

# Vendi-RAG Diversity-Weight Tuning for Factuality-Coherence Trade-offs on ELI5

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May 30, 2026

## Abstract

This report synthesises findings from 13 peer-reviewed papers addressing the following research question: How does varying the diversity-weight parameter in Vendi-RAG affect the trade-off between factuality and coherence scores on the ELI5 dataset compared to standard RAG baselines. Current evaluation methods for Retrieval Augmented Generation (RAG) suffer from `\textit{factual myopia}`: they relentlessly emphasize factual accuracy yet neglect global logical integrity in long-form answer generation. This drives models to force unnatural connections, producing 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Beyond Factual Accuracy: Evaluating Global Reasoning Integrity in RAG Systems with LogicScore. Research question: How does varying the diversity-weight parameter in Vendi-RAG affect the trade-off between factuality and coherence scores on the ELI5 dataset compared to standard RAG baselines?.

## 2 Methodology

Systematic literature search across multiple databases yielded 13 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.5/10.

### **3 Results**

13 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.5/10.

### **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/2602.00848v1>
- <http://arxiv.org/abs/2502.11228v2>
- <http://arxiv.org/abs/2601.15050v4>