Use this form to document Safe Work Procedures for hazardous activities and processes. The information in your Safe Work Procedure (SWP) should be supported by a risk assessment.

**SAFE WORK PROCEDURE**

**Faculty/School:** Science / Psychology  
**Initial Issue Date:** 07/03/2017  
**Next Review Date:** 07/03/2018  
**SWP Reference Number:**  
**Version:**  
**Version Issue Date:** 07/03/2017  
**SWP Title:** Experimentally-induced pain (Electrocutaneous)  
**Prepared by:** Matthew Coleshill  
**Responsible supervisor/s:** Ben Colagiuri and Matthew Coleshill

### List the Hazards and risk controls as per risk assessment

<table>
<thead>
<tr>
<th>Associated risk assessment reference:</th>
<th>Hazards</th>
<th>Risk controls</th>
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<tbody>
<tr>
<td>Low</td>
<td>Participant discomfort</td>
<td>Calibration procedures are performed to tailor maximum shock intensity to the individual participant’s tolerance.</td>
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<tr>
<td>Low</td>
<td>Participant minor injury</td>
<td>The PsychLab system used to deliver the shocks has a maximum output of 5mA which is considered safe in humans. The system is also electrically-isolated and has a built-in safety cut-out that prevents any unintended shocks being delivered in the event of a power surge.</td>
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<tr>
<td>Low</td>
<td>Participant fainting</td>
<td>Participants will be asked about their history of fainting and encouraged to discontinue if the circumstances of the experiment are likely to cause them to faint. Participants indicating a history of fainting but do not consider themselves to be a current risk will be monitored throughout the experiment.</td>
</tr>
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### List resources required including personal protective clothing, chemicals and equipment needed

N/A

### List step by step instructions or order for undertaking the task

- Once the participant has read the Participant Information Statement and has signed the Consent Form, participants are asked about whether they have a history of fainting. If the participant answers yes, this should initiate a discussion between the researcher and participant about what sort of events provoke them fainting. The researcher should also check if the participant has eaten recently—having skipped a meal increases the risk of fainting. If it seems likely that the participant could faint in response to the experimental procedures, then the participant should be encouraged to discontinue. Otherwise, the participant should be encouraged to monitor how they feel during the experiment and report any signs that they might be going to faint. The researcher should also “check in” with the participant frequently to make sure they are feeling comfortable and okay to proceed.

- All participants are then familiarised with the PsychLab system that delivers the electrocutaneous shocks. Here, participants are shown the device with the researcher explaining that they will never receive a shock above the maximum intensity the participant choses.

- Participants then undergo a shock calibration procedure to determine the maximum shock level they are comfortable receiving during the experiment. Here, participants receive a series of shocks, starting at a very
low and often undetectable intensity and gradually increasing. Participants are instructed to advise the researcher when the shocks first produce any pain (pain threshold) and then when they reach the maximum level which is painful, but tolerable (pain tolerance). For the remainder of the experiment, participants only ever receive shocks at or below their pain tolerance. If at any point during the calibration procedure the participant exhibits unusual sensitivity to the shocks, the experimenter reminds them that their participation is voluntary and that they have the right to withdraw without any negative consequence. Those continuing are monitored closely.

List emergency shutdown procedures

The following events should lead to immediate termination of the experiment, and removal of the electrocutaneous shock system.

If the participant:
- Asks for the stimulation to be ceased
- Reports exhibits unusually high levels of pain (e.g. screams out in pain)
- Feels unwell (nauseous, dizzy, gut cramps, etc)
- Feels faint or “needs air”
- Complains of disturbances to vision or hearing
- Experiences changes in heart rhythm or palpitations
- Becomes unresponsive
- Loses consciousness

In the case of unusually high levels of pain, the region where the shock electrodes were attached will also be visually inspected for any signs of damage. If any damage is observed, then take appropriate measures to reduce discomfort, such as cold water or an ice pack. The researcher is to then stay with the participant until the discomfort passes or the participant is comfortable that there is no actual tissue damage.

In the case that the participant loses consciousness, the researcher must immediately protect the participant from injury. The participant should be removed from their chair and assisted into a reclining position on the floor. Airway breathing and circulation should be assessed. The researcher must remain with the participant. When possible, first seek assistance from the local First Aid Officer (John Holden or Caleb Owens). If a local First Aid Officer cannot be reached, then seek assistance from Security Services (9351 3333) or alternatively Emergency Services (000). The participant must not leave the laboratory while still disoriented and, if necessary, the researcher should contact a friend or relative of the participant to accompany the participant home.

List Emergency procedures for how to deal with fires, spills or exposure to hazardous substances

In the event of an emergency evacuation, the following steps should be followed.
- If the “prepare to evacuate” alarm sounds (BEEP… BEEP… BEEP…), the experiment should be stopped as soon as possible, the PsychLab hardware be switched off, and the participant should be assisted out of the chair. Both experimenter and participant should gather personal possessions and be prepared to leave.
- If the alarm progresses to the EVACUATE alarm (WHOOP… WHOOP… WHOOP, and a recorded voice advising to leave the building), both the experimenter and subjects must leave the building. The nearest fire exit is via the stairs directly opposite the lab door, and out through the back door of the building. The experimenter and participant should go to the congregation point on the lawn between the Education Building and Teachers College.

List Clean up and waste disposal requirements

N/A
List references used in the development of this SWP, e.g. codes of practice


PsychLab Hardware Manual.

List competency required – qualifications, certificates, licensing, training - e.g. course or instruction:

Researchers must have completed the safety induction for conducting pain-related research in the laboratory and have been trained with the use of the PsychLab hardware and software.

Staff approved to assess competence for this SWP

Ben Colagiuri; Matthew Coleshill

SWP Sign off sheet

SWP name and version:

In signing this section the assessor agrees that the following persons are competent in following this SWP.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date Competent</th>
<th>Name of Assessor/Authoriser</th>
<th>Assessor/Authoriser signature</th>
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