Tracing the Emergence of Stimulus Memorability

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Background
Memorability: a predictive value of whether an image is likely to be remembered or forgotten.

At which memory stage(s) does memorability emerge?

When?

Modal Model of Memory

Conclusions

1. Memorability emerges during VWM: Memorable items require fewer resources and are more competitive than forgettable items.
2. Memorability continues to emerge post-VWM: Memorable items decay slower than forgettable items.

Methods

Remember


VWM Task
LTM Task

Contributions to Memorability

26.9% Personality and Social Attributes
23.5% Variance Between Participants
49.6% Unexplained

How might memorability emerge in VWM?

1. Memorability emerges during VWM:
   Memorable items require fewer resources and are more competitive than forgettable items.

2. Memorability continues to emerge post-VWM:
   Memorable items decay slower than forgettable items.

Predictions

1) Memorable faces require fewer resources
2) Memorable faces are more competitive

Results

Both predictions are correct!

1) Memorable face sensitivity > forgettable face sensitivity
2) Mixed memorable > set size 6 forgettable

Conclusions

1. Memorability emerges during VWM: Memorable items require fewer resources and are more competitive than forgettable items.
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References