

Effect of perturbation during motor adaptation on hand localization in virtual reality

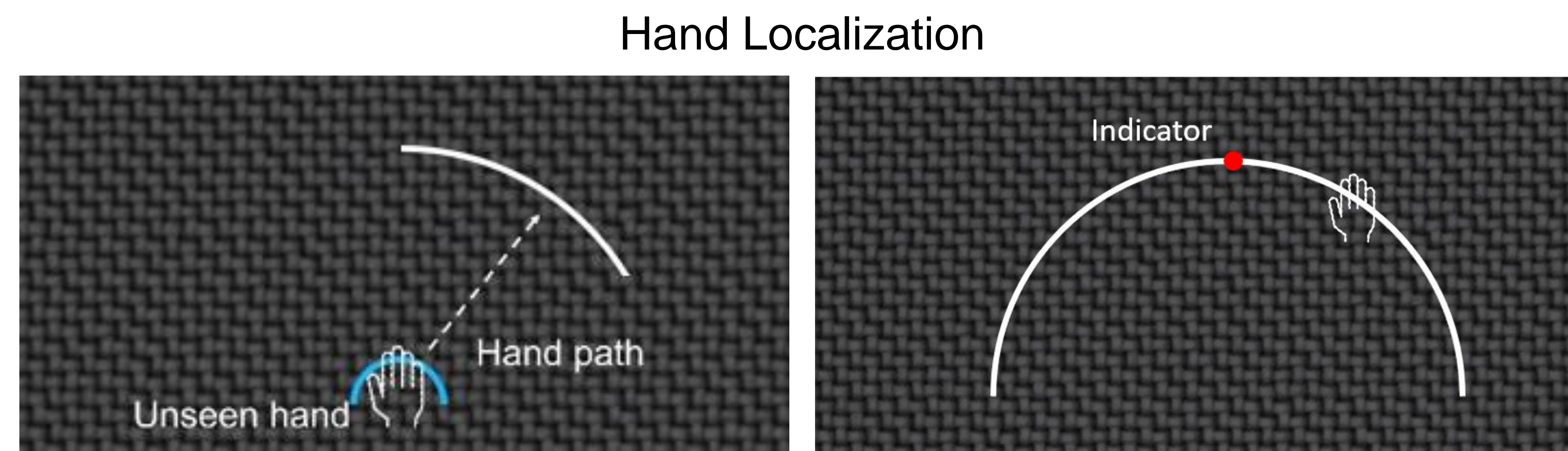
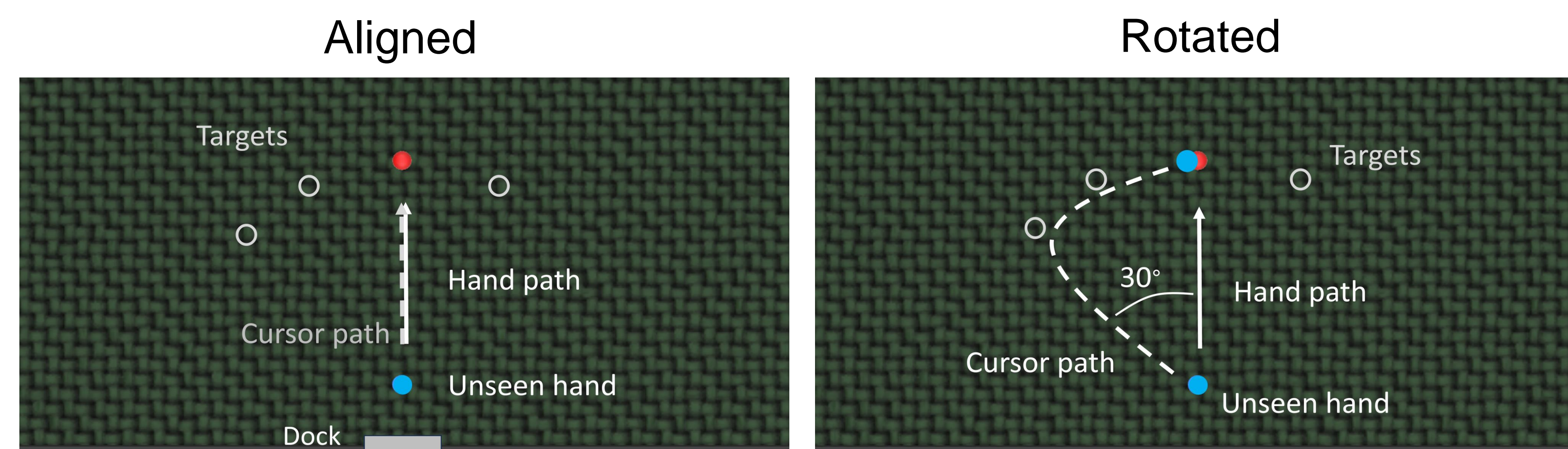
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Are end-effector shifts also observed in more naturalistic virtual reality environments?

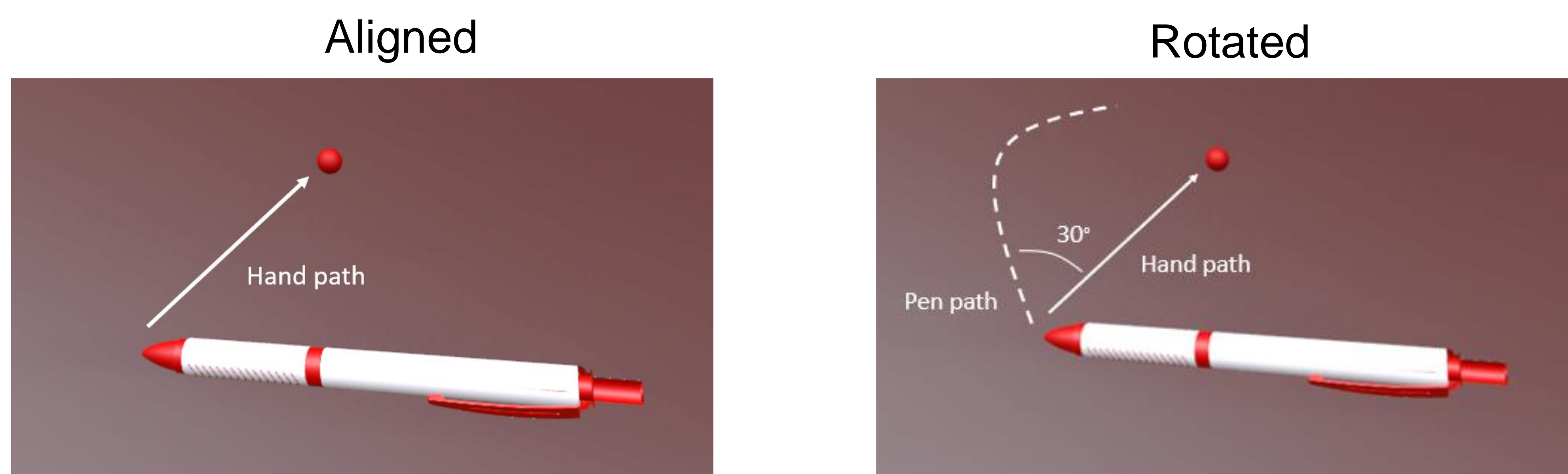
- Our brain has a remarkable capacity for learning movements and adapting them to accomplish a motor goal.
- When visual feedback of hand position is misaligned, people can compensate for this perturbation, show persistent reach aftereffects, and even misestimate the location of the unseen hand in the direction of previous visual training.

Participants reached to targets and indicated hand position

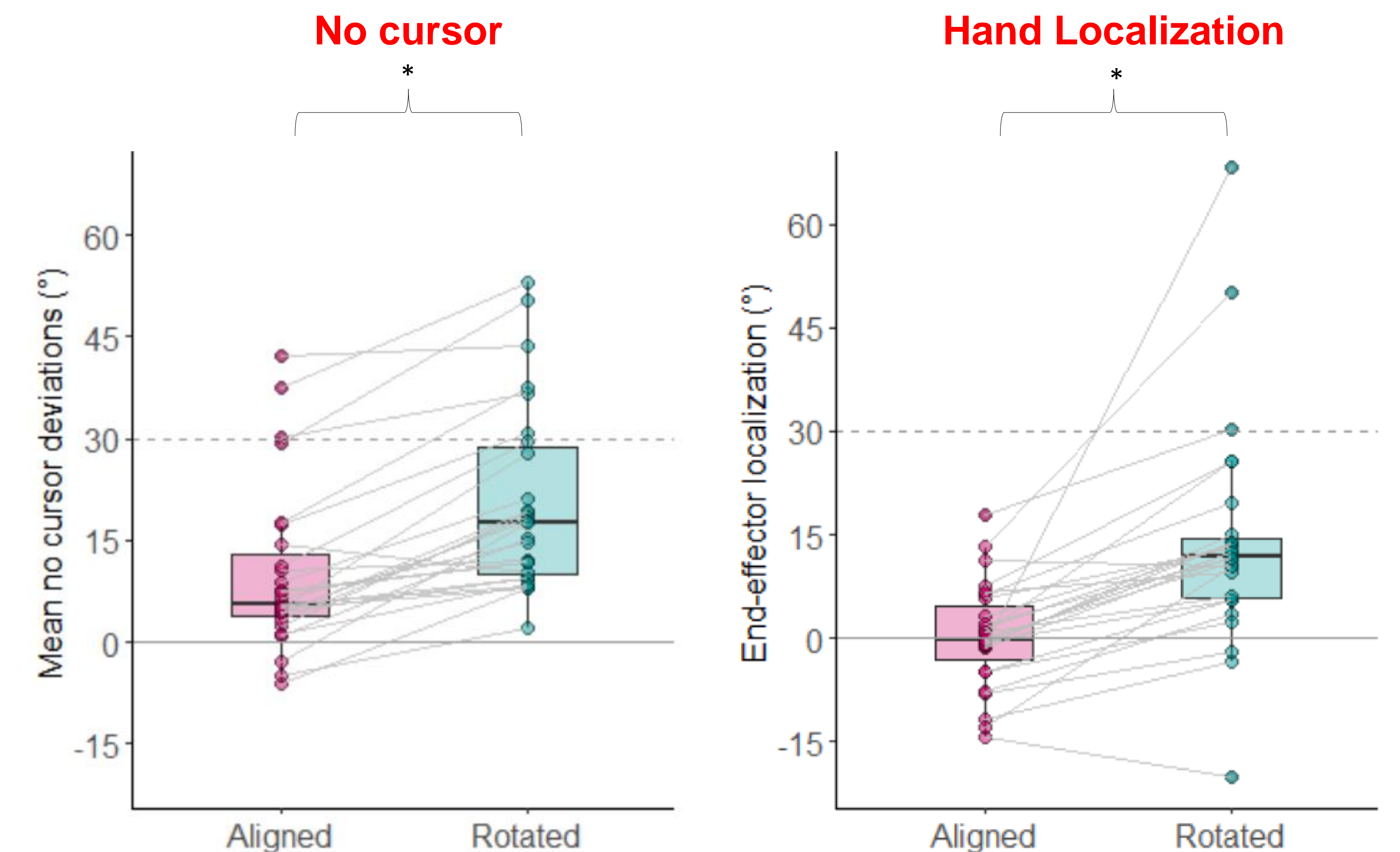
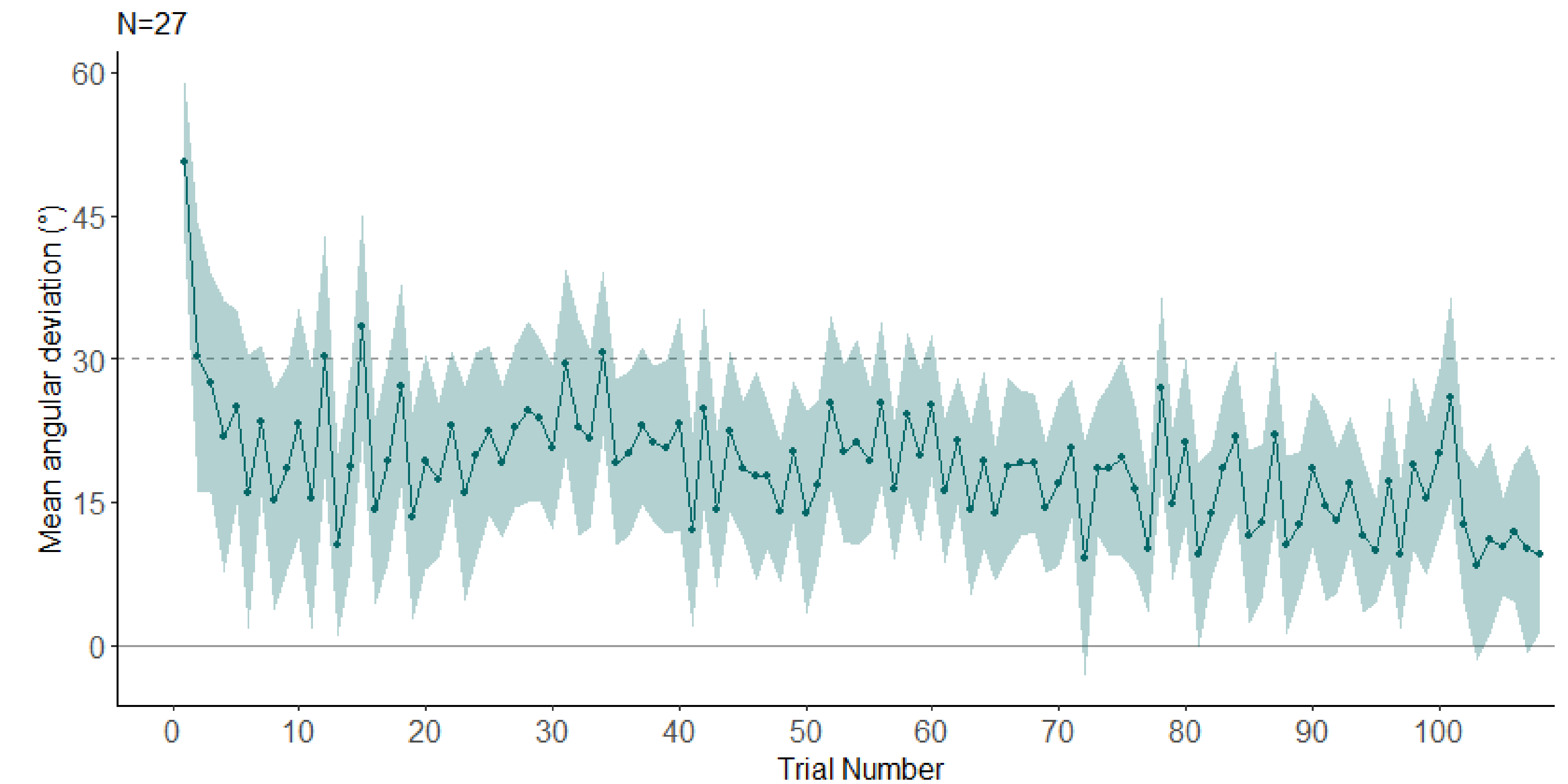


Next Steps

How well can people adapt when aiming with a tool and is tool location also recalibrated?



Reaches compensated for perturbation which led to reach aftereffects and shift in hand localization



In VR, reach adaptation led to a consistent shift in estimating the unseen hand location and implicit reach aftereffects