


All staff undertaking risk assessments or checking risk assessments for student projects must be competent and have undertaken the University's Risk Assessment training.

Assessment Ref. No.	VRTreadmill	Version No.	1
Activity Assessed	<i>Please provide a clear description of the activity, purpose, where, and when it takes place.</i>		
	Immersive Virtual Reality with gaming treadmills – Link room 210		
Assessment Date	16/03/2026	Faculty / Directorate	Health and Human Science
Date of Next Review	March 2027	School / Service	Psychology
Assessor	Martyn Atkins	Additional individuals involved in developing the RA	Archie Bullivant & Gray Atherton
Signature of Assessor		Signature of Academic Supervisor / Approver	

Risk Score Matrix							Risk Score and Description			
Likelihood	Severity						Risk Score	Risk Level	Category	Description
		Insignificant	Minor	Moderate	Major	Fatal				
	Very Unlikely	1 Green	2 Green	3 Green	4 Green	5 Amber	1 – 4	Low	Acceptable	No further actions needed
	Unlikely	2 Green	4 Green	6 Amber	8 Amber	10 Red	5 – 9	Medium	Tolerable/Adequate	Should be reviewed to ensure that there is nothing else which could be done
	Possible	3 Green	6 Amber	9 Amber	12 Red	15 Red	10 – 15	High	Undesirable	Immediately review current control measures, and where appropriate decide on further actions
	Likely	4 Green	8 Amber	12 Red	16 Red	20 Red	16 - 25	Very High	Unacceptable	Stop activity and make immediate improvements
Almost Certain	5 Amber	10 Red	15 Red	20 Red	25 Red	<i>Likelihood (L) x Severity (S) = Risk Score (RS)</i>				

What is/are the hazard(s) involved with the activity being undertaken?	Who might be harmed and how?	What are you already doing to control the risk?	Risk Score with current controls in place			What further action is necessary? (Add these actions to the action plan below).	Target Risk Score Likelihood x Severity = Risk Score		
			L	S	RS		L	S	RS
Slips and trips	Researcher and participants Minor injuries may occur when falling	Only participants with suitable mobility will be allowed to take part – experiment pre-screen mandatory.	3 - Possible	3 - Moderate	9 - Medium Risk	Implement a strict participant recruitment policy:	2 - Unlikely	3 - Moderate	6 - Medium Risk

	over equipment or slipping on treadmill surface when using low-friction slippers.	Work areas will be kept tidy and clear of obstructions. Mandatory treadmill induction: supervisor assists mounting/dismounting; safety ring/harness used; no stepping off treadmill until instructed; non-slip flooring around treadmill. All areas will remain well lit.				Participants to be pre-screened to ensure good mobility and balance. Unsuitable participants will not be recruited.			
Electrical failure	Researcher and participants Electrical shock burns or any injury as a cause of fault electrics including portable electrical equipment.	All electrical items have been PAT tested. Plugs, cables, wires and leads are regularly visibly inspected and kept in a safe and appropriate condition. Extension cables are not used as to reduce the risks of trip hazards. Electrical equipment will only be used with dry hands.	1 - Very Unlikely	5 - Fatal	5 - Medium Risk		1 - Very Unlikely	5 - Fatal	5 - Medium Risk
Fire	Researcher and participants Smoke inhalation and burns	Equipment will be shut off when not in use. Participants will be informed of the buildings' fire escapes and further regulations. Any equipment using Li-ion batteries e.g. VR headsets etc. will not be left charging unattended.	1 - Very Unlikely	5 - Fatal	5 - Medium Risk		1 - Very Unlikely	5 - Fatal	5 - Medium Risk
Use of VR equipment	Participants Postural strain, shoulder/back discomfort, strain to knees/ankles from stabilising on tilting treadmill platform.	Participants will be promoted to keep a good posture when using the equipment maintaining an appropriate centre of gravity. Familiarisation period. Participant may stop at any time. Additional controls: Participant remains stationary while headset	1 - Very Unlikely	2 - Minor	2 - Low Risk		1 - Very Unlikely	2 - Minor	2 - Low Risk

		removed; supervisor confirms safe dismount; cooling-down period after each treadmill run.							
Lone/Out of hours working	Researcher and participants	Data collection only in staffed hours. Additional controls: Treadmill must not be used without trained supervisor present; power down when unsupervised.	1 - Very Unlikely	5 - Fatal	5 - Medium Risk		1 - Very Unlikely	5 - Fatal	5 - Medium Risk
Hygiene / cross-contamination	Participants and researcher Possible cross contamination of infections.	The detachable front and back cushions will be removed and cleaned with antibacterial wipes between each participant.	3 - Possible	2 - Minor	6 - Medium Risk	Develop safe working practice: VR headset's detachable front and back cushions will be removed and cleaned with antibacterial wipes. Treadmill rails and other contact surfaces to be cleaned using antibacterial wipes.	2 - Unlikely	2 - Minor	4 - Low Risk
VR sickness	Participants	Participants will be given the opportunity to familiarise themselves with the equipment and will be asked if they have experienced any VR sickness in the past. The researcher will emphasise that the participant should stop their participation if they feel uneasy or unwell.	1 - Very Unlikely	2 - Minor	2 - Low Risk	Develop safe working practice: Participants given a 1–2-minute familiarisation period. The researcher will emphasise that the participant should stop their participation if they feel uneasy or unwell. Cooling-down period / reset break after each treadmill run.	1 – Very Unlikely	2 - Insignificant	2 - Low Risk
Physical dissociation	Participants Disorientation may occur after extensive use of the VR equipment.	Participants will be so informed and promoted to bring their own water to the session. Participants will be asked to sit down before leaving if they are experiencing discomfort.	1 – Very Unlikely	2 – Minor	2 - Low Risk		1 – Very Unlikely	2 - Insignificant	2 - Low Risk

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Task related distress	Participants VR tasks may cause unintended distress to participants (i.e., Acrophobia or claustrophobic).	All tasks will be explained clearly and in detail prior to participants taking part. Participants will be told that they can withdraw at any time.	1 - Very Unlikely	3 - Moderate	3 - Low Risk		1 - Unlikely	3 - Moderate	3 - Low Risk
Component collision	Participants Fast of unexpected movement of a body part may result in unintentional collision with treadmill components (e.g. the support rails)	Tasks will be designed so fast, uncontrolled movements are not required for task completion.	2 - Unlikely	2 - Minor	4 - Low Risk		2 - Unlikely	2 - Minor	4 - Low Risk
Mechanical movement hazard	Participants and researchers. Unexpected tilt, sensor fault causing sudden movement, pinch points in treadmill mechanism.	Follow manufacturer advice on maintenance.	3 - Possible	3 - Moderate	9 - Medium Risk	Develop safe working practice: Mandatory treadmill pre-check routine to be conducted by researchers. If a fault is detected, all experiments will cease and the manufacturer contacted for maintenance and repair / resolution.	2 - Unlikely	3 - Moderate	6 - Medium Risk

Refer to scoring matrix on page 3/4

Action Plan and Monitoring

This section should be completed by the Risk Assessor and discussed with Manager / Academic Supervisor		This section should be completed by the Manager / Academic Supervisor for monitor and review		
Hazard	Action required	Action assigned to	Target date	Date Completed
Slips & Trips	Implement a stringent participant recruitment policy to pre-screen participants to ensure good mobility and balance.	Gray Atherton	April 2026	
VR Sickness	Add additional points to the current safe working practice and ensure they are communicated to researchers and followed (observation checks): <ul style="list-style-type: none"> Participants to be given a 1–2-minute familiarisation period. Participant instructed to stop if they feel uneasy or unwell. Cooling-down period / break after each treadmill run.	Gray Atherton	May 2026	
Hygiene / cross-contamination	Headset and treadmill rail cleaning routine using safe cleaning materials. Follow new safe working practice checklist.	Researchers	April 2026	
Mechanical hazard	Add additional points to the current safe working practice and ensure they are communicated to researchers and followed (observation checks): <ul style="list-style-type: none"> Mandatory treadmill pre-check conducted by researchers. If a fault is detected, all experiments will cease and the manufacturer contacted for maintenance and repair / resolution.	Gray Atherton	April 2026	

Review

When reviewing this risk assessment remember to move completed actions into the ‘what are you already doing.’ column, as these actions should be in place by the time you review the risk assessment. You should review your risk assessment if you think it might no longer be valid (e.g. following an incident in the workplace or if there are any significant changes to hazards, such as new work equipment, work activities, personnel etc.)

Severity Table

Severity of injury	Examples	Score
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Likelihood Table

Severity of injury	Examples	Score
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Insignificant	None or very insignificant injuries, health effects, damage or disruption to work. Short-term and/or localised environmental harm.	1	Very unlikely	Good control measures are in place. Controls do not rely on a person using them (i.e. personal compliance with safety rules). Controls are very unlikely to break down. People are very rarely in this area or very rarely engage in this activity.	1
Minor	Cuts bruises, mild skin irritations, mild headaches and pains requiring minor first aid treatment. Minor property damage or disruption to work. Notable contributor to environmental harm.	2	Unlikely	Reasonable control measures are in place but they do rely on a person using them (some room for human error). Controls unlikely to breakdown. People are not often in this area / do not often engage in this activity.	2
Moderate	More serious injuries or ill-health requiring time off work or a hospital visit for example burns sprains, strains, short term musculoskeletal disorders, cut requiring stitches, back injuries, fractures to fingers and toes. Short term absence relating to physical or mental health issues. More serious property damage or disruption. A significant contributor to environmental harm.	3	Possible	Inadequate controls are in place, or likely to breakdown if not maintained. Controls rely on personal compliance. People are sometimes in this area or sometimes engage in this activity and situations sometimes arise from this activity.	3
Major	Broken limbs, amputations, long-term health problems or longer absence. Acute illness requiring medical treatment. Loss of consciousness, serious electric shock, loss of sight. Major property damage, major disruption to work. A major contributor to significant environmental harm.	4	Likely	Poor controls in place. Heavy reliance on personal compliance (lots of room for human error). People are often in this area / engage in this activity on a regular basis / situation often arise from this activity.	4
Fatal	Injury or ill-health which leads to death either at the time, soon after the incident, or eventually, as in the case of certain occupational diseases, such as asbestos-related cancers. Catastrophic business losses. The major contributor to significant environmental harm.	5	Almost certain	No controls in place where there should be, exposure to the hazard is expected to occur in most circumstances. The activity is considered such high risk that it will `certainly lead to injuries.	5