Metamnemonic predictions of lineup identification performance

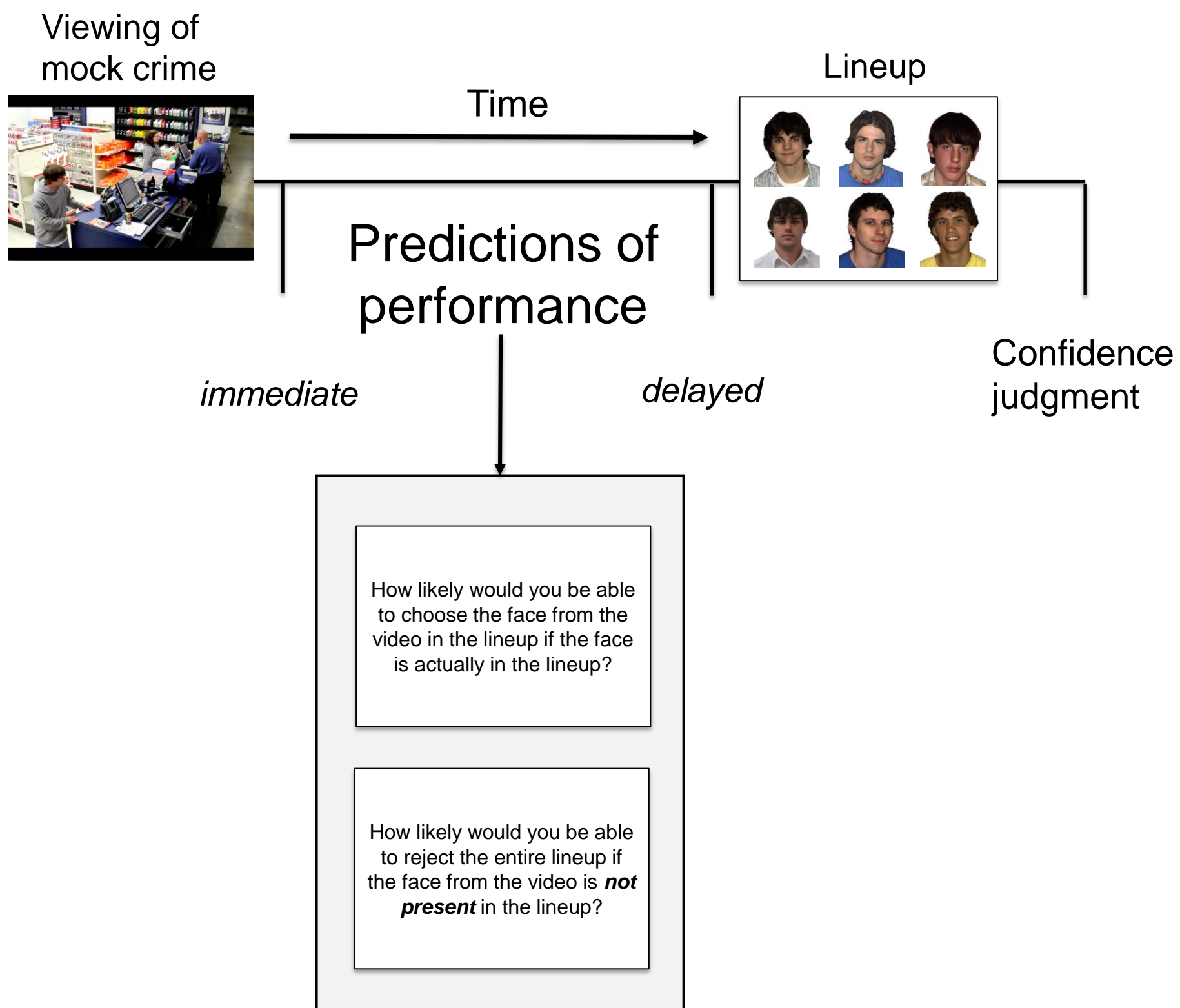Geoffrey L. McKinley, Aaron S. Benjamin and Scott D. Gronlund

In the real world, police may ask an eyewitness about their potential performance on a lineup.

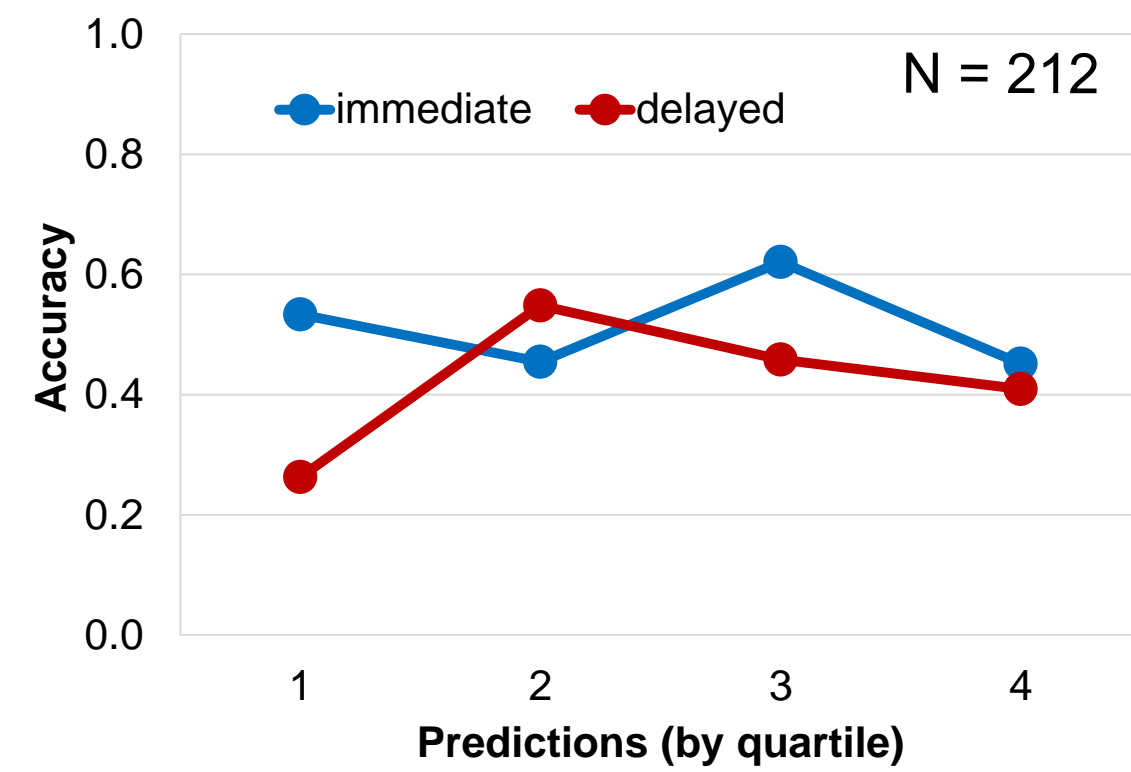However, it's not clear whether their response has any predictive utility.

Current motivation:

- **To examine whether the timing of this judgment makes a difference in predicting performance on a lineup**

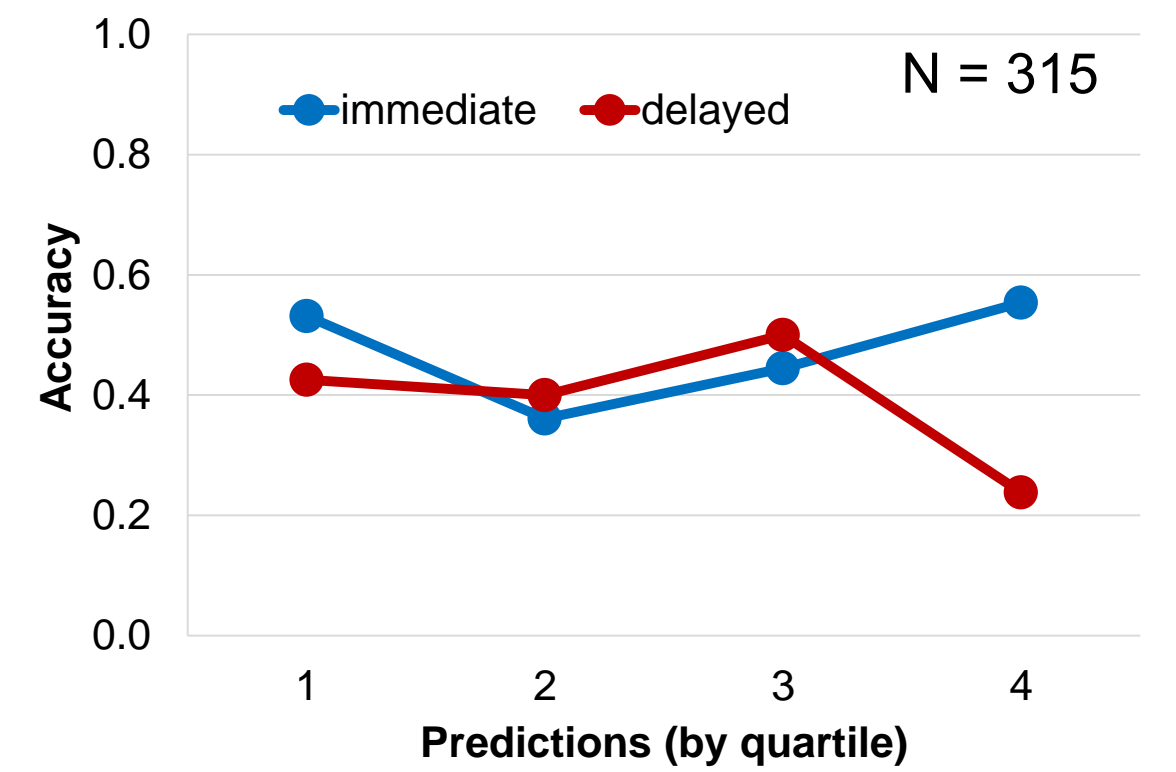- **To examine how the timing of this judgment affects lineup performance**
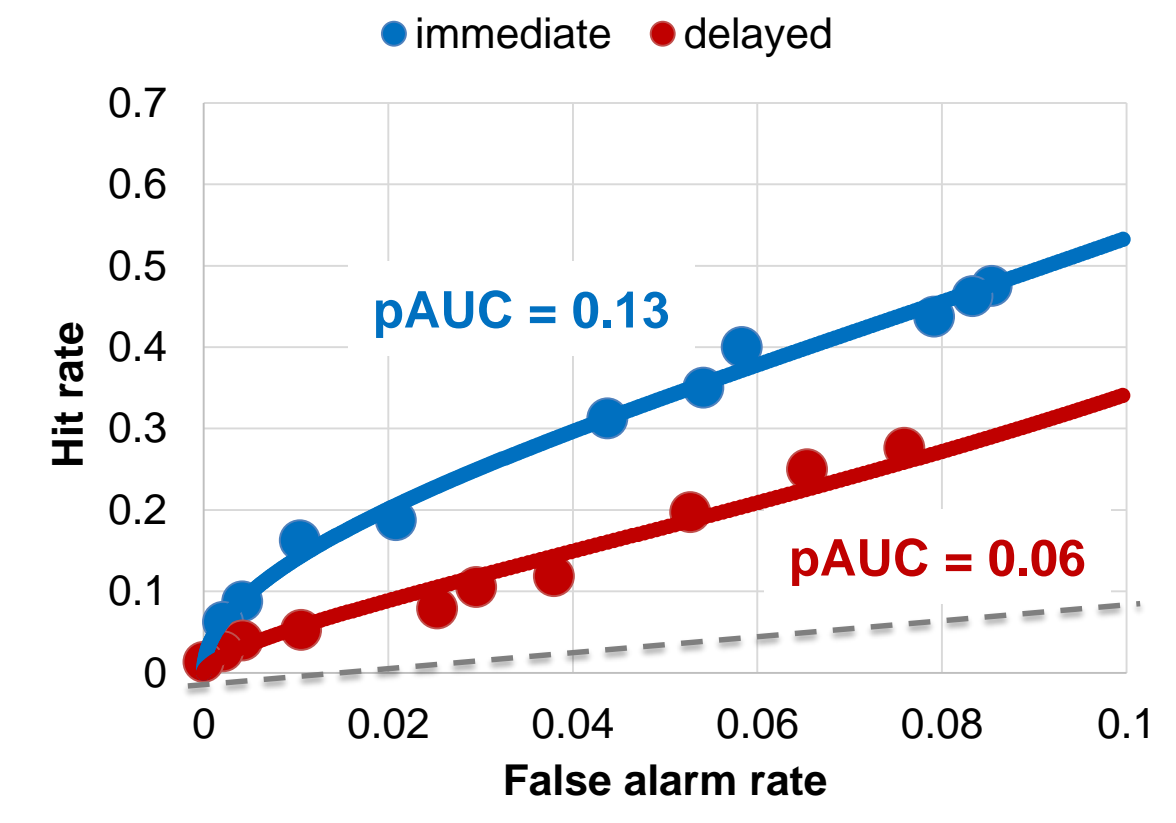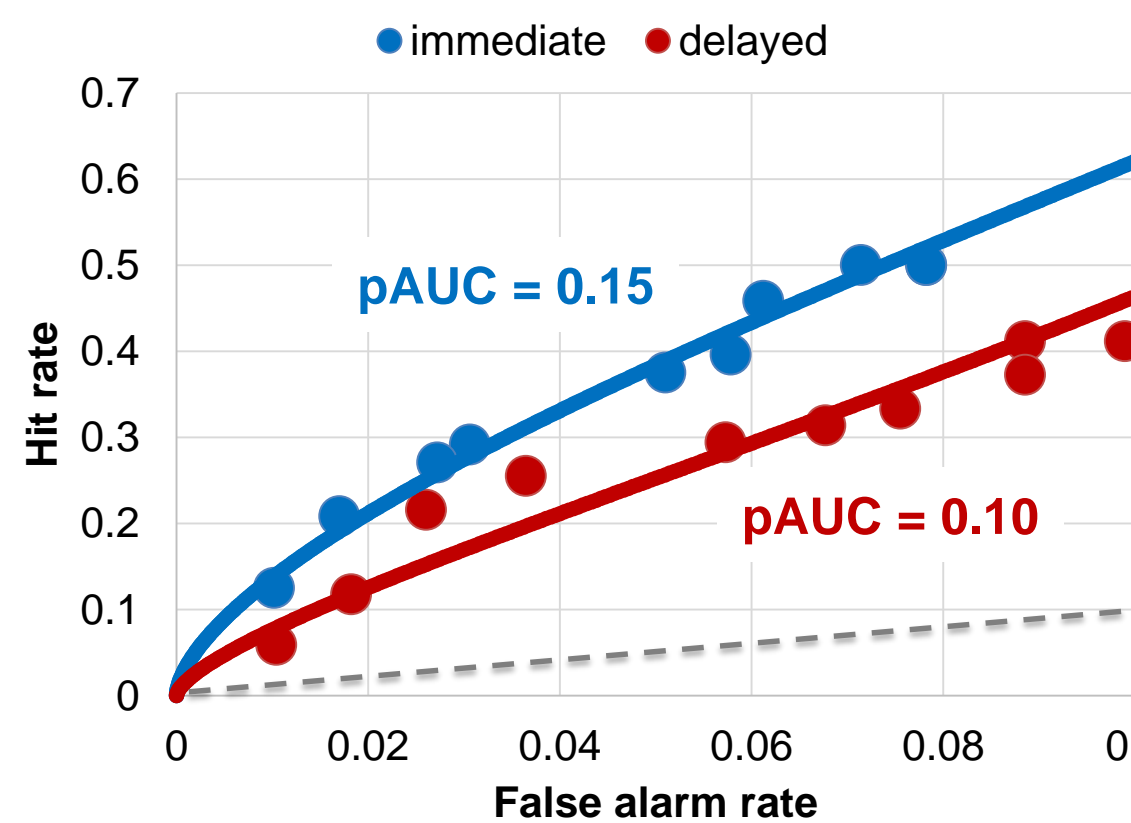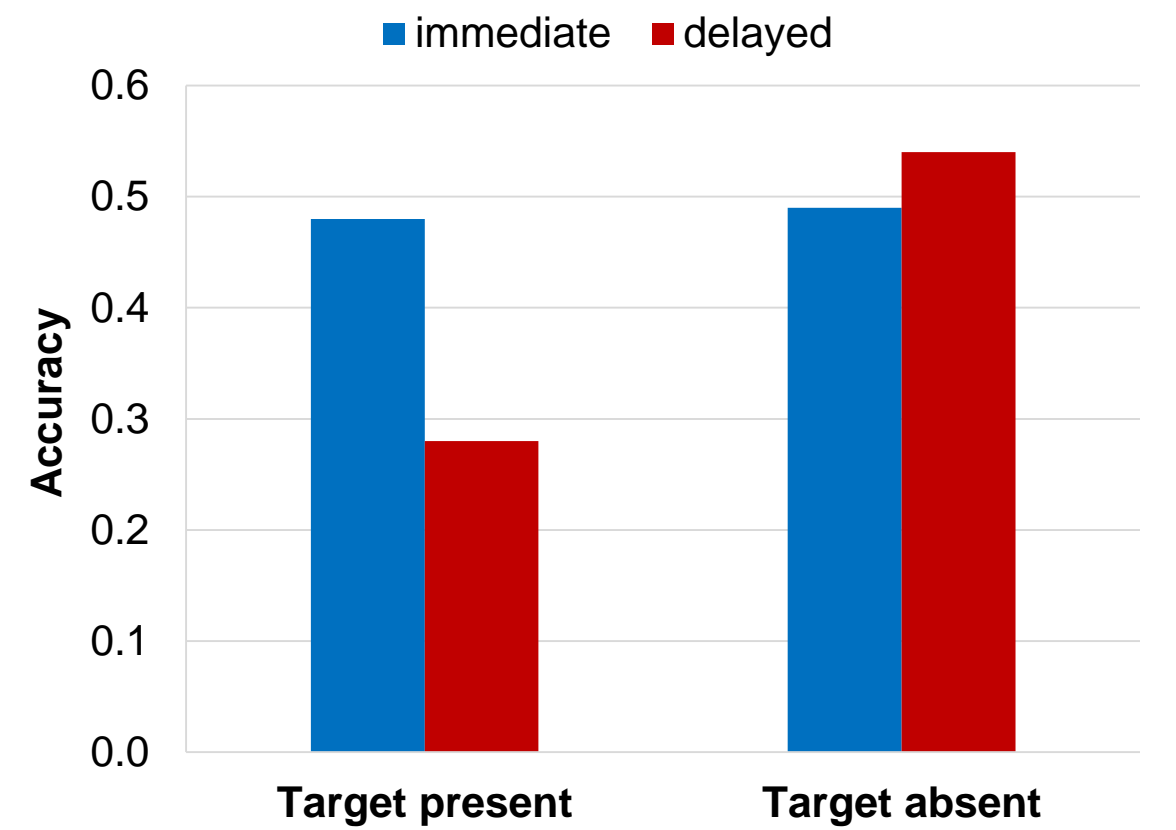
General Procedure

Viewing of mock crime

Time → Lineup

Predictions of performance

immediate   *delayed*

Confidence judgment

How likely would you be able to choose the face from the video in the lineup if the face is actually in the lineup?

How likely would you be able to reject the entire lineup if the face from the video is **not present** in the lineup?

Experiment 1: Online (short retention interval)

N = 212
— immediate — delayed
Accuracy vs Predictions (by quartile)

Experiment 2: Lab (1 day retention interval)

N = 315
— immediate — delayed
Accuracy vs Predictions (by quartile)

Predictions were not related to accuracy

■ immediate ■ delayed
Accuracy — Target present / Target absent

■ immediate ■ delayed
Accuracy — Target present / Target absent

● immediate ● delayed
pAUC = 0.15
pAUC = 0.10
Hit rate vs False alarm rate

● immediate ● delayed
pAUC = 0.13
pAUC = 0.06
Hit rate vs False alarm rate
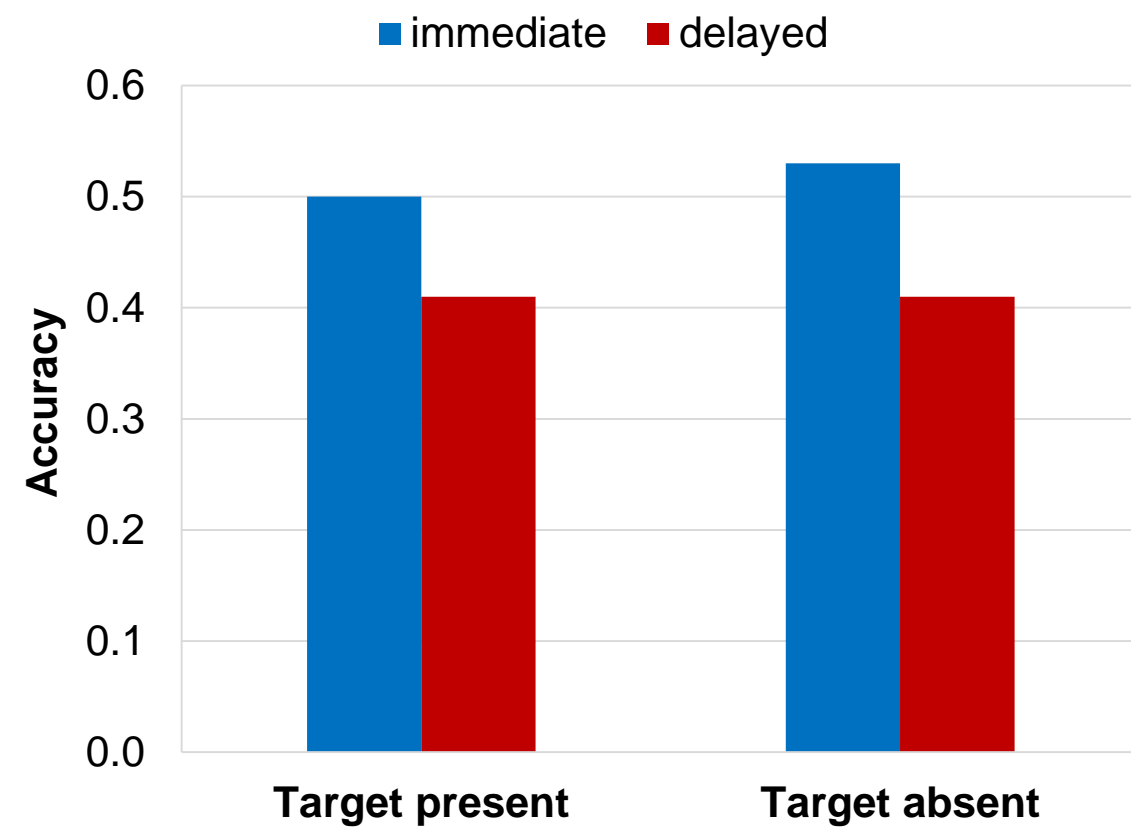
Making a judgment immediately after viewing the lineup improved performance on a lineup

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