

Self-motion perception without sensory motion

A. J. C. Reuten^{1,2*}, J. B. J. Smeets¹, M. H. Martens^{3,4}, J. E. Bos^{2,1}

¹ Department of Human Movement Sciences, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

² Human Performance, The Netherlands Organization for Applied Scientific Research (TNO), Soesterberg, The Netherlands

³ Traffic and Transport, The Netherlands Organization for Applied Scientific Research (TNO), The Hague, The Netherlands

⁴ Department of Industrial Design, Eindhoven University of Technology, Eindhoven, The Netherlands

*a.j.c.reuten@vu.nl

ORCID

Reuten: 0000-0003-4641-4180

Smeets: 0000-0002-3794-0579

Martens: 0000-0002-1661-7019

Bos: 0000-0002-1494-6804

Supplementary Information

Temporal response traces of displacement and MISC class per participant

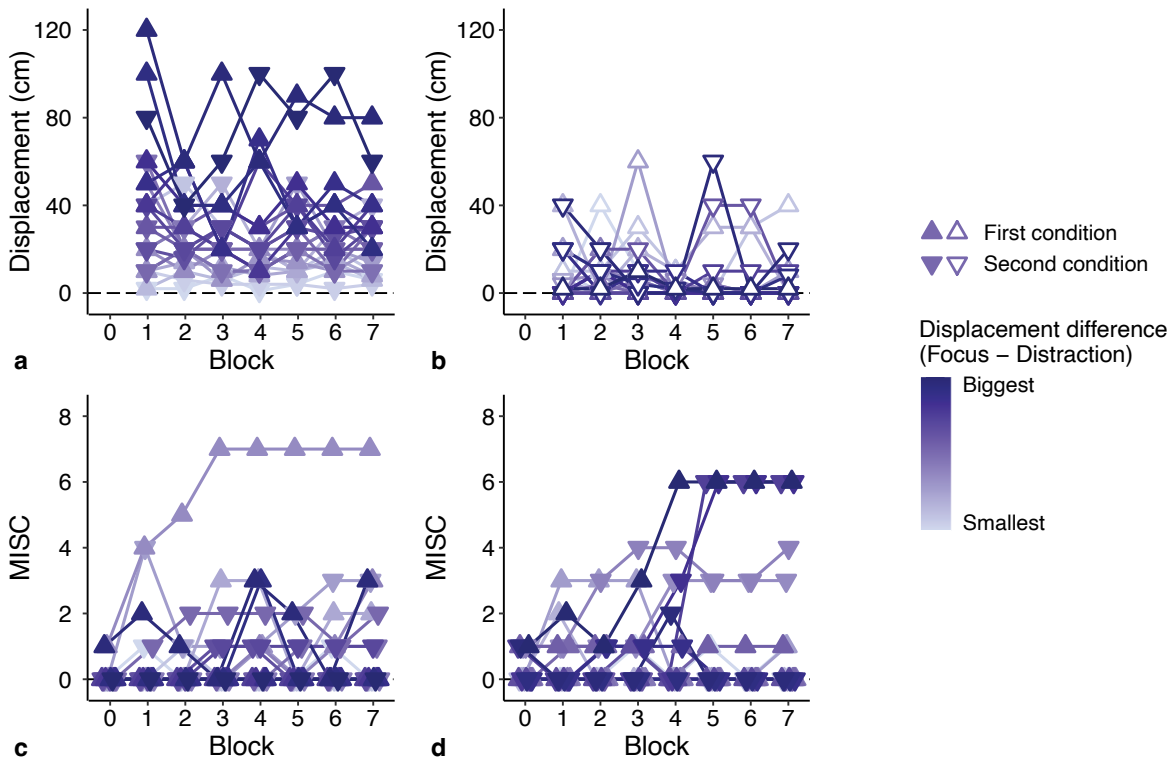


Fig. S1 The development of displacement (**a, b**) and MISC class (**c, d**) in the Focus and Distraction condition reported by individual participants. We used a gradient to contrast the participant with the biggest displacement difference between conditions (in dark purple) to the participant with the smallest displacement difference (in light purple). To visualize a possible effect of condition order, we used different symbols indicating the order of conditions for each participant

Exploratory correlational analyses

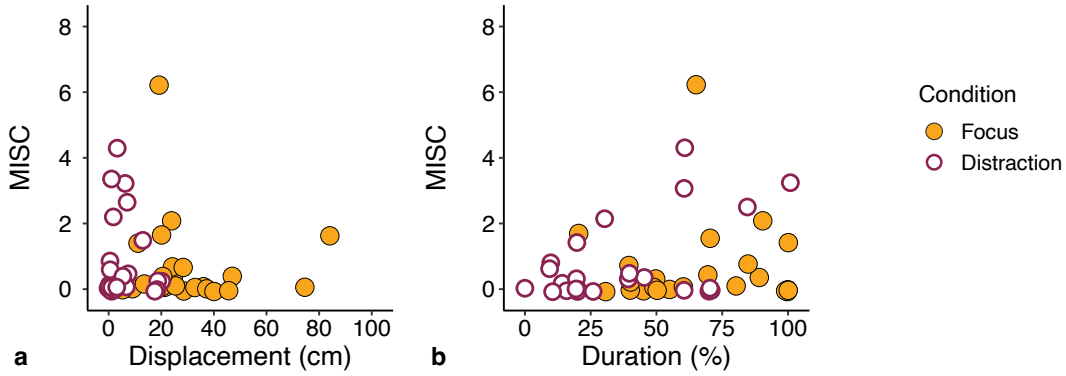


Fig. S2 We explored possible correlations between measures of self-motion perception and MISC class independent of condition. **(a)** There was no evidence for a correlation between the reported displacements and MISC classes ($r_s = -0.04$, $p = 0.805$), **(b)** neither between the reported motion durations (0% = never moved to 100% = always moved) and MISC classes ($r_s = 0.12$, $p = 0.405$). Jitter was added to help discriminate between individual data points