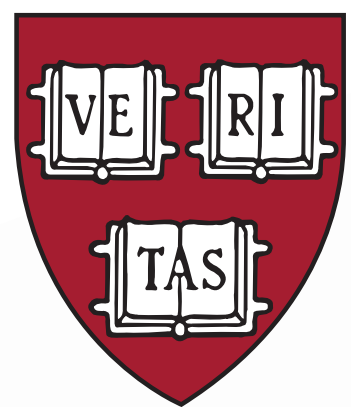


Visual working metamemory

JORDAN SUCHOW, DARYL FOUGNIE & GEORGE ALVAREZ

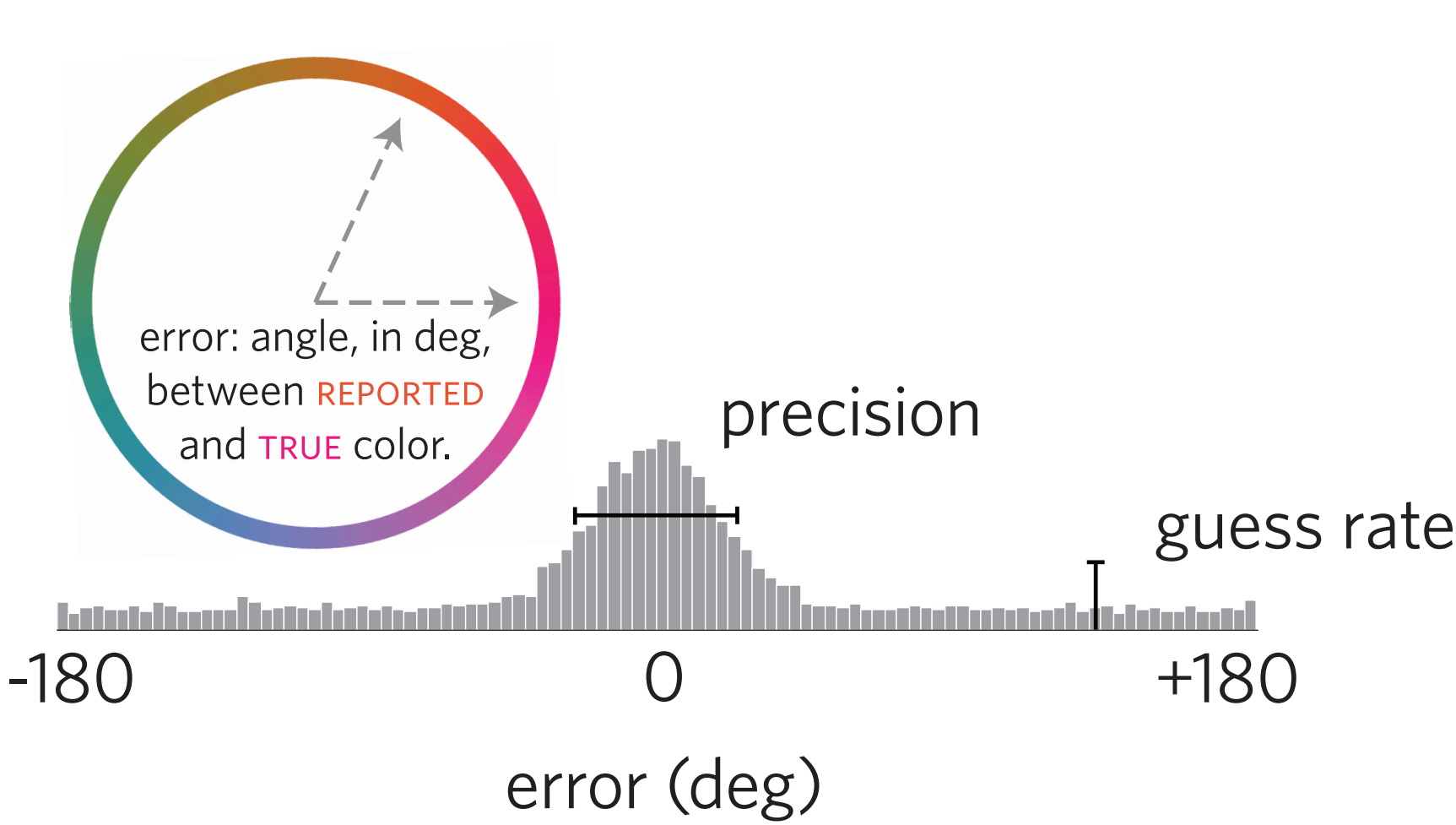
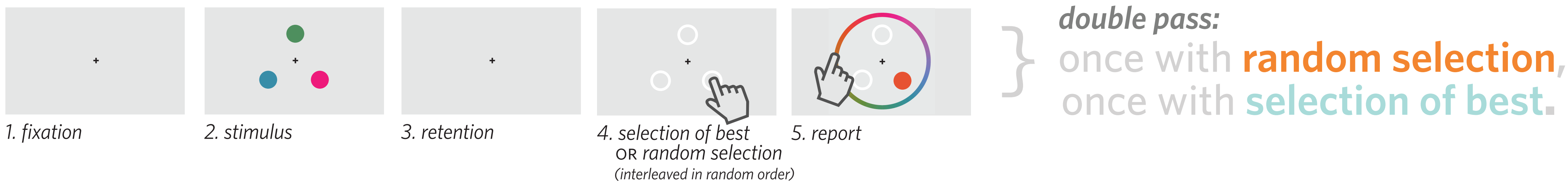
Department of Psychology, Harvard University



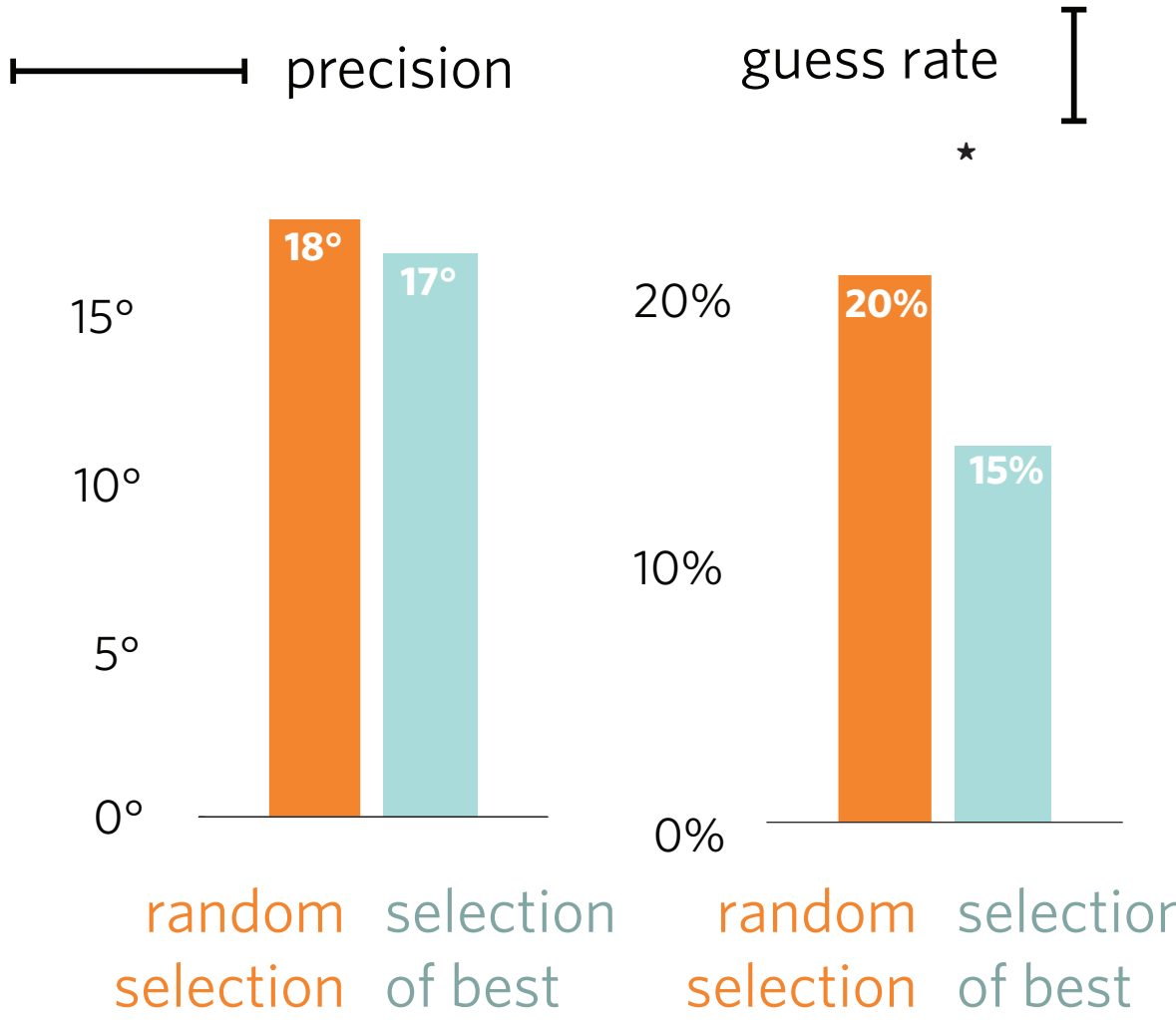
Metamemory is an awareness of the quality of one’s own memories.
Here, we ask whether participants have visual working metamemory.

TASK ONE

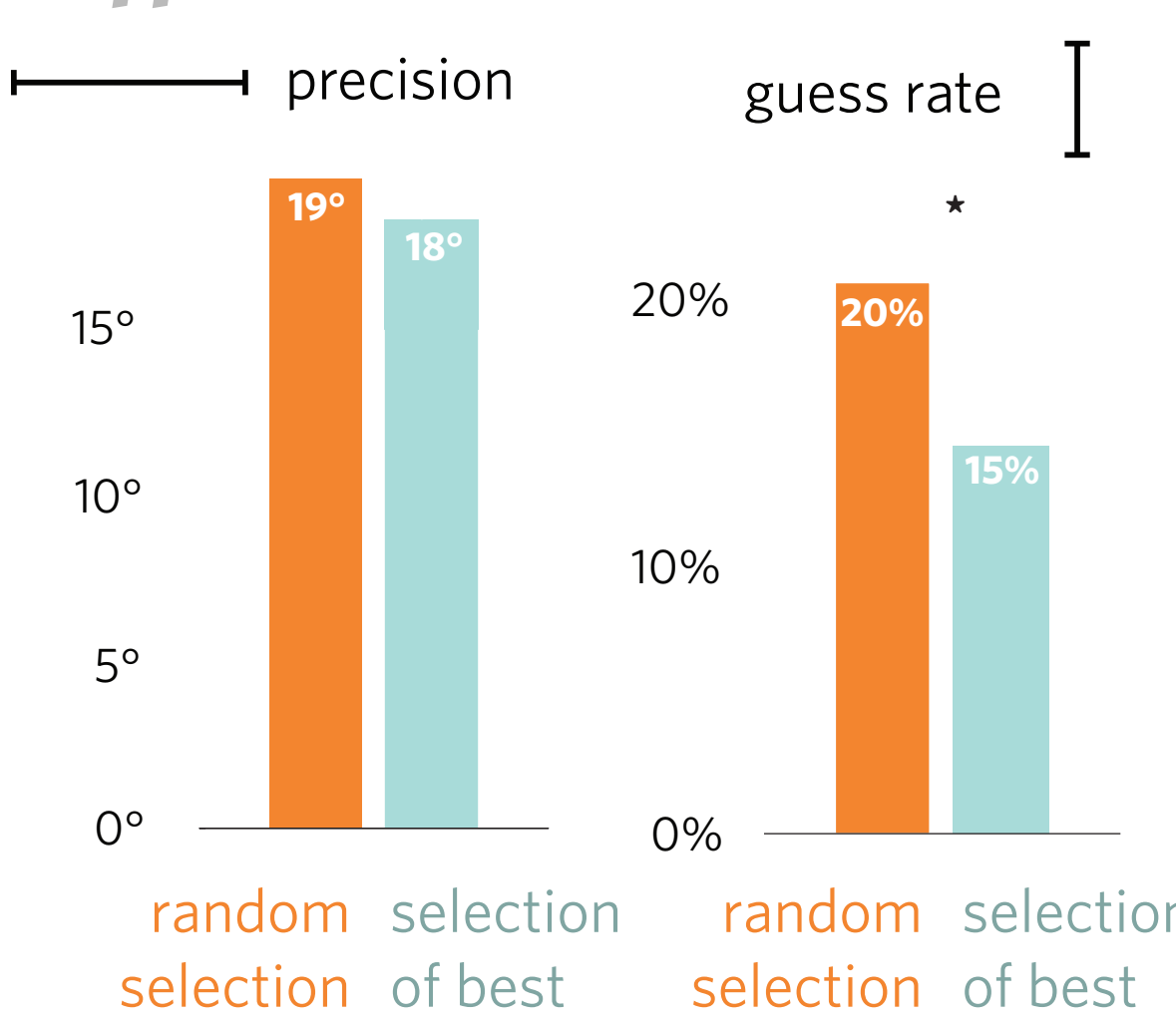
A standard visual working memory task, where on half of the trials participants are given the opportunity to report the item they remember best.



different displays, same session.

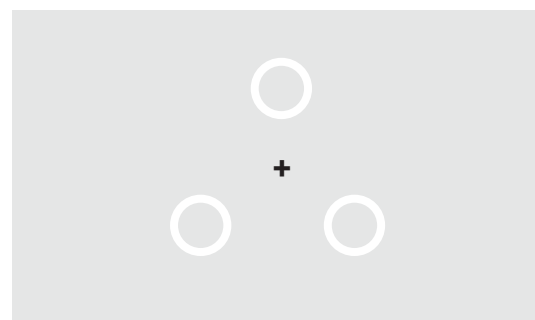


same displays, different session.



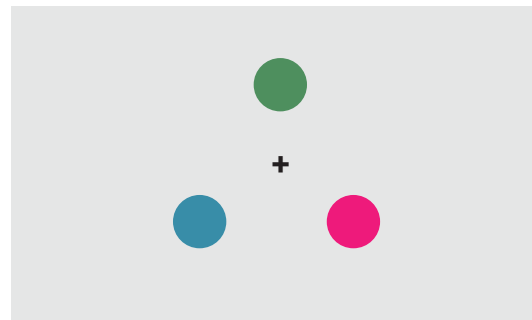
Potential objections:

Q: Were the locations equally memorable?



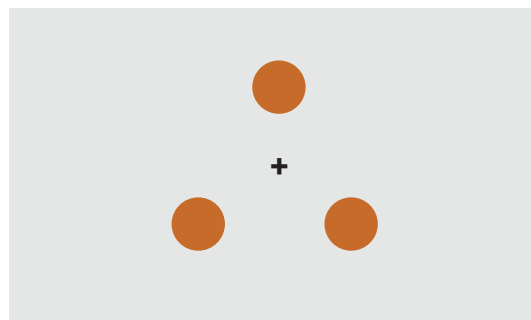
A: Yes. Performance does not differ much across the three locations (precision: 19.6°, 21.1°, 21.5°).

Q: Were the colors equally memorable?



A: Yes. Performance does not differ much across 6 color bins (precision: 14.6°, 14.2°, 13.1°, 13.5°, 14.5°, 14.3°).

Q: Were the displays equally memorable?



A: Perhaps not, but the double pass procedure makes this irrelevant because we’re comparing across conditions for the same items on the same displays.

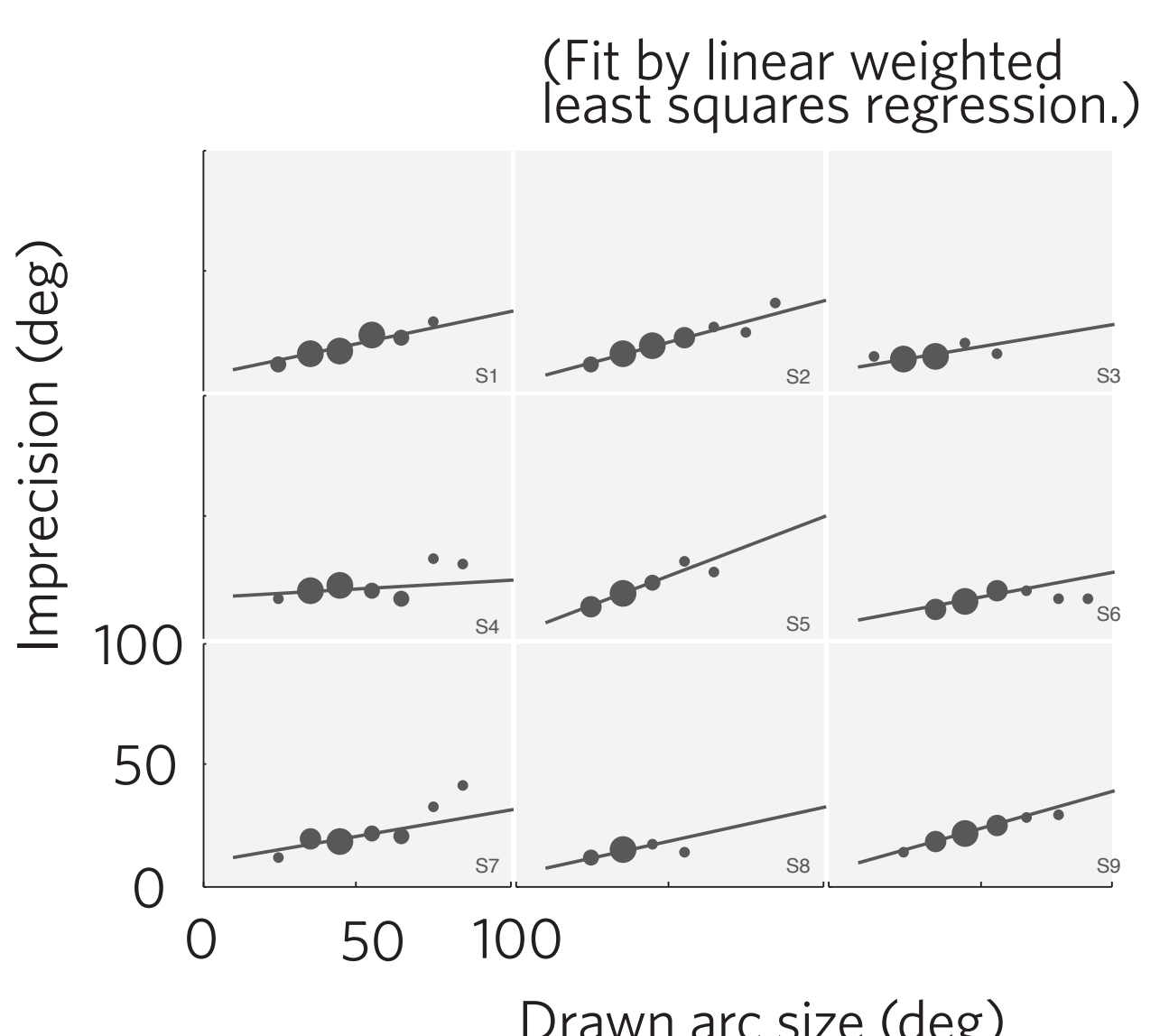
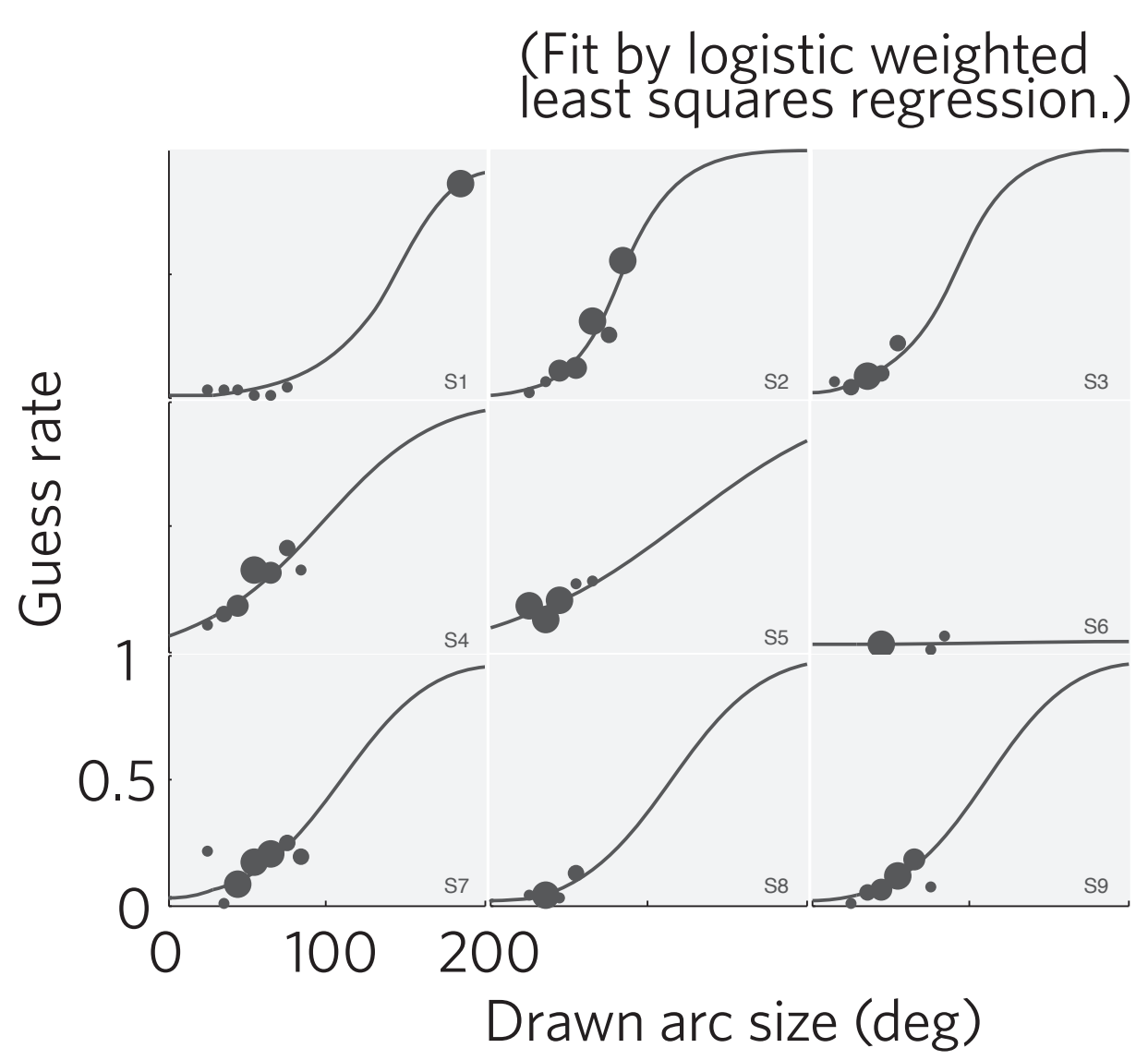
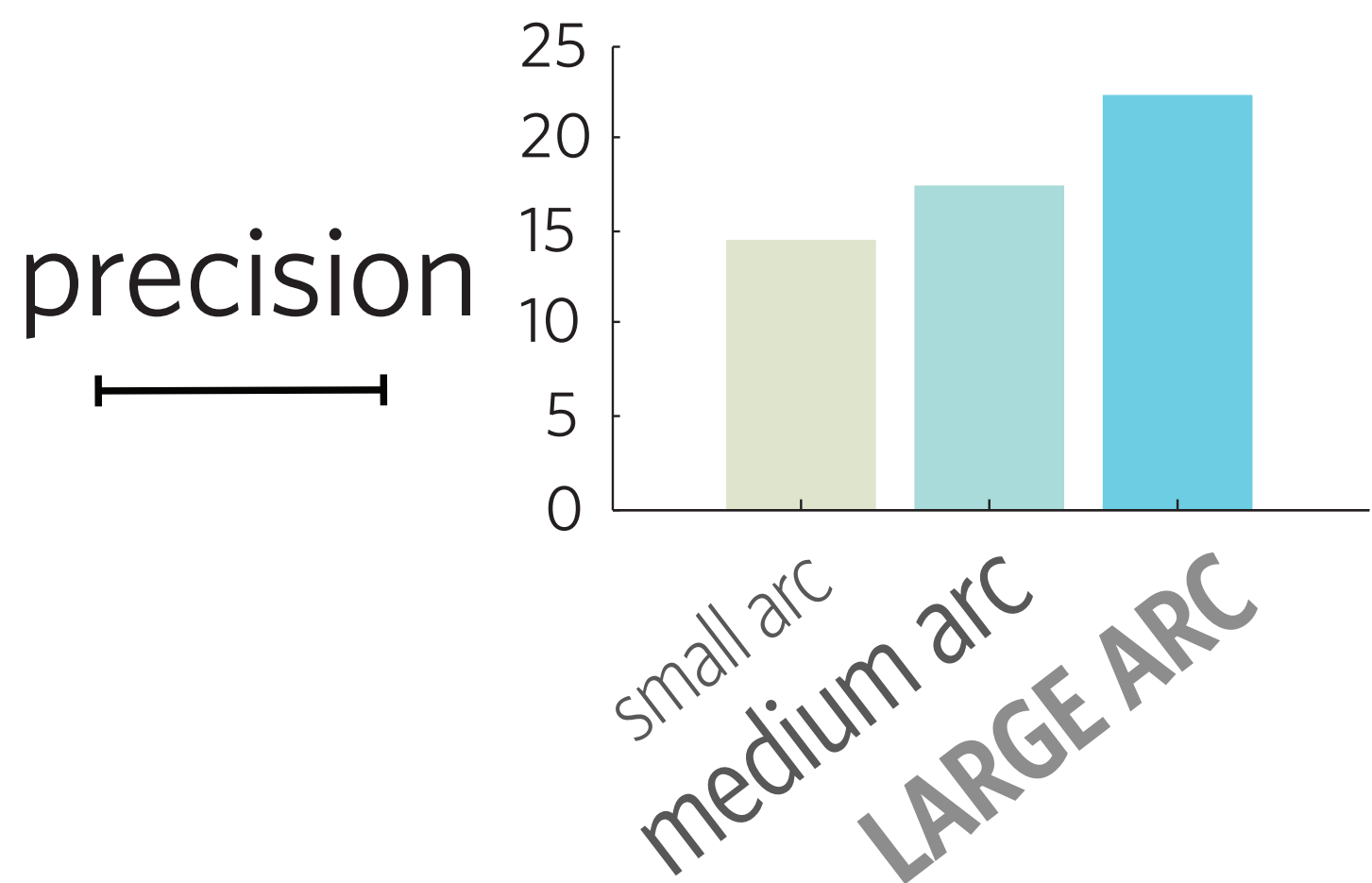
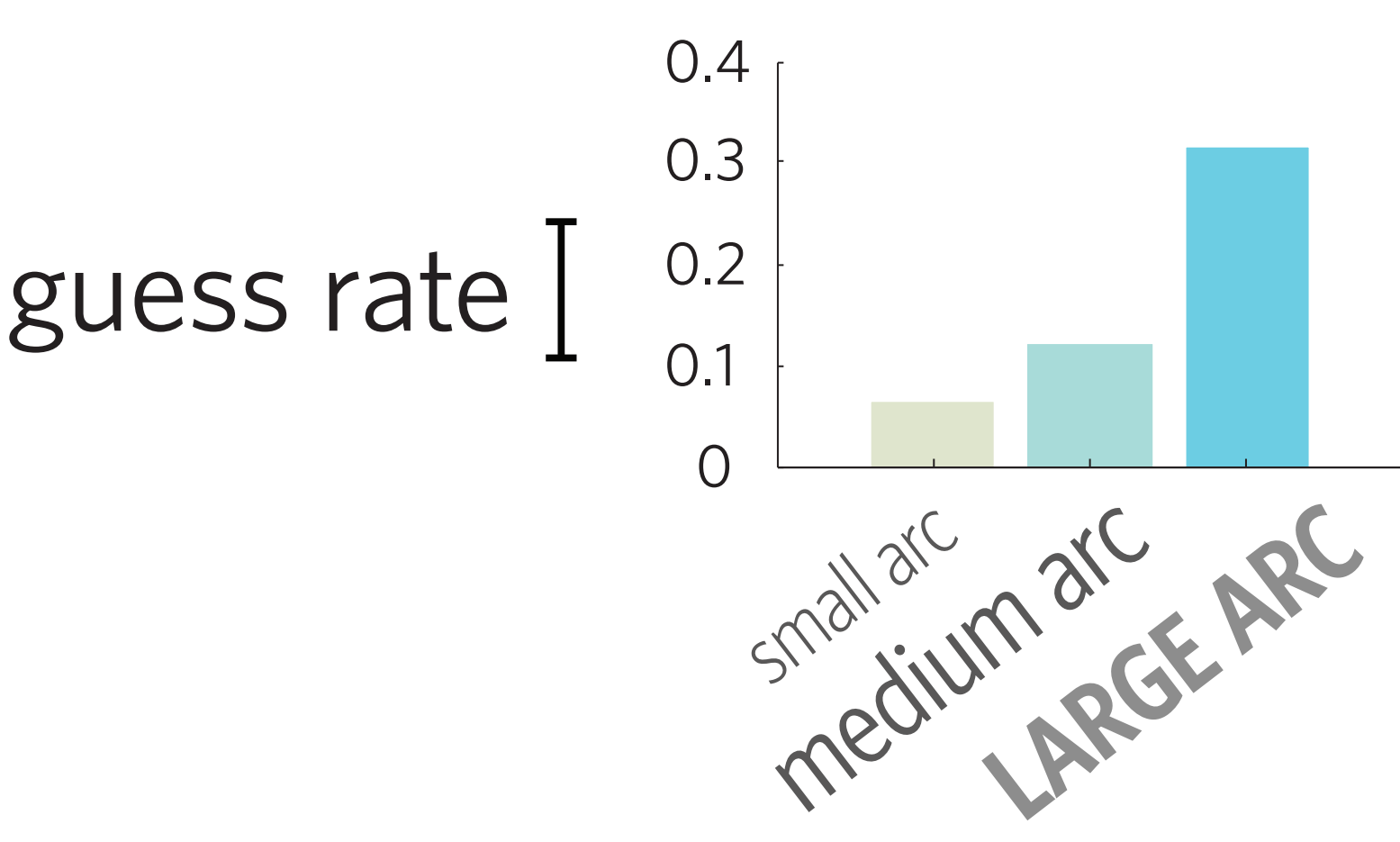
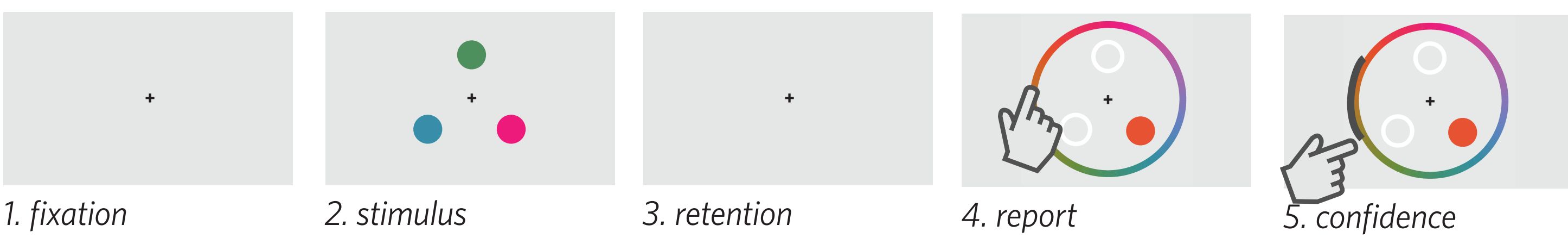
Q: Were there tradeoffs during encoding?



A: No. On each trial, we asked participants to report all of the items from the display. We found independence of performance across items.

TASK TWO

A standard visual working memory task, with the addition of a confidence rating given in the form of an arc drawn on the color wheel.



CONCLUSIONS

(1) Visual working metamemory exists, (2) it reflects both the existence and the precision of the underlying memories, and (3) people can use it to guide their selection of information stored in memory, picking out the object they remember best.

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