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| **Debriefing**  Optimality in visual search. |

I would like to take this opportunity to thank you for your time today!

A recent influential model proposed that eye movements are “ideal” during search and maximally efficient (Najemnik & Geisler, 2005). However a series of studies carried out in our (in preparation) and other laboratories (Morvan & Maloney, 2012) implicated that humans are not optimal in visual search.

In this study we systematically varied the heterogeneity of the distractor, relative to the target, making it an easy search(pop-out) on one side of the screen and hard search(serial) on the other side of the screen and measured participant’s eye movements. When the target is absent an optimal strategy is to move your eyes to the hard side of the display (serial search) because no eye movement is necessary to conclude that the target is not on the ‘pop-out-side’ of the display. If participants move their eyes to the easy (parallel) side first despite the fact that the target is not presented there, their strategy will be deemed suboptimal.

Any information obtained during the course of the research will be kept strictly confidential. Before commencing the experiment, you will have been allocated a participant ID code, from that point onward your data will have been collected and stored anonymously. Your data will be kept for five years and may be used in future studies of similar topics. If, for any reason, you wish to withdraw from this study, you may do so by contacting the researcher or his supervisor.

If you would like to read more on this research area, please see:

Morvan, C., & Maloney, L.T.(2012) Human visual search does not maximize the post-saccadic probability of identifying targets. *PLoS Computational Biology*, 8(2), 1-11.

Najemnik, J., & Geisler W.S.(2005) Optimal search strategies in visual search. *Nature*, 434, 387-391

If you would like further information regarding this research or have any questions or concerns, please speak to the experimenter, or contact: Anna Nowakowska ([r02al13@abdn.ac.uk](mailto:r02al13@abdn.ac.uk)) or Dr. Amelia Hunt([a.hunt@abdn.ac.uk](mailto:a.hunt@abdn.ac.uk))