UNIVERSITY OF LIMERICK
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UNIVERSITY OF LIMERICK RESEARCH ETHICS COMMITTEE

RISK ASSESSMENT FORM – PROCEDURES INVOLVING HUMAN SUBJECTS

Procedure No	SS071

Title of Procedure	Laser assessment of velocity and acceleration		
Name of Assessor(s)	Ian Kenny	**Assessment Date**	July 2019

Does this procedure already have ethical approval? (Delete as appropriate)	**YES**
If **YES**, enter ethical number and expiry date	**Approval No: 2021_01_SS071_RA** **End Date: July 2029**

1 Please provide a brief description of the procedure

This procedure involves maximal and sub-maximal running for a set distance between 5m and 100m. PESS students, staff, members of general public and trained athletes will be used. Subjects will warm up using their normal routine (usually 15 to 20 minutes), after which they will be perform 2-3 sub-maximal warm-up trials/runs. The testing trials will then commence. For maximal runs, no more than 10 trials will be conducted in any one session, with a minimum of 5 minutes recovery between each maximal trial. 2-3 minutes recovery will be provided between sub-maximal trials. A class I laser is positioned on a tripod a set distance behind the subject, aimed at their back, and provides a measurement of distance covered and time taken. The laser is positioned on a tripod at a set height and distance behind the participant. The laser operator will point the laser at the participants' back and will track this point throughout the entire run. Measurements of distance covered and time taken will be recorded.

2 Location in which the procedure may take place

x	PESS Biomechanics Laboratory (PG040, PG043)
x	Other appropriate off-campus sites
x	PESS Sports Hall, Gymnasium, Multipurpose Sports Hall, UL Arena and UL track

3	Eligibility of subject(s) to be used

x	PESS student (U.G. or P.G.)
x	University staff or campus personnel
x	Members of the general public e.g. sports scholarship athletes, high performance athletes, engaged in research projects granted ethical approval.

4	Potential risks. To be explained before obtaining consent

X	Low Risk

The laser device is a Class I laser. This is the weakest class of laser and poses minimal bio-hazard for human exposure. The device is required to be pointed at the subject's back as they run, therefore preventing any exposure to the eyes.

Other risks will be no greater than those risks already inherent with training sessions and running, for example, risk of pulled muscle, tendon or ligament strain, slight muscle soreness. Participants may wear the same attire as they normally would during competitive sport.

All exercise carries risk of cardiovascular accident in those who are susceptible. Participants with pre-existing muscle or joint problems carry more risk of injury than healthy participants. The participants will complete a standard pre-test questionnaire prior to participation, and anyone with a history of cardiovascular disease or recent / recurring injuries will not undertake this procedure. Participants will only take part when they present with no contraindications to safe participation in exercise / physical activity.

Additionally, all PESS research would utilise a participant information sheet (explaining the risks to participants) as well as in informed consent prior to participation,.

5	Action to be taken in the event of an foreseeable emergency

The procedure will be terminated if the volunteer shows any sign of distress.
Standard first aid procedures may be required depending on the severity of the situation. The following standard procedure should be followed in the event of an incident occurring in the PESS building / UL Facility:

1. Stop the procedure. Position the subject to prevent self-injury.
2. If appropriate, raise the subject's lower limbs to improve blood flow. Should the subject fail to respond summon help immediately.
3. Check vital signs airways, breathing and circulation (ABC)
4. If required attempt CPR as soon as possible.
5. Requesting Help: Emergency Contact telephone numbers are listed on laboratory door:
    - During normal working hours 9am-5pm, use lab phone to contact the Student Health Centre on **061-20**2534
    - Outside of normal working hours, or if the Student Health Centre number is engaged/busy, use the laboratory phone to dial 3333 for UL security personnel who will then contact the ambulance service. Contact one of the PESS First Aiders – names are listed on the PESS laboratory door.
6. When contacting the above clearly state: Location, Building, Room Number, Nature of Incident/Accident and provide a contact number.

7. Complete the UL ‘Accident & Emergency’ form (completed by the investigator, not the volunteer).
Forms available on UL HR website: https://www.ul.ie/hr/hr-policies-procedures-and-forms-z

6	**Level of supervision required for procedure**

X	Trained PESS lecturing or research staff or teaching assistants
X	Trained PESS postgraduate researcher
X	Trained PESS undergraduate student

7	**Other documentation required for this assessment?**

X	Pre-test subject questionnaire
X	Detailed protocol
X	Participant Information Sheet
X	Participant Consent Form

FOR COMPLETION BY HEAD OF DEPARTMENT

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In the Department of: Physical Education and Sports Sciences

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8 Approval of procedure

X	Granted

Others, please specify

Comments/conditions



Signed: _____ Date: 04/11/19

(Head of Department)