VMAC DM Debriefing Questions

**1. What are the research questions?**

The experiment investigates how likely we are to be distracted by distinctive stimuli, and how this influences the choices that we make. We know that stimuli signalling the opportunity for reward become more likely to capture our attention, in a way that is very hard for us to overcome. In the current experiment we are investigating how this attentional bias to reward influences the choices that we make

**2. How does this study extend previous research on this topic?**

Previous research has shown that reward signalling stimuli become more likely to capture people’s attention (Le Pelley et al., 2015), and that stimuli that people intentionally pay attention to are more likely to be chosen (Shimojo et al., 2003). This study extends on previous research by examining whether the attentional bias to reward influences the decision-making process.

**3. What are some potential real-world implications of this research?**

We live our lives surrounded by signals for reward: signs directing us to tasty food and drink, adverts for desirable products, social media notifications on our phones, etc. The findings from this study will help deepen our understanding of how our cognition works. That is, how people gather and process information in their environment that they use to make decisions about how to behave.

**4. Briefly describe a potential issue (e.g., ethical, practical) or limitation of the study (e.g., design, ecological validity).**

One potential ethical issue is that monetary reward might further incentivize people to sign up to the study. To ensure that this performance-dependent reward does not constitute an additional inducement to sign up for the study, it will be not be mentioned in the project description on SONA and will only be mentioned on the consent form and in subsequent instructions.

**5. Briefly describe the study methodology (e.g., design, dependent/ independent variables, materials).**

The study uses a within-subjects design. The key independent variable is the colour of the distractor in the search/choice display. The main dependent variables are (1) time to locate and respond to the target in the Search Task, and (2) the proportion of choice trials on which the coloured circle is chosen.

**6. Further reading (i.e., a reference to a reading/s related to the current study for curious students).**

Pearson, D., Watson, P., Albertella, L., & Le Pelley, M. E. (2022). Attentional economics links value-modulated attentional capture and decision-making. *Nature Reviews Psychology*, 1–14. <https://doi.org/10.1038/s44159-022-00053-z>