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UNIVERSITY OF LIMERICK RESEARCH ETHICS COMMITTEE

RISK ASSESSMENT FORM – PROCEDURES INVOLVING HUMAN SUBJECTS

		Procedure No	**SS 015**
Title of Procedure	Qualitative analysis of fundamental motor skills		
Name of Assessor	Dr. Phil Kearney	Assessment date	November 2018
Does this procedure already have ethical approval ?			**YES**
If so, enter ethical number and expiry date	**Approval No: 2019_11_SS 015 _RA** **End Date: December 2028**		

1 **Please provide a brief description of the procedure**

Participants will be assessed on a number of fundamental movement skills from the list detailed below. Depending on the circumstances, the performances may be video recorded to facilitate analysis and feedback.

1. **Run**: Participants will be asked to run a distance of 20-30m (depending on the age of the participant) in a straight line marked by cones at the beginning and end. Participants should be encouraged to run as fast as they can.
2. **Skip**: Participants will be asked to skip a distance of 10m in a straight line.
3. **Gallop**: Participants will be asked to skip a distance of 10m in a straight line. Half of the trials will lead with the right leg, and half with the left leg. Galloping is a skip-like movement pattern where one foot is always in front of the other.
4. **Hop**: Participants will be asked to hop a distance of 10m in a straight line. On half of the trials the participant will hop on the right leg and half on the left leg.
5. **Dodge**: Three cones are set out in a T shape, with one cone at the bottom of the base, and one at each side of the top. The base and top of the T both measure 10m. Participants stand by the single cone at the base of the T and when instructed run straight towards the tester who stands in the middle of the top of the T. When the participant is half way, the tester raises either his/her right or left hand, indicating which cone the participant is to run to. The participant must change direction as quickly as possible and run to the indicated cone.
6. **Leap**: Two gradually diverging lines of cones will be laid out. Participants will be asked to pick the furthest point between the lines of cones that they think that they can successfully leap across. Participants must start running within 5m of the first line of cones. Leaping involves taking off on one foot and landing on the other.

7. **Horizontal Jump**: Participants will be asked to stand behind a mark and then jump forward as far as they can, taking off and landing on two feet.
8. **Vertical Jump**: Participants will be asked to stand at a mark and jump as high as they can.
9. **Catch**: Participants will stand within a 2m square marked with cones. An experimenter will throw a ball to the participants which is aimed to land on one of the cones marking the 2m square and the participant is to attempt to catch the ball.

10. **Overarm throw**: Standing at the back of a 2.5m x 1m (length x width) rectangle marked with cones, participants will be asked to throw a ball as hard as possible at a wall.
11. **Strike**: Participants are given a bat/racket and asked to stand within a 2m square marked with cones. A ball is either thrown or bounced to the participant. Participants are instructed to strike the ball as far as they can.
12. **Kick**: A ball is placed at the front of a 3m x 1m rectangle marked with cones. Participants are asked to stand at the other side of the square, and when they are ready, to kick the ball as hard as possible towards a wall/net.
13. **Punt**: The punt is a kick where the ball is initially held in the hands. Participants are asked to kick a ball as hard as they can towards a wall or a net from within a 3m x 1m rectangle marked with cones.
14. **Static balance**: Participants are asked to place one foot on a wooden beam (400cm long, 4cm wide, 4cm high), with their hands on their hips and the other foot on the floor. When ready, participants are to raise their foot off the floor and place it so that the sole of the foot rests on the mid-shin. A timer starts when the foot is lifted from the floor. The timer ends when the foot is removed from the beam, the free foot is removed from the shin, or the hands are removed from the hips. The test may be performed with eyes open or closed. In addition, the test may be performed with the foot flat on the beam or standing on the ball of the foot.
15. **Dynamic balance**: Task begins as per static balance. The participant must walk along the beam. Depending on the level of the performers, the test may ask for a simple walk along the beam, for the participant to walk to the end of the beam and back, for the participant to walk "heel to toe", for the participant to shuffle sideways, or for the participant to walk backwards along the beam.

Standard Operating Procedure doe Qualitative Analysis of Fundamental Movement Skills are available on the PESS Sharepoint.

2 **Location in which the procedure may take place**

x	Biomechanics Laboratory (PG-040)
x	Research Laboratory (PG-043)

Others, please specify

x	Appropriate locations such as sports halls in PESS or UL Arena
x	Other appropriate facilities in schools or sports clubs

3 **Eligibility of subject(s) to be used**

x	PESS student (U.G. or P.G.)
x	University of Limerick staff or campus personnel

Others, please specify

x	Members of the general public engaged in research projects granted ethical approval

4	**Potential risks. To be explained before obtaining consent**

x	None, or minimal discomfort only

There are minimal risks such as muscle and joint injury and subjects may suffer from a little muscle soreness. However the risks will not be greater than in a normal skills teaching situation such as in a physical education lesson or a coaching session for beginners.

5	**Action to be taken in the event of a 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. If in PESS, 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

If an emergency or incident occurs offsite, follow the local procedures for dealing with such an event. **Ensure you are aware of the offsite local safety procedures in the event of a foreseeable emergency.**

6	**Level of supervision required for procedure**

	x	PESS lecturing, research staff and teaching assistants
	x	PESS postgraduate researcher
Others, please specify		
	X	Trained postgraduate student
	x	Teacher / Coach

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

x	Pre-test subject questionnaire
x	Detailed protocol

Others, please specify

x	Participant Information Sheet
x	Participant Consent Form
x	If participants are under 18 years, parental information sheet and consent form, and child assent form.

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PROCEDURES INVOLVING HUMAN SUBJECTS

Procedure No **SS 015**

Title of Procedure Qualitative analysis of fundamental motor skills

Name of Assessor Dr. Phil Kearney

Assessment date November 2018

W **Committee approval for experiment**

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Others, plerse sprcify

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Comments/conditions

Signedc. (Head of Department)

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Standard Operating Procedure SS 015
Qualitative Analysis of Fundamental Movement Skills

GENERAL PROCEDURES

(1) Participants should be screened for health risks, including recent musculo-skeletal injury, using an appropriate version of the PAR-Q (https://www.ul.ie/pess/research-ethics/par-q).
(2) Ensure that the testing venue is free from obstacles, and that the floor is appropriate (i.e., dry, even).
(3) Participants should be introduced to the test set up (cameras, stations, sequence).
(4) Provide instruction relating to the first skill.
(5) Provide familiarization attempts.
(6) Record 2-10 trials depending upon the skill and the circumstances (e.g., age).
(7) Move to the next station and repeat steps 3-5.
(8) The live performance or video recordings are evaluated using an appropriate qualitative checklist (e.g., as detailed in Gallahue & Clelland-Donnelly, 2007; Haywood & Getchell, 2014).

LOCOMOTOR SKILLS

1. Run

Preparation

- Measure a 20-30m straight line and mark the start and end with cones.
- If cameras are used, they are placed to collect a side view (at the 20m mark) and a front view.

Procedure

- Participants should be encouraged to run as fast as they can.
- Ensure that participants are fully recovered before asking them to perform an additional attempt.

2. Skip

Preparation

- Measure a 10m straight line and mark the start and end with cones.
- If cameras are used, they are placed to collect a side view (at the 5m mark) and a front view.

Procedure

- Participants should be encouraged to skip at a comfortable pace.
- Ensure that participants are fully recovered before asking them to perform an additional attempt.

3. Gallop

Preparation

- Measure a 10m straight line and mark the start and end with cones.
- If cameras are used, they are placed to collect a side view (at the 5m mark) and a front view.

Procedure

- Participants should be encouraged to gallop at a comfortable pace. Half of the trials will lead with the right leg, and half with the left leg.

4. Hop

Preparation

- Measure a 10m straight line and mark the start and end with cones.
- If cameras are used, they are placed to collect a side view (at the 5m mark) and a front view.

Procedure

- Participants should be encouraged to hop at a comfortable pace. Participants who demonstrate a basic form should be encouraged to "hop a little faster". On half of the trials the participant will hop on the right leg and half on the left leg.
- Ensure that participants are fully recovered before asking them to perform an additional attempt.

5. Dodge

Preparation

- Three cones are set out in a T shape, with one cone at the bottom of the base, and one at each side of the top. The base and top of the T both measure 10m.
- If cameras are used, they are placed to collect a side view and a front view focused on the point at which the child must change direction.

Procedure

- Participants stand by the single cone at the base of the T and when instructed run straight towards the tester who stands in the middle of the top of the T. When the participant is half way, the tester raises either his/her right or left hand, indicating which cone the participant is to run to. The participant must change direction as quickly as possible and run to the indicated cone. Participants should be encouraged to complete the course as quickly as possible.

6. Leap

Preparation

- Two gradually diverging lines of cones will be laid out.
- If cameras are used, they are placed to collect a side view (mid-leap) and a front view.

Procedure

- Participants will be asked to pick the furthest point between the lines of cones that they think that they can successfully leap across. Participants must start running within 5m of the first line of cones.

7. Horizontal Jump

Preparation

- Use two cones and some chalk to mark a starting line.
- If cameras are used, they are placed to collect a side view and a front view.

Procedure

- Participants will be asked to stand behind the mark and then jump forward as far as they can, taking off and landing on two feet.

8. Vertical Jump

- Use four cones and to mark a square within which the participant must jump.
- If cameras are used, they are placed to collect a side view and a front view.

Procedure

- Participants will be asked to stand within the square and then jump as high as they can.

MANIPULATIVE SKILLS

9. Catch

Preparation

- Set out a 2m square marked with cones.
- A variety of objects will be used (e.g., bean bag, tennis ball) depending upon the participant characteristics.
- If cameras are used, they are placed to collect a side view and a front view.

Procedure

- Participants will stand within the 2m square marked with cones. An experimenter will throw a ball to the participants which is aimed to land on one of the cones marking the 2m square and the participant is to attempt to catch the ball.

10. Overarm Throw

Preparation

- A rectangle of length 2.5m and width 1m will be marked out with cones facing a wall at least 10m away.
- If cameras are used, they are placed to collect a side view and a rear view.

Procedure

- Participants will be asked to throw a ball as hard as possible at the wall.

11. Strike

Preparation

- Mark out a 2m square using cones, facing a wall at least 10m away.
- If cameras are used, they are placed to collect a side view and a rear view.

Procedure

- Participants are given a bat/racket and asked to stand within the 2m square. A ball is either thrown or bounced to the participant, depending upon their level. Participants are instructed to strike the ball as far as they can.

12. Kick

Preparation

- A ball is placed at the front of a 3m x 1m (length x width) rectangle marked with cones, facing a wall at least 10m away.
- If cameras are used, they are placed to collect a side view (ball contact).

Procedure

- Participants are asked to stand at the opposite side of the rectangle from the ball, and when they are ready, to kick the ball as hard as possible towards a wall/net.

13. Punt

Preparation

- A ball is placed at the back of a 3m x 1m (length x width) rectangle marked with cones, facing a wall at least 10m away.
- If cameras are used, they are placed to collect a side view (ball contact).

Procedure

- Participants are asked to pick the ball, and when they are ready, to kick the ball as hard as possible towards a wall/net.

STABILITY SKILLS

14. Static Balance

Preparation

- Place a wooden beam (400cm long, 4cm wide, 4cm high) in an area of the venue away from any walls.
- If cameras are used, they are placed to collect a side view and a front view.

Procedure

- Participants are asked to place one foot on the wooden beam, with their hands on their hips and the other foot on the floor. When ready, participants are to raise their foot off the floor and place it so that the sole of the foot rests on the mid-shin. Participants are asked to hold this position for as long as possible.
- A timer starts when the foot is lifted from the floor. The timer ends when the foot is removed from the beam, the free foot is removed from the shin, or the hands are removed from the hips.
- The test may be performed with eyes open or closed. In addition, the test may be performed with the foot flat on the beam or standing on the ball of the foot.

15. Dynamic Balance

Preparation

- Place a wooden beam (400cm long, 4cm wide, 4cm high) in an area of the venue away from any walls.
- If cameras are used, they are placed to collect a side view and a front view.

Procedure

- Task begins as per static balance. The participant must walk along the beam. Depending on the level of the performers, the test may ask for a simple walk along the beam, for the participant to walk to the end

of the beam and back, for the participant to walk “heel to toe”, for the participant to shuffle sideways, or for the participant to walk backwards along the beam