

# **Can mentally reinstating the context out loud benefit immediate and delayed memory recall in adult witnesses?**

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# Can Mentally Reinstating the Context Out Loud Benefit Immediate and Delayed Memory Recall in Adult Witnesses?

## Introduction

- Mental Context Reinstatement (MCR) forms part of the Cognitive Interview (CI) (Geiselman et al., 1986), a well-established tool to elicit accurate and complete eyewitness memory accounts.
- MCR is based on the *Encoding Specificity Principle* (Tulving & Thompson, 1973) and involves reconstructing mentally the to-be-remembered event by attending to environmental and emotional cues present at the time of the crime (Memon & Higham, 1999).
- Police underuse MCR mnemonic due to time limits and when used instructions are not always clear and applied consistently (Dando et al., 2008).
- Can slight modification – mentally reinstating the context out loud - enhance the forensic application of MCR?
- Dietze et al. (2010) found no detriment of reinstating the context aloud in children.
- Hypothesis: aloud MCR (aMCR) will increase recall compared to conventional MCR (cMCR) during immediate and delayed recall attempts.

## Method

### Design

- Two groups independent design.
- IV: Mental Context Reinstatement condition (conventional MCR vs aloud MCR) DVs: number of correct, incorrect, and confabulated items and accuracy rate (correct items/total items).

### Participants

- Seventy adults were recruited.

### Materials

- *To be remembered event.* 1-minute video of a mock car accident used as a Public Service Announcement on texting while driving.



Figure 1. Frames of the to-be-remembered video of a car accident

- *Interview script (first recall).* Scripts (adapted from Eastwood et al., 2019) followed CI structure - rapport, explain, cMCR or aMCR, free recall, cued recall, and closure. Interviews were conducted online via Microsoft Teams.

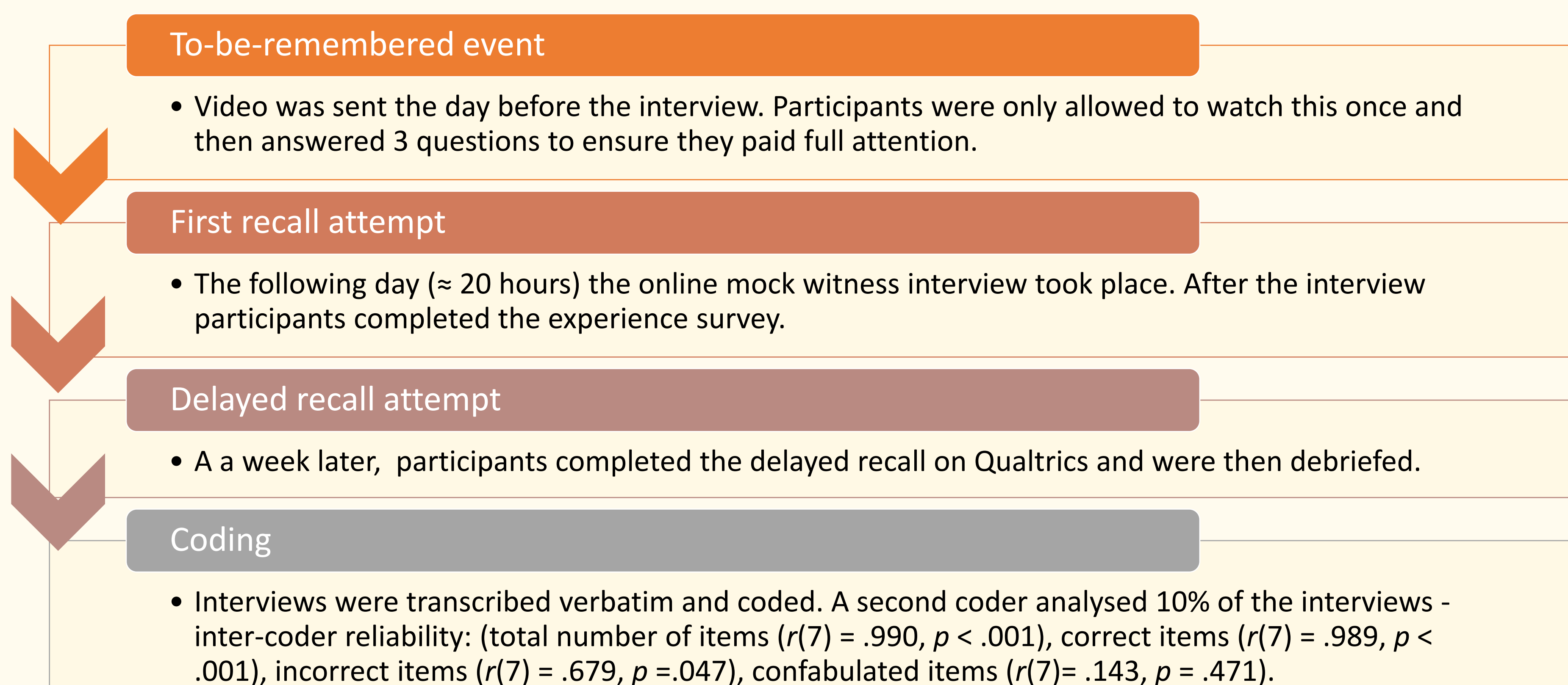
Example instructions: cMCR - "Think about what you saw."

aMCR - "Think about what you saw and tell me about it."

- *Experience survey.* Questions to assess how comfortable participants felt and how helpful they found MCR to enhance their recall.

- *Delayed recall.* Participants answered online the same free and cued recall questions from the interview script.

## Procedure



## Results

Correct items per MCR condition and recall attempt

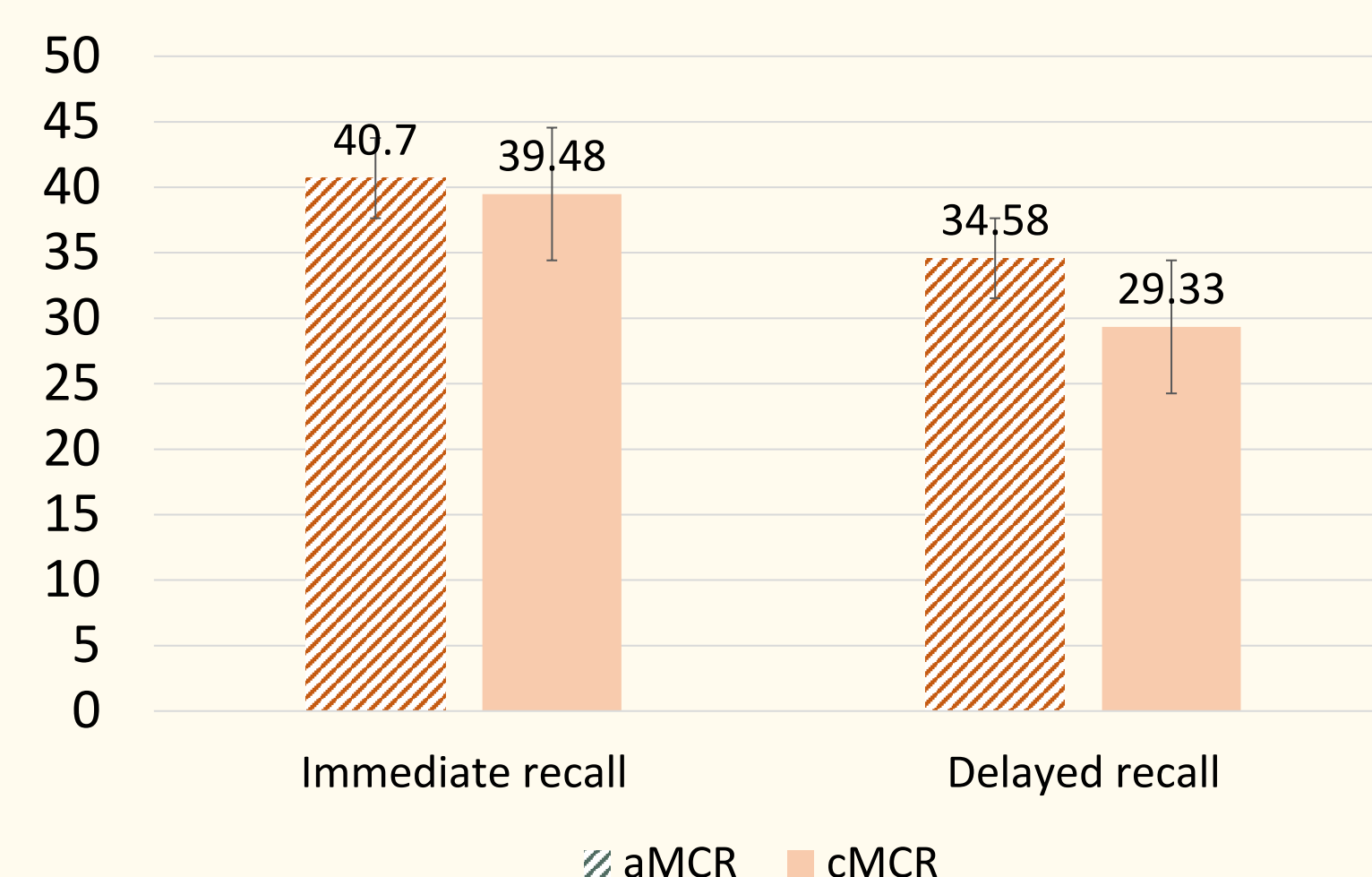


Figure 1. Correct items recalled across MCR conditions and recall attempts.

- **Correct items:** No sig. difference between MCR groups in immediate recall ( $t(68) = .380, p = .352$ ). Marginally sig. difference between MCR groups in delayed recall ( $t(58) = 1.611, p = .056$ ).
- **Accuracy:** No sig. difference between MCR groups in immediate recall ( $t(68) = -.064, p = .475$ ). No sig. difference between MCR groups in delayed recall ( $U = 412.5, p = .624$ ).
- **Incorrect items:** No sig. difference between MCR groups in immediate recall ( $t(68) = .357, p = .361$ ). No sig. difference between MCR groups in delayed recall ( $U = 432.5, p = .845$ ).

- **Confabulated items:** No sig. difference between MCR groups in immediate recall ( $U = 552, p = .435$ ). No sig. difference between MCR groups in delayed recall ( $U = 411.5, p = .558$ ).
- **Experience survey:** No significant relationship between how comfortable participants felt and how much they recalled for the aMCR ( $r(34) = .006, p = .971$ ) or cMCR condition ( $r(29) = -.077, p = .692$ ).

Accuracy rates per MCR condition and recall attempts

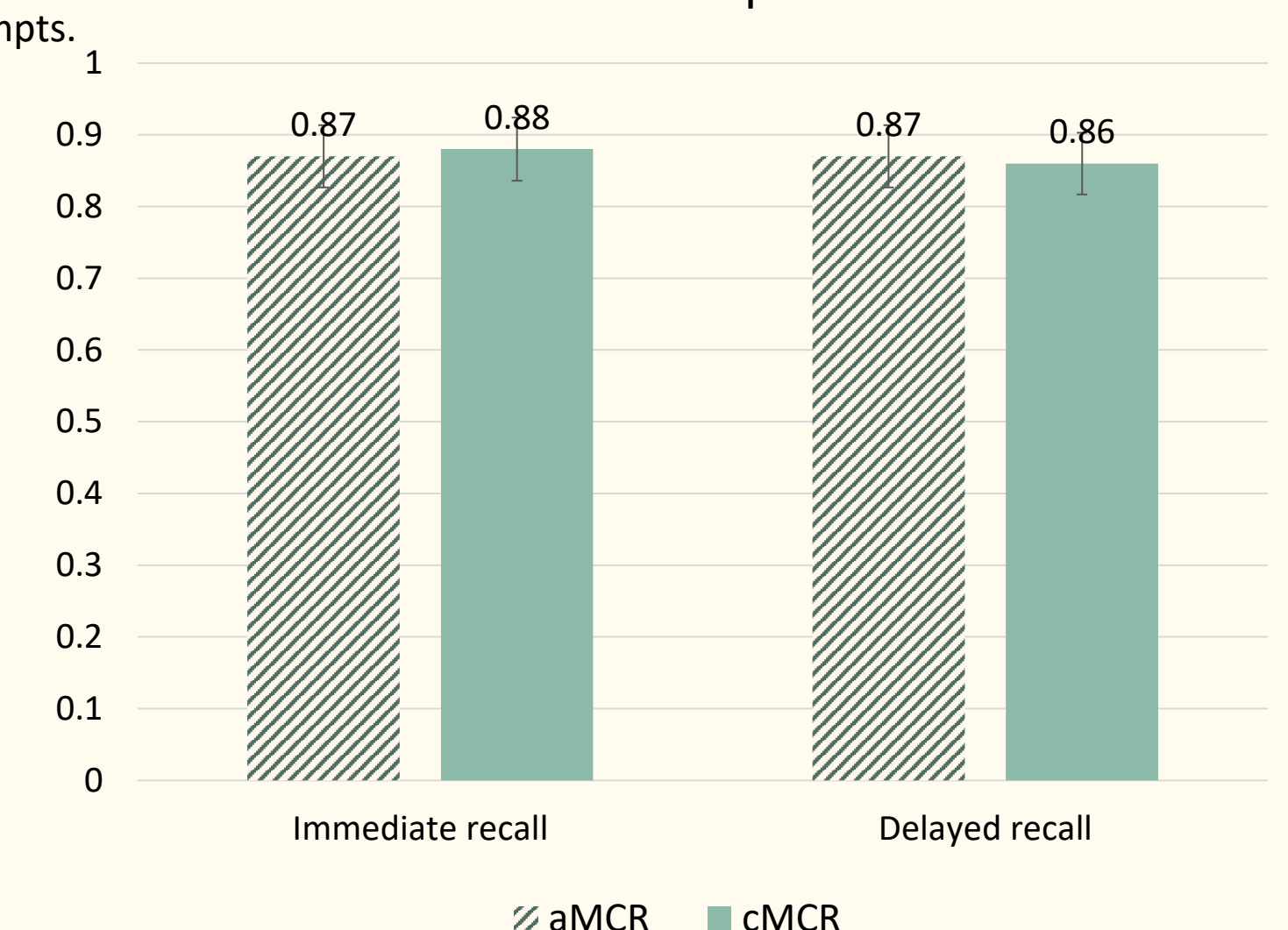


Figure 2. Accuracy rates across MCR conditions and recall attempts.

## Discussion

- aloud MCR and conventional MCR are equally effective in aiding memory recall.
- Trends suggest that aMCR benefitted particularly delayed recall.
- Could aMCR enhance long-term memory consolidation and reduce forgetting?
- Implementing aMCR has the benefit of ensuring witnesses are engaging in the mnemonic
- aMCR offers an additional tool in the investigative interview toolbox.

### Limitations and further directions

- Conducting the interviews online due to the COVID-19 pandemic contributes to the reduction of ecological validity.
- No live event but a video of a car crash was used as to-be-remembered.

## References

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