Facial Composites: Does a post-interview delay provide a release from verbal overshadowing under forensically-relevant conditions?

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Composite Construction using Feature-based systems

Feature-based composite systems (e.g., PRO-fit, E-FIT) require a witness to select specific facial features (e.g., eyes, nose, mouth) from among examples in a database to create a visual likeness of the criminal. Witnesses recall details about the criminal’s face using a Cognitive Interview (CI). System operators use this description to select relevant examples of facial features from the database (e.g., narrow noses). The witness must then recognize when a good facial likeness of the criminal has been reached.

Inserting a delay between description and composite construction

Frowd and Fields (2011) found that inserting a 30 minutes delay between the verbal description given during a CI and composite construction led to better quality composites relative to when composites had been constructed in the standard way (i.e., immediately after a CI).

This suggests that a post-interview delay provides a release from verbal overshadowing.

The Present Study

Is the post-interview delay a useful method under more forensically-relevant conditions?

The present study aims to further examine the utility of the CI+30 minutes method. Within a single experiment we manipulated Post-Interview Delay (30 minute delay vs. no delay) and two forensically relevant variables: length of Post-Encoding Delay (2 days vs. 3-4 hours) and Target Encoding Conditions (Incidental vs. Intentional). Participants were either aware or unaware that they would need to construct a composite of the target in a second experimental session.

Method: Composite Construction Phase (2x2x2 between-subjects design, N=36)

Participants watched a video clip from the UK soap ‘Eastenders’, depicting interactions between a target character and another character. Participants were either aware or unaware that they would need to construct a composite of the target in a second experimental session.

Method: Assessing Composite Quality

A new set of participants (N=36) rated the likeness of the composites to photographs of their target individuals (1 = poor likeness, 10 = good likeness). Participants rated 48 composites/target pairs from either the Incidental or Intentional Encoding Condition.

Results

Likeness ratings were significantly lower for the CI+30 mins compared to the CI condition. This main effect was qualified by an interaction with Encoding Condition: F(1,34) = 5.875, p = 0.025, η² = 0.157. Post-hoc analyses confirmed a main effect of Post-Interview Delay: F(1,24) = 9.181, p = 0.005, η² = 0.311, but the interaction with Encoding Condition was not found to be robust.

Discussion

On the basis of our results we cannot recommend the CI+30mins method to those who construct facial composites in applied settings.

General Conclusions:

Methodological differences in the presentation of target faces may explain the differences in findings. Here participants viewed videos of the target individuals whereas Frowd and Fields (2011) used static photographs. Different strategies used to encode target faces may interact with the presence or absence of a Post-Interview Delay prior to composite construction.

References


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