Challenging mock juror knowledge about memory can improve evaluation of eyewitness evidence

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Introduction

- Surveys of the public over the past decade suggest that laypersons are generally misinformed about memory.¹⁻³
- Challenging knowledge may improve efficacy of expert information by weakening the illusion of explanatory depth (IOED)⁶

Rate level of understanding on a concept

Explain concept

Re-rate understanding

Read expert explanation

Re-rate original understanding

Rate current understanding

The IOED task developed by Rozenblit & Keil (2002)

- We previously found that memory knowledge is susceptible to IOED.⁶
- People report decreased understanding after providing explanations and increased understanding following expert information.⁶

Research Questions

Can forcing mock jurors to explain memory concepts: Affect how they evaluate the eyewitness? Affect how they evaluate the defendant? Influence their verdict decision?

Method

N = 199 from Mturk
- 63.3% White
- 68.8% Female
- M_age = 38.8 years
- 98% Eligible to vote

1. Rate understanding for memory concepts
2. Explain concepts or complete filler task
3. Re-rate understanding
4. Read strong or weak eyewitness case & memory-focused jury instructions
5. Evaluate eyewitness and defendant
6. Render verdict

Results

- Participants’ ratings of understanding decreased over time, B = 2.31, SE = 0.27, p < .001
- Explainers showed a greater decrease post-task, B = -1.63, SE = 0.27, p < .001

- The strong eyewitness evidence was rated as more accurate, F = 4.153, p < .001, partial η² = .18
- Explainers were more skeptical, F = 8.23, p = .005, partial η² = .04; they tended to be more skeptical of the weaker evidence, F = 3.37, p = .068
- Participants found the defendant more culpable when the evidence was stronger, F = 28.77, p < .001, partial η² = .13
- Explainers found the defendant less culpable, F = 4.53, p = .035, partial η² = .02

- However, participants’ verdicts were informed only by case strength, B = -0.63, SE = 0.15, p < .001

Key Findings & Future Directions

- Engaging in explanations may improve people’s evaluation of eyewitness evidence; however, mock jurors appear to consider other evidence when rendering their verdicts
- This task could serve as a low-cost method for improving jurors’ evaluation of eyewitness and other evidence
- Future work should assess whether engaging in explanations before reviewing case materials changes how people attend to or process evidence

References


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