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**UniSQ HREC Approval number: ETH2023-0716**

University of Southern Queensland

Participant Information Sheet

Questionnaire

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| **Project Title** |
| **Assessing differences in acute pupillometry response and cognitive demand following different exercise training types in trained individuals.** |

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| **Research team contact details** | |
| **Student Investigator details** | **Student Investigator details** |
| **Miss Yeleena Harradine**  Email: u1136924@umail.usq.edu.au | **Miss Hayley Tatton**  Email: u1139721@umail.usq.edu.au |
| **Principle Supervisor details** |  |
| **Mr Kyle Pringle**  **Associate Lecturer – Clinical Exercise Physiology**  Email:  [Kyle.Pringle@unisq.edu.au](mailto:Kyle.Pringle@unisq.edu.au)  Telephone: +61 7 3812 6425 |  |
| **Description** | |

**Purpose:** Explore physiological (heart rate, heart rate variability, ventilation, sleep, and fatigue) and cognitive (pupil constriction, dilation, gaze tracking, blink velocity) responses to evaluate changes in preparedness/readiness following different training types of resistance, aerobic and mixed training.

**Relevance:** This project will provide detailed insight into fatigue, cognitive processing, and physiological readiness following moderate to high physical activity, allowing for a unique understanding into both physical and cognitive determinants of different forms of physical activity.

**Involves**: Completing a computer based cognitive task with ocular biofeedback data (pupil dilation, constriction, gaze tracking, blink velocity) and physiological measures (heart rate, heart rate variability).

**Data collection:** Physiological data will be collected through Polar H10 heart rate chest strap, collecting parameters of cardiac rhythm (heart rate, heart rate variability) and respiration (breathing rate and volume) during a computer based cognitive task. Ocular biofeedback measures (pupil dilation, constriction, gaze tracking, blink velocity) will be collected during the cognitive task through wearable PupilCore eye tracking glasses.

**Collaboration**: This project is being conducted as part of research projects within Bachelors of Sport and Exercise Science (honours) degree at University of Southern Queensland.

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| **Participation** |

Your participation will involve completing three different physical activity training sessions, followed by completing a computer based cognitive task while wearing eye-tracking glasses and heart rate chest strap underneath clothing. The pre-task wellness questionnaire and computer task will take approximately 90min of your time for each trial, with three trials in total.

Your participation in this project is **entirely voluntary**.

* If you do not wish to take part, you are not obliged to.
* If you decide to take part and later change your mind, you are free to withdraw from the project at any stage without penalty, by contacting the Research Team (contact details at the top of this form).
* Non-participation will have no bearing on current or future course evaluation within University of Southern Queensland and will not have any academic standing towards university grading.
* Non-participation will have no bearing on current or future roles in the School of Health and Wellbeing and will have no bearing on occupational performance or evaluating.
* You will continue to receive all services as part of University of Southern Queensland course enrolment.
* You will not be coerced into participation by supervisors or research team and there is no expectation that you should or will consent to being involved in the proposed research or any future studies.

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| **Expected benefits** |

It is expected that this project will not directly benefit you, however; it may benefit the understanding of operational fatigue within healthy individuals and lead to enhanced understanding of autonomic nervous system control and responses relating to fatigue. This may lead to an improvement in fatigue monitoring of healthy and trained individuals and potentially improve performance and health outcomes trained individuals undertaking high stimulus roles/activities.

Participants will receive an incentive in the form of a gift card upon completion of all trials of the research project. The gift card will be presented upon completing the last trial of the research project and presented in the form of a physical gift card.

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| **Risks** |

In participation of the trials, there are no anticipated risk beyond normal day-to-day living. Participants may experience exercise induced muscle soreness following trails as an expected physiological response. Strategies to minimise this potential muscle soreness will be provided to each participant.

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| **Privacy and confidentiality** |

Your participation in this project is entirely voluntary. If you do not wish to take part, you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You will be unable to withdraw data collected about yourself after you have participated in the focus group.

All comments and responses are confidential unless required by law.

The research team will take every precaution to maintain the confidentiality of the data and your privacy. All data collected will be deidentified and names will be replaced with numbering prior to data storage.

The data collected within this project will be made available for future research purposes by the research team following project completion. All data will be non-identifiable, and any data collected as part of this project will be stored securely, as per University of Southern Queensland’s Research Data and Primary Materials Management Procedure.

Upon completion of the research trials and analysis of data, participant feedback and a summarised version of the research trial can be generated upon request.

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| **Consent to participate** |

We would like to ask you to sign an online consent form to confirm your agreement to participate in this project <https://bit.ly/USQResConsentKP01>

Alternatively, you can confirm your agreement to participant in the project online via direct email to primary researcher ([Kyle.Pringle@unisq.edu.au](mailto:Kyle.Pringle@unisq.edu.au).

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| **Questions** |

Please refer to the Research team contact details at the top of the form to have any questions answered or to request further information about this project.

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| **Concerns or complaints** |

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland, Manager of Research Integrity and Ethics on +61 7 4687 5703 or email [researchintegrity@unisq.edu.au](mailto:researchintegrity@unisq.edu.au). The Manager of Research Integrity and Ethics is not connected with the research project and can address your concern in an unbiased manner.

**Thank you for taking the time to help with this research project. Please keep this document for your information.**