

Forgetting a Face: Attribute Amnesia for Familiar Identities



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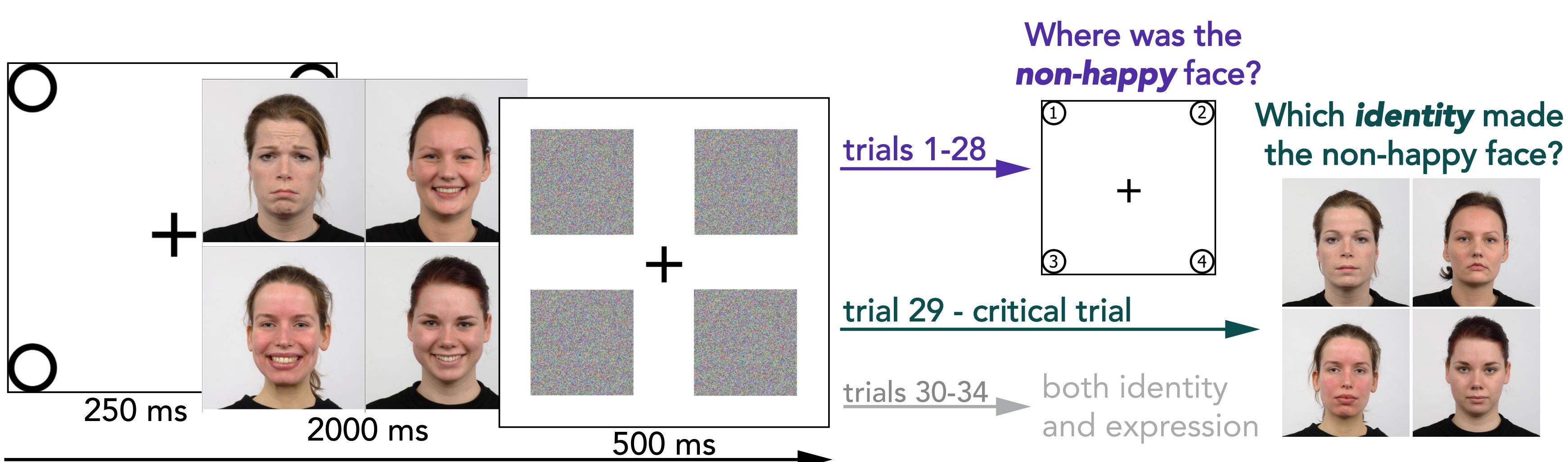
Do we encode identity automatically and durably?

Face processing is (usually) easy and fast— but is it automatic?
What stays in memory?

Familiarity shown to affect automatic processing of some types of face information (e.g., identity)¹

Approach

Attribute amnesia: failing to report salient attributes of something you've just focused on to complete a task²



Exp 1: Do people locating expression fail to report identity?

Materials and Methods

Participants

Recruited from mTurks
Located in the U.S.

Aged 18-65

41% f, 56% m, 3% other

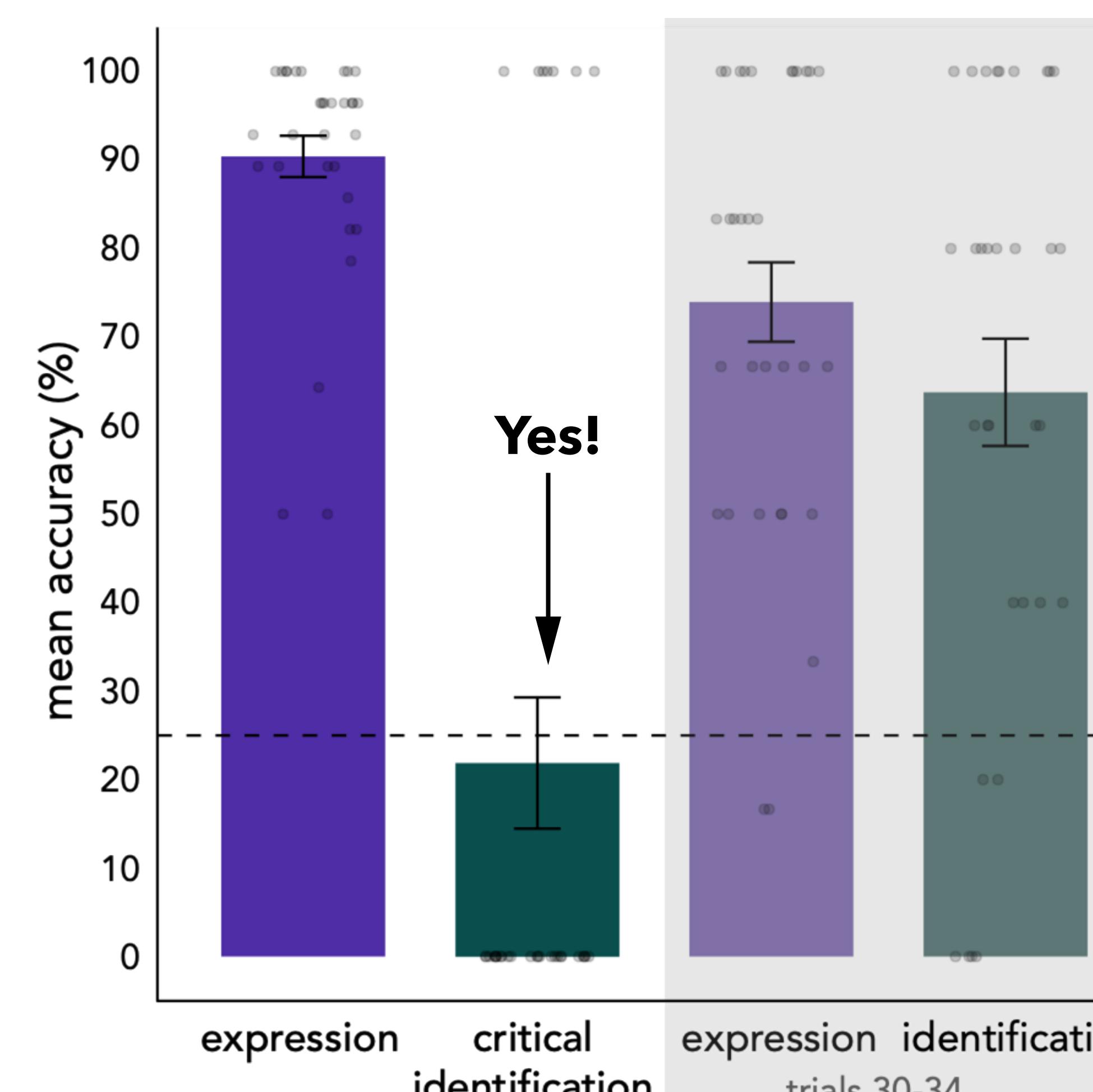
Radboud Face Database³

4 ids, 6 expressions, 5 vps l/r

Familiar* Celebrities

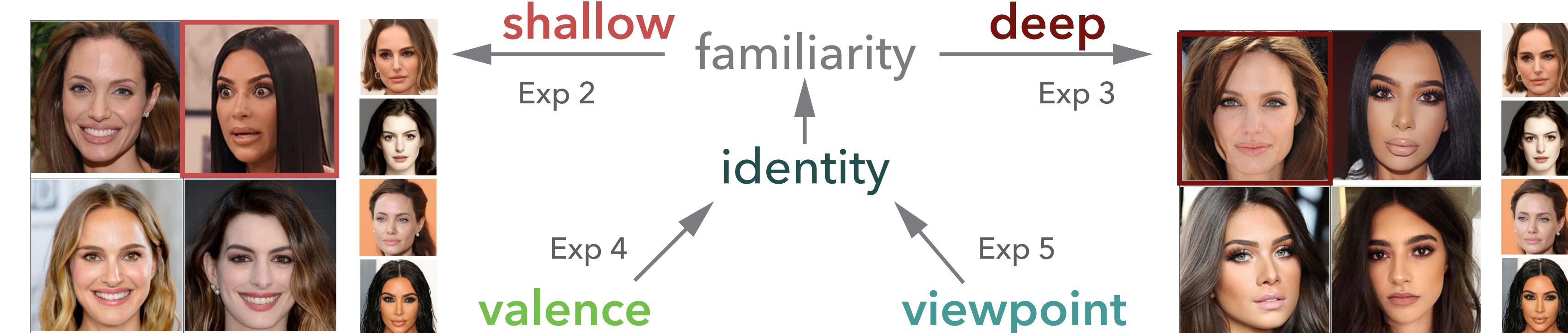
Angelina Jolie Natalie Portman
Kim Kardashian Anne Hathaway

*Assessed via survey



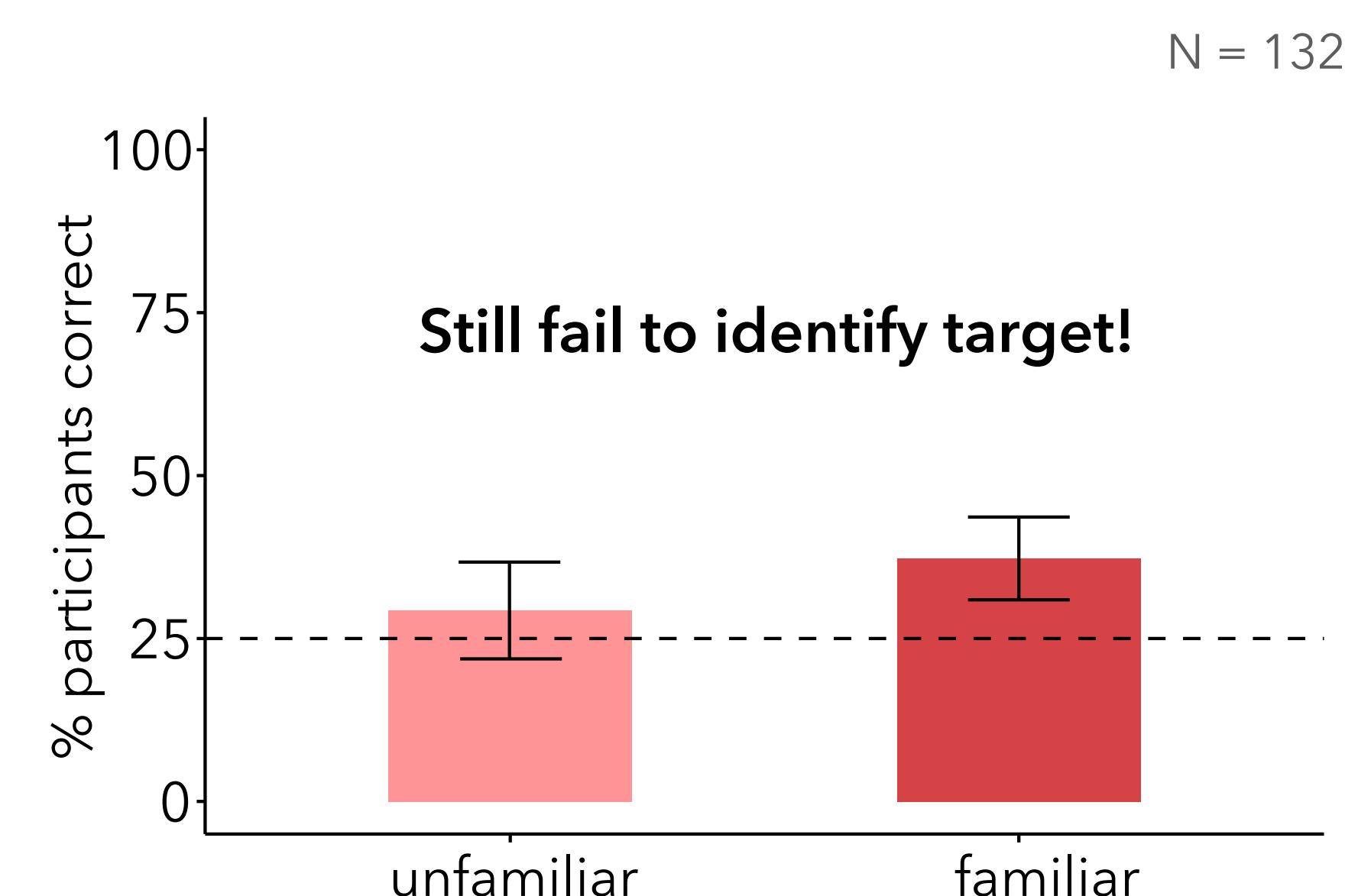
Can we “boost” automatic identification?

Manipulating along a hierarchy of face information⁴



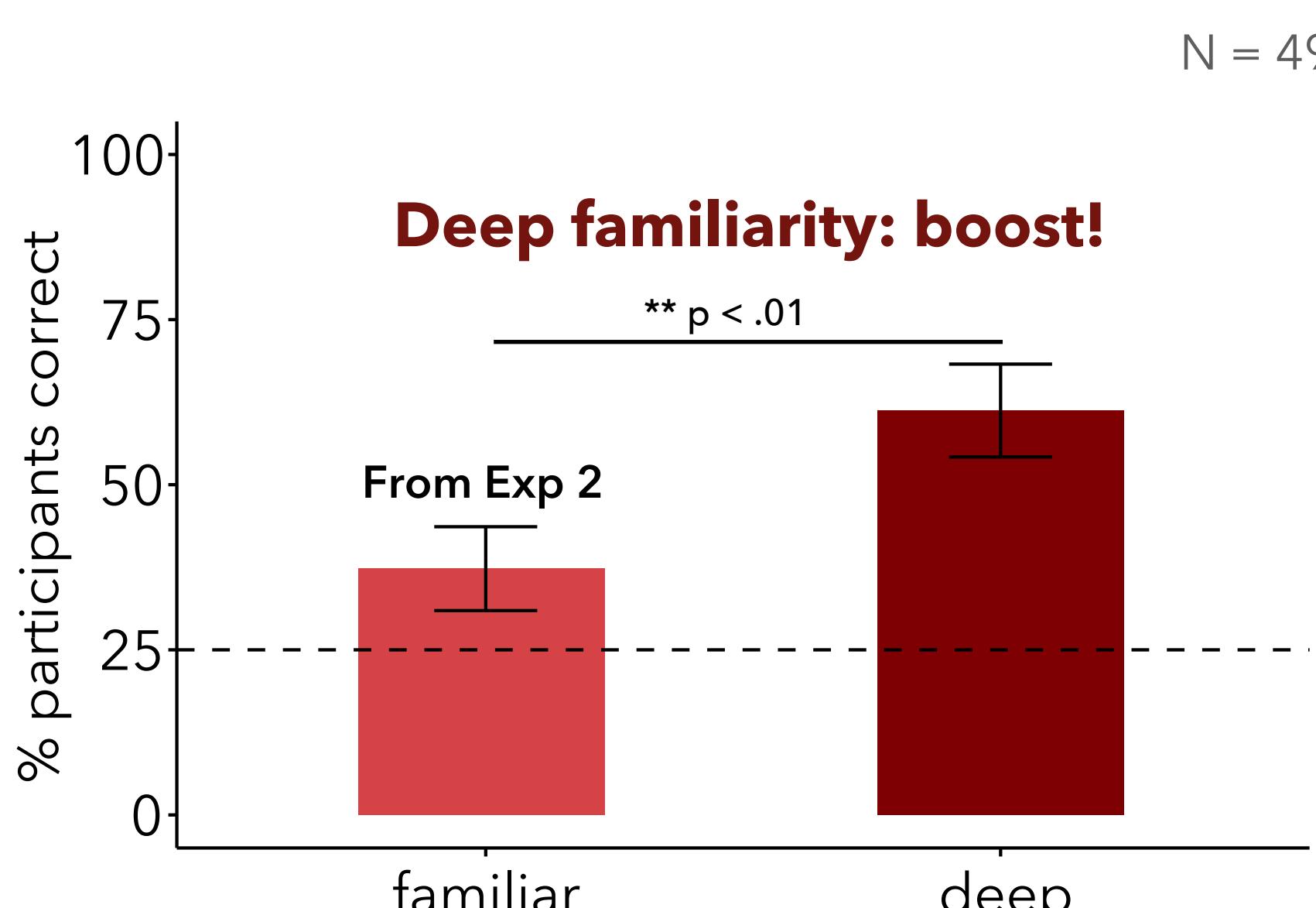
Exp 2

shallow: locate expression, identify person



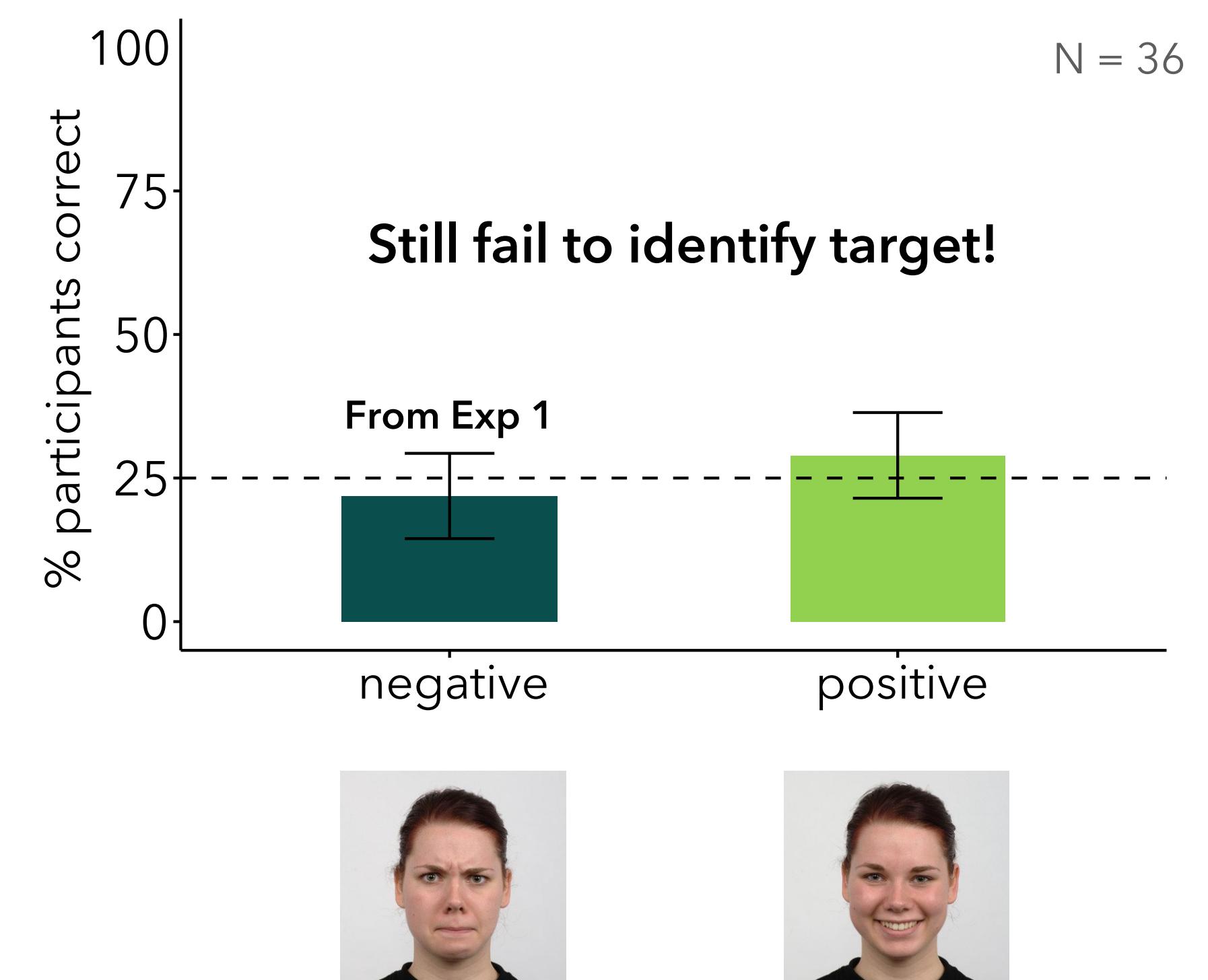
Exp 3

deep: locate familiar person, identify person



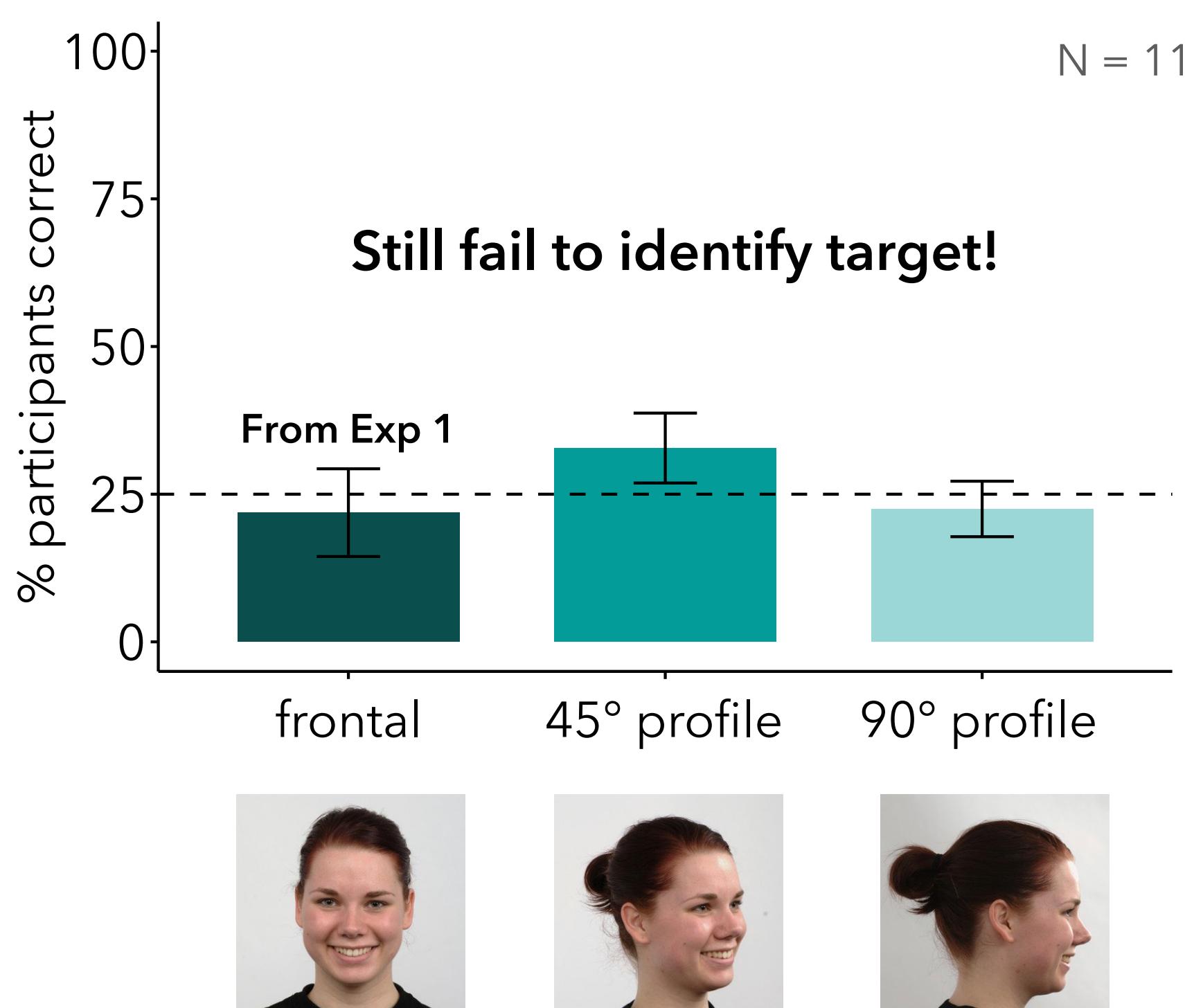
Exp 4

valence: locate expression, identify person



Exp 5

viewpoint: locate expression, identify person



Conclusions

People are more likely to remember who they just saw when assessing whether they are familiar (Exp 3)

But not:

... when processing expression on familiar faces (Exp 2)

... under different expression valence contexts (Exp 4)

... under different viewpoints (Exp 5)

Identification not as automatic and familiarity not as powerful as we'd think

Discussion

- Supports proposed face information processing hierarchy⁵

- Get things lower in hierarchy “for free”?

- No evidence for more automatic processing of positive > negative valence faces

- No evidence of viewpoint-tradeoff for identity

References

1: Yan, Young, and Andrews (2017)

2: Chen & Wyble (2015)

3: Langer et al. (2010)

4: Hill et al. (2019)

5: Colón et al. (2021)

Acknowledgements

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