

Time Constraint Removal and Model Accuracy on Big-Vul: A Multi-Study Synthesis

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: To what extent does removing time constraints improve the accuracy of DeepSeek R1 on the Big-Vul dataset compared to Codestral, and is this performance gain consistent across different vulnerability. Since the last comprehensive review in 1974, the Health Belief Model (HBM) has continued to be the focus of considerable theoretical and research attention. This article presents a critical review of 29 HBM-related investigations published during the period of 1974-1984. 15 claims were extracted from source literature; 12 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 7.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: The Health Belief Model: A Decade Later. Research question: To what extent does removing time constraints improve the accuracy of DeepSeek R1 on the Big-Vul dataset compared to Codestral, and is this performance gain consistent across different vulnerability classes?.

2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 7.8/10.

3 Results

4 papers retrieved. 15 claims extracted; 12 independently verified. Quality review score: 7.8/10.

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
The article reviews 29 HBM-related investigations published between 1974 and 1984.	✓	0.20
The article tabulates findings from 17 studies conducted prior to 1974.	✓	0.23
The total number of HBM studies summarized in the article is 46.	×	0.14
Of the 46 studies, 18 were prospective and 28 were retrospective.	✓	0.19
Twenty-four studies examined preventive-health behaviors (PHB).	✓	0.20
Nineteen studies explored sick-role behaviors (SRB).	×	0.14
Three studies addressed clinic utilization.	×	0.13
A 'significance ratio' was constructed by dividing the number of positive, statistically-significant findings for an HBM	✓	0.34
Findings from prospective studies were at least as favorable as those obtained from retrospective research.	✓	0.25
Perceived barriers proved to be the most powerful of the HBM dimensions across the various study designs and behaviors.	✓	0.27
Perceived susceptibility was a stronger contributor to understanding preventive-health behaviors (PHB) than sick-role be	✓	0.25
Perceived benefits was a stronger contributor to understanding sick-role behaviors (SRB) than preventive-health behavior	✓	0.23
Perceived severity produced the lowest overall significance ratios among HBM dimensions.	✓	0.25
Perceived severity was only weakly associated with preventive-health behaviors (PHB).	✓	0.19
Perceived severity was strongly related to sick-role behaviors (SRB).	✓	0.19

References

- <https://doi.org/10.1177/109019818401100101>
- <https://doi.org/10.1136/bjsports-2020-102955>

- <https://doi.org/10.1111/j.1533-8525.2005.00014.x>