

## Supplementary Data

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# Visuomotor Impairment in Early-Stage Alzheimer's Disease: Changes in Relative Timing of Eye and Hand Movements

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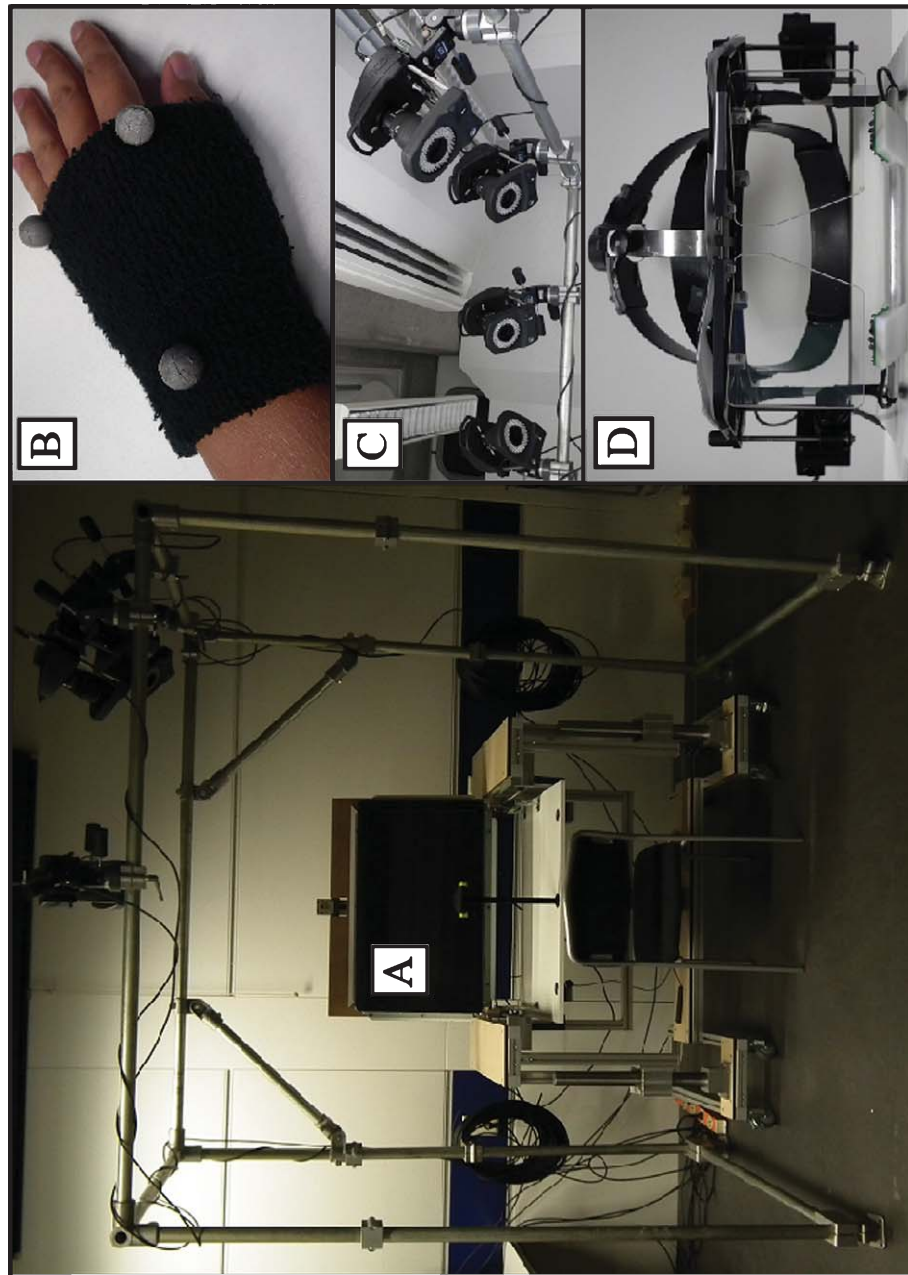
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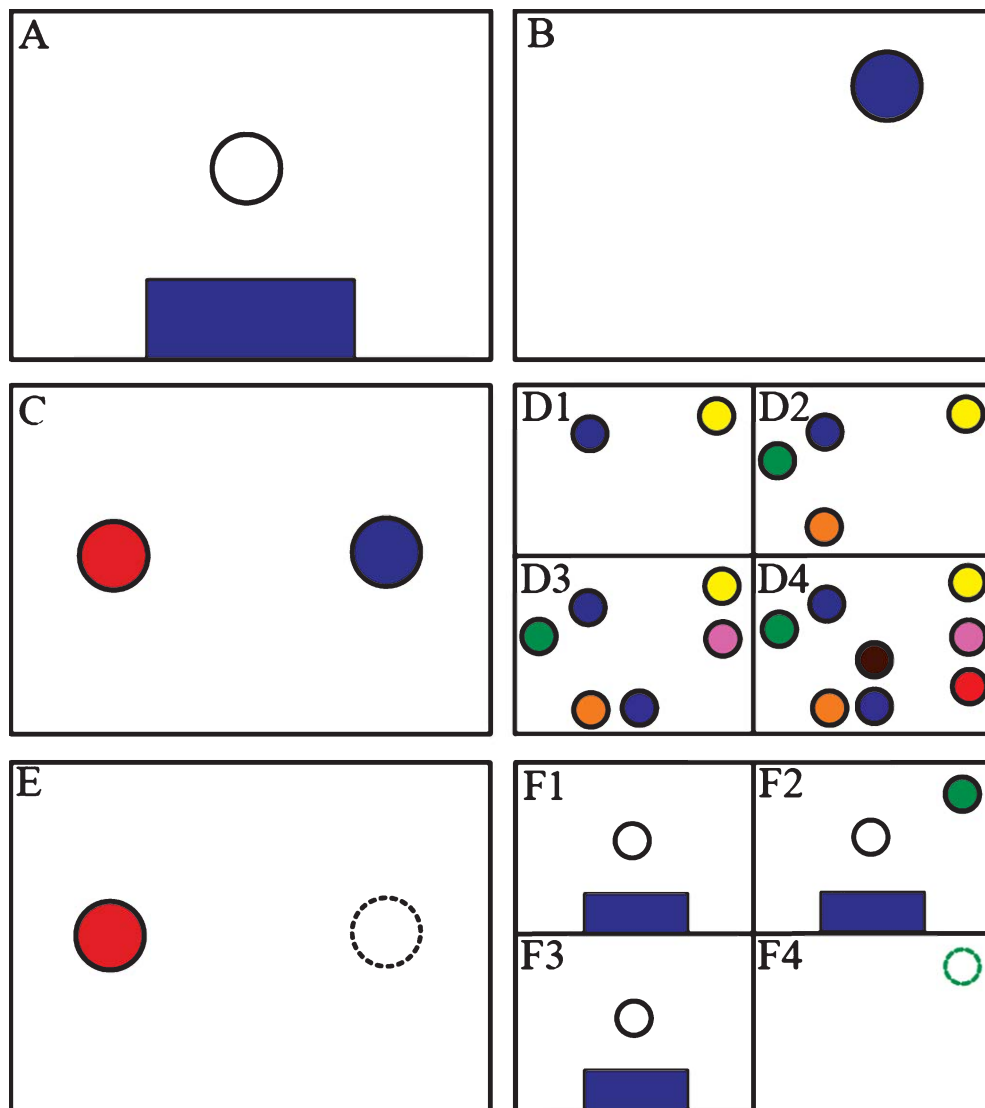
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Supplementary Figure 1. The measurement setup consisting of a touch screen, a motion capture system, and an eye tracker. Participants were seated in front of the touch screen (A), on which the tasks were displayed. Participants wore a wristband with three markers of reflective tape (B), which allowed the Vicon motion capture system (C) to register all hand movements made in a predefined volume. The Chronos eye tracker (D) was used to record eye movements during the tasks.



Supplementary Figure 2. Representations of the touch screen showing the different tasks. A) Starting position. The background color of the touch screen was set to grey (brightness of 60%, i.e., [RGB] of [0.6 0.6 0.6]) and remained this color during all tasks. The participant fixated the eyes on the white central dot (brightness of 100%) and placed the index finger on the blue bar (brightness of 17%) on the bottom of the screen. B) Pro-tapping task. A blue dot appeared that had to be touched as fast and accurate as possible. C) Dual planning task. The eyes had to be fixated on the red dot (brightness of 33%), while simultaneously the blue dot had to be touched. D) Sequential tapping task. D1: two colored dots had to be touched in a fixed order, i.e., blue and yellow (brightness of 83%). In each succeeding subtask the level of difficulty was increased by expanding the number of targets to four adding green (brightness of 38%) and orange (brightness of 58%), six adding pink (brightness of 48%) and purple (brightness of 30%) and finally eight adding red and brown (brightness of 28%) (D2–4). E) Anti-tapping task. Participants had to touch the screen on the side opposite to the location of the red dot, mirrored in the y-axis. F) Spatial memory task. A green dot briefly flashed on the screen while participants were in starting position (F1–3). As soon as the starting position disappeared from the screen, the remembered location of the flashed dot had to be touched (F4).