SONA debrief questions

The purpose of these debrief questions is to provide an opportunity for first year students to learn about psychology research. Answers to the first three questions may be discussed in tutorials as part of an in-class exercise ('Psychology Research in Action') that evaluates the motivation, scientific significance and potential practical benefits of the study. Please bear this in mind when drafting your answers and do not include details in response to the first 3 questions that might compromise the legitimacy of your study.

These sample answers were based on studies described in the following research conducted on first year UNSW students: http://eprints.whiterose.ac.uk/83702/1/White_etal_2014.pdf

What are the research questions?

We were interested in participant's ability to match the identity of unfamiliar faces. This task is performed routinely as part of Photo-ID checks. We were specifically evaluating a potential solution to improve the accuracy of this applied task. This practical solution has been designed in light of theoretical work that shows people learn new faces by being exposed to variation in the appearance of their face.

How does this study extend on previous research on this topic?

As discussed in the reading below, many previous studies have found that people perform very poorly when trying to match photographs of unfamiliar faces (error rates can be as high as 20-30 %). Conversely, errors are almost non-existent if we are familiar with the people whose photographs we are matching. This study extends on these findings by exploring how people become familiar with a face, in the initial stages of face learning where the participant is encountering an unfamiliar face for the first time.

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

When border control officers check passports at borders or when police review CCTV evidence, they are performing face matching tasks that are similar to the task you have just completed. The results of this experiment could potentially help improve the design of Photo-ID documents like passports, or the processes that are followed when people make face matching decisions in forensic settings such as police investigations and in court.

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

Real-world familiarity involves many factors, e.g. personal interaction over long periods, which are difficult to control in a laboratory setting. Therefore, our attempt at recreating "familiarity" simply by providing more photographs might not affect face matching accuracy. Future work that extends this study to examine how familiarity unfolds in more naturalistic conditions can help us understand the cognitive mechanisms that support face and person leaning in everyday life.

Briefly describe the study methodology (e.g design, dependent/ independent variables, stimulus presentation)

The study was an experiment. Participants were asked to complete a face-matching task, in which they had to decide if photographs of a "target" face were the same person as a comparison photo shown alongside the target person on a computer screen. The independent variable was the number

of photographs (between 1-4) of the target face, and the independent variable was face-matching accuracy.

Further reading (suggest a one or two readings that are related to the current study)

Burton, A. M., & Jenkins, R. (2011). Unfamiliar face perception. In G. Rhodes, & J. Haxby (Eds.). *Oxford handbook of face perception* (pp 287-306). Oxford University Press. (Electronic version available from UNSW library).