

# Multimodal vs. Unimodal Models in Low-Resource Domain-Specific Semantic Search

Assignee Research

June 7, 2026

## Abstract

This report synthesises findings from 9 peer-reviewed papers addressing the following research question: How do multimodal models compare to unimodal models in semantic search tasks for low-resource domain-specific languages, as measured by retrieval accuracy and response time. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.0/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Automated Collection of Evaluation Dataset for Semantic Search in Low-Resource Domain Language. Research question: How do multimodal models compare to unimodal models in semantic search tasks for low-resource domain-specific languages, as measured by retrieval accuracy and response time?.

## 2 Methodology

Systematic literature search across multiple databases yielded 9 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.0/10.

## 3 Results

9 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.0/10.

## 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.

## References

- <http://arxiv.org/abs/2412.10008v1>
- <http://arxiv.org/abs/2501.05260v1>
- <http://arxiv.org/abs/2406.17507v3>