

## Abstract

Participants unexpectedly witnessed a live verbal altercation on the street and provided free recall testimony. Eye-closure during recall was more effective in a quiet but dissimilar environment (inside) than in a distracting but similar environment (on the street), suggesting that spontaneous mental context reinstatement may play a more important role in the eye-closure effect than reduction of environmental distractions.

## Introduction

- Research shows that eyewitnesses remember significantly more about witnessed events if they close their eyes during recall (e.g., Perfect et al., 2008).
- One explanation of the eye-closure effect is that it cuts out environmental distractions, enhancing concentration (Perfect, Andrade, & Eagan, 2011) and visualization (Vredeveldt, Hitch, & Baddeley, 2011).
- An alternative or additive explanation is that it facilitates spontaneous mental simulation of the context of the witnessed event (cf. Caruso & Gino, 2011). Indeed, the Cognitive Interview manual recommends eye-closure to facilitate mental context reinstatement (Fisher & Geiselman, 1992).

## Hypotheses

### Distraction Hypothesis

- Eye-closure during recall will be most effective in a retrieval environment with many distractions.

### Context Hypothesis

- Eye-closure during recall will be most effective in a context that is dissimilar to the context of the witnessed event.

## Method

### Participants

- 96 undergraduates of John Jay College (58% female; various races).

### Procedure

- Participants unexpectedly witnessed a verbal argument on the street and were then asked to recall it.
- Participants were randomly assigned to recall condition (eyes open or closed) and location (inside on a quiet corridor or outside on a busy street).



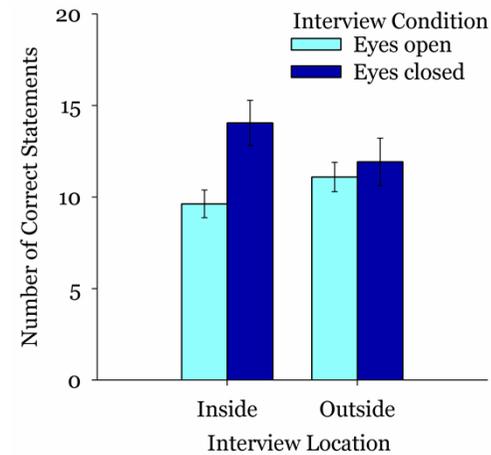
### Data Coding

- Two blind coders independently coded all statements as correct or incorrect.
- A third blind coder double-coded 23% of all statements, achieving high interrater reliability for both coders (Coder 1:  $\kappa = .91, p < .001$ ; Coder 2:  $\kappa = .92, p < .001$ ).

## Results

### Number Correct: 2 x 2 ANOVA

- Significant effect of interview condition  $F(1, 92) = 4.43, p < .05, \eta^2 = .04$
- No significant effect of location ( $F < 1$ )



- Marginally significant interaction between condition and location  $F(1, 92) = 3.59, p = .06, \eta^2 = .04$ 
  - Eye-closure effective for witnesses interviewed inside,  $F(1, 92) = 8.00, p < .01, \eta^2 = .08$ , but not for witnesses interviewed outside ( $F < 1$ )

### Testimonial Accuracy: 2 x 2 ANOVA

- Interview condition and location did not significantly affect testimonial accuracy of eyewitness reports (all  $ps > .29$ )

## Discussion

### Practical Implications

- Eye-closure is a simple method to help witnesses remember more information without harming testimonial accuracy.

### Theoretical Implications

- Eye-closure was more effective in a quiet but dissimilar environment than in a distracting but similar environment, suggesting that spontaneous mental context reinstatement may be more important than reduction of environmental distractions.
- Future research should disentangle the effects in a full factorial design (quiet-similar vs. quiet-dissimilar vs. noisy-similar vs. noisy-dissimilar conditions).

## References

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