Debriefing for Selective Attention

IRB Protocol #: IRB-2023-1181

1. What is the general aim of this research?

This research is designed to investigate how different visual transients (abrupt onsets and offsets of stimuli) affect selective attention (your ability to focus attention on targets and ignore distractors in the environment). More specifically, the present study aims to clarify previous findings about whether distractors draw attention to themselves when they have abrupt onsets (i.e., they appear suddenly), thereby modulating performance on a selective-attention task.

2. Is this correlational or experimental research?

This is experimental research. We manipulated the type of visual transient (onset or offset) for target and distractor stimuli in a selective-attention task, as well as the congruency of the target and distractors (whether they were associated with the same response or different responses). We measured your task performance in terms of response time and error rate. We predict worse performance when the target and distractors are incongruent (i.e., associated with different responses) and expect that this effect will be larger when the distractors have abrupt onsets.

3. What topic in introductory psychology does this research illustrate?

This research is covered under the topic of attention in introductory psychology textbooks.

4. Where can I learn more about this type of research?

For published research related to the topic of this study, please see:

- Miller, J. (1991). The flanker compatibility effect as a function of visual angle, attentional focus, visual transients, and perceptual load: A search for boundary conditions. *Perception & Psychophysics*, 49(3), 270–288. https://doi.org/10.3758/BF03214311
- Yantis, S. (1993). Stimulus-driven attentional capture. *Current Directions in Psychological Science*, 2(5), 156–161. https://doi.org/10.1111/1467-8721.ep10768973
- **5.** Which faculty member is supervising the research and how can I contact her/him/them? Dr. Darryl W. Schneider, an Associate Professor in the Department of Psychological Sciences, is supervising this research. You can contact him by phone at 765-494-3537 or by email at dws@purdue.edu.

6. How long has the investigator been studying this topic and how does this study fit into the investigator's program of research?

Dr. Schneider has been studying cognition and attention for over 15 years. The current study is designed to provide further insight regarding aspects of selective attention.

A lot of research in psychology depends on the participation of individuals like yourself. We're very grateful for your help. Thank you very much for participating.