

# Study Information Sheet

**Study Title:** Training a Robot Coach

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Thank you for taking the time to consider participating in my research project. This information sheet gives an overview of the proposed work. If you decide to take part, you will give more information on exactly how the study will run.

## Who is doing the work?

Katie Winkle, PhD student based at the Bristol Robotics Laboratory, University of the West of England.

## What is the project and study for?

This study is part of PhD research aiming to design a social robot to function as a coach for guiding therapeutic exercises. The aim of this study is to have a human expert (e.g. physiotherapist or personal trainer) train the robot using supervised machine learning. Further, we wish to explore whether such an approach (and the resulting robot system) might be a useful tool – i.e. how people feel about, and their experience of, working with such a robot throughout a real-world, long-term exercise programme.

## Who are we looking for?

We invite participants who meet the following criteria:

- 18 years old or over
- No health conditions preventing safe engagement with the NHS Couch to 5K programme
- Fluent in English
- Not currently running often

We are looking to recruit people who would like to take up running as a form of exercise – and would be interested in following an NHS-designed running plan, ‘Couch to 5K’ to do so. Your current fitness or running experience is not important so long as you do not frequently run already and are in general good health with no medical conditions which might prevent you safely taking part in the programme. The following guidance is taken from the NHS Couch to 5K website:

### Who is Couch to 5K for?

*Couch to 5K is for everyone. Whether you've never run before or if you just want to get more active, Couch to 5K is a free and easy way of getting fitter and healthier. If you have any health concerns about beginning an exercise regime like Couch to 5K, make an appointment to see your GP and discuss it with them first.*

## What does the study involve?

You will be invited to complete 9 weeks of the Couch to 5K programme, attending 3x weekly exercise sessions at Wallscourt Farm Gym, Frenchay Campus. During these sessions you will be accompanied and monitored by a qualified fitness instructor and/or the social robot Pepper. From Session 2 onwards, the role of the fitness instructor will be to observe your interaction with the robot and generate training data for improving its behaviour. You are free to miss, rearrange or stop attending

exercise sessions at any time during the 9 week programme. Additionally you can stop or take a break at any time during an exercise session.

During the final week of the study, you will have the chance to test out a few different versions of the robot designed using the training data generated during the earlier parts of the study. Throughout the study, we will ask you to complete a brief weekly journal documenting your experiences of undertaking the programme and working with the robot.

Before starting the study you will have the chance to meet the fitness instructor and go through the proposed exercise programme in detail. The following information is taken from the Couch to 5K website. Please note that whilst Couch to 5K is an NHS designed programme, this research is not being carried out in direct collaboration with the NHS.

#### What is Couch to 5K?

*Couch to 5K is a running plan for absolute beginners. It was developed by a new runner, Josh Clark, who wanted to help his 50-something mum get off the couch and start running, too. The plan involves 3 runs a week, with a day of rest in between, and a different schedule for each of the 9 weeks.*

#### How does Couch to 5K work?

*Probably the biggest challenge a new runner faces is not knowing how or where to start. Often when trying to get into exercise, we can overdo it, feel defeated and give up when we're just getting started. Couch to 5K works because it starts with a mix of running and walking to gradually build up your fitness and stamina. Week 1 involves running for just a minute at a time, creating realistic expectations and making the challenge feel achievable right from the start.*

#### **Contacts**

If you have any questions about the topic of this research, or taking part in this study then please contact the researcher Katie Winkle (k.winkle@bristol.ac.uk) or project supervisor Paul Bremner (paul.bremner@brl.ac.uk).