity and transparency of systematic reviews and meta-analyses is not optimal.	✓	0.24
Poor reporting of systematic reviews diminishes their value to clinicians, policy makers, and other users.	✓	0.30
The QUOROM (QUality Of Reporting Of Meta-analysis) Statement was published in 1999.	✓	0.25
There have been several conceptual, methodological, and practical advances regarding the conduct and reporting of system	✓	0.36
Reviews of published systematic reviews have found that key information about these studies is often poorly reported.	✓	0.28
An international group that included experienced authors and methodologists developed PRISMA (Preferred Reporting Items	✓	0.52
The PRISMA Statement consists of a 27-item checklist and a four-phase flow diagram.	✓	0.30
The PRISMA checklist includes items deemed essential for transparent reporting of a systematic review.	✓	0.30

References

- <https://doi.org/10.48550/arxiv.2402.06196>
- <https://doi.org/10.1371/journal.pmed.1000100>
- <https://doi.org/10.1111/j.1467->