

INFORMATION SHEET FOR PARTICIPATING IN A RESEARCH STUDY

You are being invited to take part in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

TITLE: The effects of physical and observational learning on sequence recall

INVESTIGATORS: Dr. Emily Cross, *Principal Investigator*
Dr. Alex Jones, *Postdoctoral Research Associate*
Ms. Dilini Sumanapala, *Doctoral Researcher*
Ms. Laurel Fish, *Undergraduate Research Assistant*

PURPOSE: When learning a new skill, observing the performances of others is often required to consolidate learning of the skill. We are interested in the difference between learning skills through observation and physical practice at both neural and behavioural levels. Dance is a motor skill that uses the entire human body, and is well suited to answering questions regarding changes that occur with different kinds of learning. Previously we have shown that different brain regions are involved in different kinds of learning. However, these regions overlap considerably. We are interested in using advanced training and neuroimaging techniques to disentangle these learning help us to examine how learning shapes the brain and behavior in more detail.

PROCEDURE: The study will take place over a number of consecutive days (3-5 days), as specified by the researcher. During each of these days, you will be invited into the lab where you will physically practice dancing several songs and will simply watch a further 4 songs without physically practicing them. Your performance will be monitored with the Xbox Kinect video game system. On the final day of testing, you will be asked a few questions regarding sequences you have learnt and to perform all the sequences from the different training conditions. Each session should last no more than 30 minutes, with the final session lasting no longer than 60 minutes.

ARE THERE ANY RISKS?: For most people, physical activity should not pose any problems or hazard. However, there are a small number of adults for whom physical activity might be inappropriate due to certain medical conditions. We ask that you consult your GP should you have any questions about taking part in moderate exercise for up to 20 minutes a day over the testing period. Otherwise, given that the procedure involves playing a dance video game at a moderate exercise level it is not painful or dangerous in any way. There is no risk of harm to you as a participant and the study has been reviewed by the Research Ethics Committee at Bangor University. If you feel uncomfortable due to health concerns or problems with performing the tasks, feel free to withdraw at any time, and if you feel unwell after exercise, we encourage you to visit your GP.

BENEFITS AND IMPLICATIONS: This research will contribute to our understanding of how we learn actions. This knowledge has wide implications for fields such as rehabilitation after brain injury. To compensate you for your time, you will be awarded £20 or a commensurate number of course credits (as you wish) on the final day of testing. Should you need to terminate your participation

before the end of the experiment, you will be compensated with an amount commensurate with time participated.

CONFIDENTIALITY: We treat your information with the utmost confidence. The information obtained from the assessments may be published in scientific journals, but your name will not appear in any public document, nor will the results be published in a form that would make it possible for you to be identified.

In keeping with the rules of the research council that funds this project (the Economic and Social Research Council; ESRC), all **anonymized** data collected from this project will be shared with the ESRC, who retain the right to reanalyze the data in future studies or meta analyses.

RIGHT TO REFUSE OR WITHDRAW: Participation in this study is voluntary. You are free to withdraw from the study at any time and without penalty. You do not need to provide a reason. Should you decide to withdraw from this study after you have already participated, you may do so up to one week after completing participation (and your data will not be included in the final sample).

COMPLAINTS: If you wish to register a formal complaint about the conduct of this research, you may do so by contacting Mr Hefin Francis, School Manager, School of Psychology, Adeilad Brigantia, Bangor University, Gwynedd, LL57 2AS. If you want to more about the research we conduct, please contact Dr Emily Cross (e.cross@bangor.ac.uk).

Please retain this information sheet for your records.

If you decide to participate, your participant code is: _____

PARTICIPANT CONSENT FORM

TITLE OF STUDY: The effects of physical and observational learning on sequence recall

INVESTIGATORS: Ms. Dilini Sumanapala, Dr. Alex Jones, Ms. Laurel Fish & Dr. Emily S. Cross

This is to certify that I,, hereby agree to participate as a volunteer in a scientific investigation as an authorised part of the research ventures within the School of Psychology at the University of Wales, Bangor, under the supervision of Dr. Emily S. Cross.

The investigation and my part in the investigation have been fully explained to me by one of the investigators listed above and I understand the explanation. I understand that my participation will take part over several consecutive days, and during those days I will have to perform several dance sequences, watch several dance sequences and complete several questionnaires. The procedures of this investigation and their risks have been answered to my satisfaction.

I understand that all data will be stored, analyzed, shared and published in a completely confidential manner with regard to my identity, and that I am free to withdraw my consent and terminate my participation at any time during the experiment and up to one week afterwards without penalty.

I understand that I will receive information about the aims of the research project at the end of the experiment, that my questions will be answered and that I may request a summary of the results of this study. I know of no medical condition that may cause adverse effects to me if I participate in this experiment.

If you would like a copy of this consent form to be e-mailed or posted to you, please indicate this by filling in your e-mail address or postal address here:

Date

Participant Signature

Participant Name (block letters)

Date

Investigator Signature

Investigator Name (block letters)