

Participant Information Sheet: the Active Brain – Children study

UCL Research Ethics Committee Approval ID Number: 23961/001

Title of Study: Impact of different types of physical exercise on educational development in children

Department: UCL's Institute of Sport, Exercise and Health and Institute of Cognitive Neuroscience

Name and Contact Details of the Researcher(s):

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Name and Contact Details of the Principal Researcher:

Dr. Flaminia Ronca (f.ronca@ucl.ac.uk)

1. Invitation Paragraph

Your child is being invited to take part in a research project: the Active Brain – Children study. The research is sponsored by University College London (UCL) and is funded by Greenhouse Sports, a UK charity that provides sports and mentoring activities in schools. Your child may or may not be attending a school where Greenhouse Sports run activities. Greenhouse Sports is partnering with researchers at UCL to better understand the impact of various forms of physical activity on child development and wellbeing, to inform their work in the future.

This document contains information about this research for you to read before consenting to your child's participation. It's important for you to understand why the research is being done and what participation will involve. Please take the time to read the information carefully. Ask us if there is anything that is not clear or if you would like more information. Thank you in advance for your time.

2. What is the project's purpose?

The aim is to understand how children benefit from different types of physical exercise. We are interested in how children might benefit differently from physical activity that requires them to think to different extents.

3. Why has my child been chosen?

We are inviting children in UK school years 4, 5 and 6 (8 to 11 years old) to participate.

4. Does my child have to take part?

Your child's participation is entirely voluntary, it is up to you and them whether they take part. If you refuse, it will have no impact on their ability to participate in Greenhouse Sports activities or any other part of school.

If you do consent for your child to take part in this project will be asked to sign a consent form on your child's behalf. You can withdraw your child at any time without giving a reason or affecting their ability to participate in Greenhouse Sports activities or any other part of school. If you decide to withdraw your child you will be asked what you wish to happen to the data collected up to that point.

5. What will happen to my child if they take part?

You or another adult will be required to travel with your child to the Institute of Sport, Exercise and Health (ISEH, in central London) twice, approximately one week apart, at times that work for you and your child. Each visit will take approximately 2 hours and include:

• Questionnaires for your child to complete, asking for their age, about their mood and if they enjoyed the visit.



- **Physical measurements** including height, weight and body fat percentage. This will be kept confidential and measurements will always be taken by a female researcher.
- **Computer 'brain games'** where your child will respond to images (e.g. smiley faces), measuring for example their reaction time. These games have been specifically created by experts to collect data from children.
- Brain monitoring whilst your child completes the 'brain games' to measure how their brain is processing information, using a technique called fNIRS (functional near infrared spectroscopy). This involves your child wearing a cap to which we attached small lights. These allow us to measure blood flow, in a similar way that smart watches measure heart rate. This is entirely non-invasive and, other than wearing the cap, can't be felt.
- **Physical activity and games** lasting up to 20 minutes, designed to make your child run around, both on a treadmill and in an open room. Your child's heart rate will be measured using a Polar heart rate strap, worn around their chest. No GPS is involved.

6. What are the possible disadvantages of taking part?

There are minimal disadvantages or risks associated with taking part in this study, as long as your child is fit and healthy to take part in exercise. Your child will be reminded that they are free to stop at any time. All methods used in this study are designed by experts to be used with children, so the risks of taking part are minimal.

7. What are the possible benefits of taking part?

Upon satisfactory completion of the study, you will be compensated with £100 in the form of gift cards (£25 after the first visit, £75 after the second visit). In addition, you will be contributing to ground-breaking research about the benefits of physical activity. It is hoped that this work leads to changes in national policy whereby the value of physical activity is taken more seriously and exercise is implemented more regularly into school curriculums.

8. What if something goes wrong?

Should you wish to report a complaint during this project, please contact Dr. Flaminia Ronca at f.ronca@ucl.ac.uk, one of the principal researchers for this project. Should you feel that your complaint has not been handled to your satisfaction, please contact the Chair of the UCL Research Ethics Committee — ethics@ucl.ac.uk

9. Will my child taking part in this project be kept confidential?

Your child's participation in this project and their data will be kept confidential. Data collected during this project will be pseudonymised. This means we don't directly link data with your child's name. Instead, we will give your child a unique number which will be linked with their data. We will store your child's name alongside their number securely in a password-protected document, saved separately from the data. This document will only be accessible to researchers. Your child will not be able to be identified in any reports or publications following this project.

10. Limits to confidentiality

All data collected within this study will kept confidentially unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

11. What will happen to the results of the research project?



Data collected in this project will be analysed at a group level, meaning that your child's results will never be looked at alone, but always as part of a larger group. Your child will not be identifiable in any report or publication. Results will be analysed and published within scientific articles. Group results will also be communicated to Greenhouse Sports who may decide to include them in their reports or communicate them with your child's school. Data linking your child to their data will be deleted after a maximum of 5 years. The data itself will be deleted after 15 years unless it is archived, anonymously, within published results.

12. Local Data Protection Privacy Notice

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data and can be contacted at <a href="mailto:data-notice-noti

Personal data used will be name, gender and ethnicity. You previously agreed to this being collected by Greenhouse Sports and shared with UCL. Within UCL, only researchers directly associated with this project will have access to the data, and this will be minimised. You consented to this when you registered your child with Greenhouse Sports. The lawful basis used to process your *personal data* will be performance of a task in the public interest.

Your personal data will be processed so long as it is required for the research project. We will pseudonymise all data as soon as it is collected and anonymise it once data collection is complete. Identifying data will be deleted after a maximum of 5 years. The data itself will be deleted after 15 years. We will minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

13. Contact for further information

If you would like more information about the research, contact Evelyn Watson on evelyn.watson.22@ucl.ac.uk or Dr Flaminia Ronca on fronca@ucl.ac.uk. The UCL Data Protection Officer is Alexandra Potts, who can be contacted at data-protection@ucl.ac.uk.

Thank you in advance for helping us with this project.

Thank you for reading this information sheet and for considering your child for this research study, please use the following QR code or web address to complete the sign-up form:



https://forms.office.com/e/hbuU4NRHzJ