

## **Debriefing form**

Thank you for completing this study, conducted by PhD Student Carl Michael Galang (galangc@mcmaster.ca) under the supervision of Dr. Sukhvinder Obhi (obhi@mcmaster.ca).

The aim of this experiment is to investigate the influence of pain observation on automatic imitation. Automatic imitation refers to the automatic tendency to imitated observed actions. We measured automatic imitation using the Automatic Imitation Task, which uses your reaction times and error rate as an index of automatic imitation; the more influenced you were by the background image of the hand, the more your automatically imitated (i.e., slower reaction times and more errors made during the task). In between each automatic imitation trial, we interleaved videos of a hand getting stabbed by a needle or touched by a Q-tip. Previous work has shown that when the observer is shocked before an automatic imitation task, they are *less* influenced by the background image of the hand. However, it is currently unclear whether *observing* another in pain has similar results. Indeed, it is possible that, since pain observation focuses on another person, observers may be *more* influenced by the background image of the hand after pain observation. The current study explores this possibility. We also had you complete the Interpersonal Reactivity Index, a measure of self-reported empathy, and the Vicarious Pain Questionnaire, a measure of vicarious experience of another in pain. We will use these scores to explore whether empathy/vicarious experience levels mediate the relationship between pain observation and automatic imitation.

**Independent Variables:** Automatic Imitation (Congruent, Incongruent) and Video (Needle, Q-tip). **Dependent Variables:** Reaction Time & Error

You are fully entitled to receive feedback about the outcomes of this research. If you provided contact details on your consent form, you will be contacted with a concise report when the project is completed. If you decide later that you would like to receive this information, feel free to email the researcher. You may also contact the researcher if you have any further questions about the research (<a href="mailto:galangc@mcmaster.ca">galangc@mcmaster.ca</a>). This project was reviewed and cleared by the McMaster Research Ethics Board. If you any have concerns or questions about your rights as a participant or about the way the study is being conducted you can contact:

The McMaster Research Ethics Board Secretariat
Telephone: (905) 525-9140 ext. 23142
c/o Research Office for Administration, Development and Support (ROADS)
E-mail: ethicsoffice@mcmaster.ca

Thank you for your help with this research. Your participation is greatly appreciated!

Carl Michael Galang (PhD Student) Dr. Sukhvinder Obhi (Principal Investigator)

New Experiment 6
Does pain observation enhance or inhibit automatic imitation?
Ver. 1 – Feb. 20, 2020