

Gazing with purpose: The role of intentionality in gaze shifts and gaze following



SSHRC CRSH

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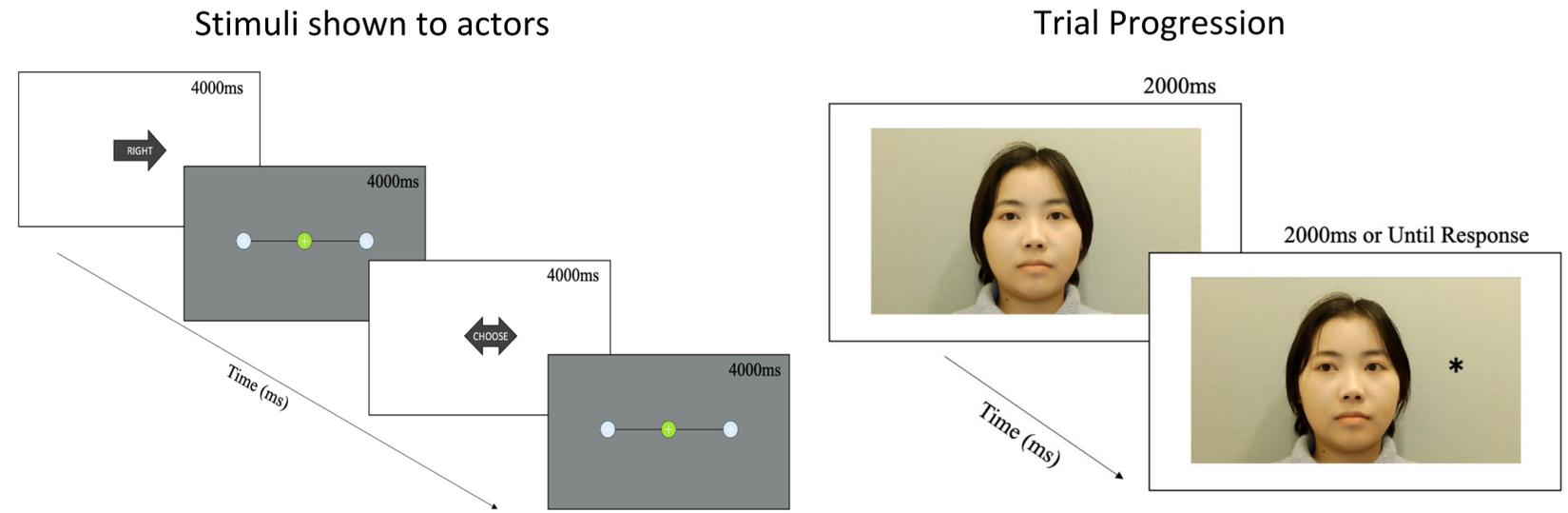
INTRODUCTION

Humans follow where others are looking, a phenomenon called gaze following behavior¹.

The mechanisms behind this behavior remain debated. Is gaze following a result of directional cues or of mentalizing processes?

Following up on past work, we modified the classical gaze cueing task² to test the individual contributions of each approach by manipulating the intentionality of the gaze (self-chosen vs. computer-instructed) and its consistency with a target (consistent vs. inconsistent).

METHODS



N = 74 (62 females, 10 males, 2 others, $M_{age} = 20.41$)
 Gaze Cueing Task where (1) Actor ID, (2) Cue Consistency, and (3) Gaze Shift are manipulated.

DISCUSSION

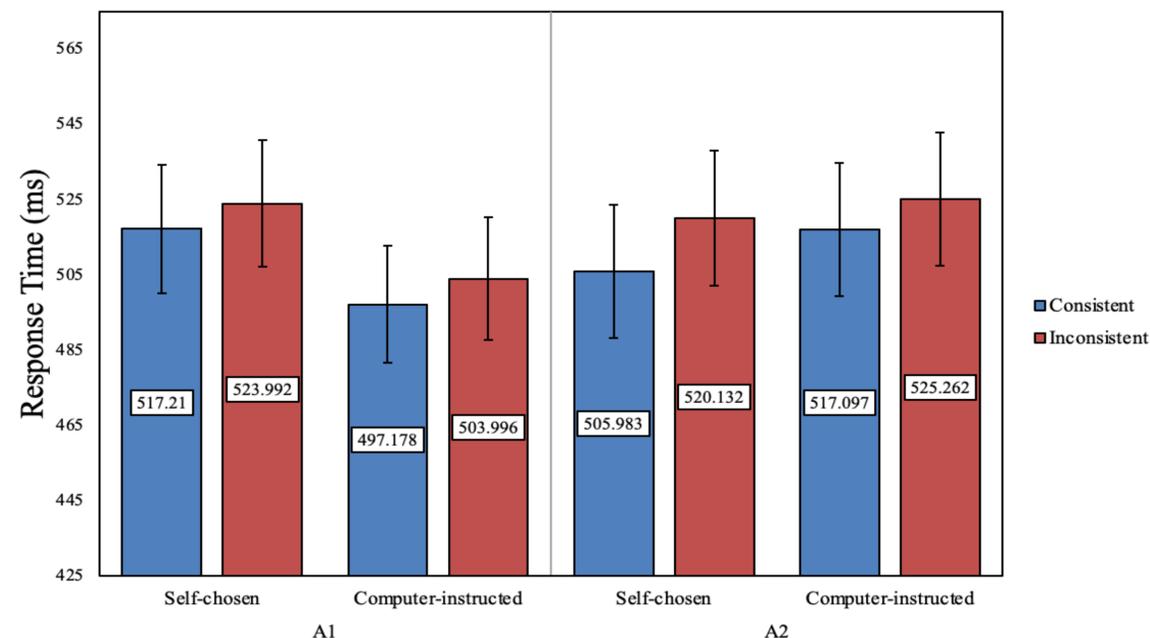
Participants were faster to report on the target with consistent cues.

Participants were also slower to respond to self-chosen gaze, although this effect interacts with Actor ID.

These results point towards mentalizing processes being present in gaze-following behaviours in addition to directionality, but might be dependent on the gazer.

RESULTS

Response times as a function of Actor ID, Gaze Consistency and Gaze Shift



Main effect of Cue Consistency:
 $F(1,73) = 18.639$,
 $p < 0.001$, $\eta^2 = 0.203$

Main effect of Gaze Shift:
 $F(1,73) = 7.545$,
 $p = 0.008$, $\eta^2 = 0.094$

Interaction of Actor ID and Gaze Shift:
 $F(1,73) = 52.501$,
 $p < 0.001$, $\eta^2 = 0.418$

REFERENCES

1. Capozzi, F., & Ristic, J. (2020). Visual Cognition, 28(2), 97-105.
2. Friesen, C. K., & Kingstone, A. (1998). Psychonomic Bulletin & Review, 5(3), 490-495.