**Participant Instructions**

**The Chase AR Exergame**

For this experiment, you are asked to play a simple smartphone-based exergame that we have developed, named The Chase. During The Chase, you will run in the real world while being chased by virtual zombies. The objective of the game is to keep away from the zombies for as long as possible. The game will automatically update its internal virtual world to take account of your steps.

This experiment comprises two exercise sessions of up to fifteen minutes each. In between each exercise session, you will be given a short break. At the end of both, you will be given a questionnaire to complete. Prior to beginning these exercise sessions, you should complete the ethics consent and demographics forms.

Each of the exercise sessions is done under different conditions. You will do the sessions in a random order. The conditions are:

* Handheld condition: Playing the exergame while holding the smartphone in your hand, or putting it in your pocket.
* Headset condition: Playing the exergame while wearing a Google Cardboard virtual reality headset, using the smartphone for a display. You will be given a minute to familiarise yourself with the view this provides.

In both conditions, there will be audio information available from the game, but the visual presentation will differ between the two. In handheld mode there will be an empty background, and an information panel occupying most of the screen. The panel contains statistics about your game, such as estimated distance travelled, and how long you have been playing for. The majority of it is occupied by a ‘mirror’, which shows you what is directly behind you in the game world. In the headset mode, these features are made smaller to leave space for the view of the real world.

The form of interface is the only difference between games. The gameplay is exactly the same otherwise in both.

**Game Instructions**

Gameplay for The Chase is reasonably simple. Your single goal is to keep away from the zombies pursuing you for as long as possible. The game will automatically measure your movements, and update its internal virtual world to match. Please be aware that in the headset mode, the game currently assumes that the direction your head is facing in is the direction you are travelling in, so if you continue to move in one direction while facing another, you may move in a different direction in the virtual world to what you would expect.

At the start of the game is a short warm-up period. Please begin running at a relatively slow pace during this time, and increase it to your normal running pace when you begin to see or hear the zombies. Please also take care to be aware of your surroundings. We expect that the user study will be conducted in a public park, so there are likely to be other people around, as well as trees and potential hazards on the ground. We don’t want you or someone else to get hurt.

Zombies will periodically appear behind you in the game world, and disappear again if you get far enough away from them. You should be able to see them in the mirror, and if you turn your head to face them, they should be visible normally. You will also be provided information through sound effects, music and animation. The zombies make noises that will get louder as they get closer. The game’s music will increase in tempo as the zombies approach. The zombies will also change animations and swing their arms at you when they get close to you. If you see this, it means that they are about to catch you, and you should speed up.

After 15 minutes, we will indicate that the time has finished and that you should stop playing the game. If you have just completed the first condition, we will assist you to change to the second condition, so that you may play it as well.

You may choose to stop playing either condition at any time for any reason, though we may ask why you chose to stop, for statistical purposes (please note that this is different to your right to withdraw your participation from the study entirely, for which you do not need to provide a reason).

Thank you for your participation in our user study.