

Parent/Guardian Information Sheet

Please take time to read the following information carefully and discuss it with others if you wish. We are happy to answer any questions that you might have about the study (contact details at the bottom of this sheet). Thank you for reading.

What is the study about?

This study is evaluating computerised cognitive training for children and adolescents. Previous research has shown that cognitive training improves children's cognitive functions. In this study, we are interested in finding out whether the training also improves academic achievement. The findings of this study will inform the design and delivery of cognitive training, and allow us to maximise the educational benefits of training.

Why has my child been invited?

We are inviting 120 typically developing children/adolescents to take part who are between **9 and 13** years old. If more families express an interest in taking part than we are able to see, then we will let you know about other research studies that we are conducting in case they are also of interest to you.

Does my child have to take part?

No, it is up to you and your child to decide whether you wish to take part. If you and your child do decide to take part, we will ask you to sign a consent form and your child to give his/her assent before he/she begins the study. You and your child are free to withdraw from the study at any time without reason and without consequence.

What will happen if my child takes part in the study?

If you and your child consent to participate, then we will ask your child to take part in a 5 week training programme. The training will take place with other children at the school in an after-school club, which will run for approximately 1 hour every weekday immediately following school. To accommodate for other after-school activities, children may miss up to 1 training session per week. To examine the effectiveness of the training, we will complete assessments of your child's IQ, memory, maths and reading ability three times: before training, immediately after training and 3 months after training. Each assessment will take approximately 1.5 hours in total and we will arrange these during the school day. We would also like to access your child's school grades to examine whether the training has any impact.

Children will be randomly assigned to one of two training programmes and will complete one of two workbooks alongside the training. The training programmes involve completing a task on the computer for 40 minutes each day. The task adapts in difficulty according to the individual's performance; therefore, it will get easier if the child is performing poorly and harder if the child is performing well. This is to maximise learning, and children should strive to complete the training to the highest difficulty level that they can achieve. The workbooks contain information and exercises encouraging children to reflect on the training programme. The workbooks will be used on set days and will take 10-15 minutes to complete; we will inform you of what days these will be completed on in advance. At the end of the study, if one of the training programmes and/or workbooks is found to be more effective than the other, we will offer your child the opportunity to use it in your own time for free.

Are there any risks to my child?

In the unlikely event that your child becomes stressed or upset in any way, the assessment or training will be stopped immediately and we will explore the reasons for this distress.

What are the potential benefits?

The training programme has been designed to improve school performance and so it may benefit your child's learning and academic achievement. By participating in this study, you and your child will also contribute to research investigating the potential benefits of cognitive training for children. We hope that this research will enable us to design more effective training programmes in the future. As a thank you for participating, all children/adolescents will be given a small gift (fun stationery or £1 Amazon voucher) for every 5 'training sessions' completed and a £15 Amazon voucher for completing at least 20 sessions.

Will my child's information be kept confidential?

Information collected about your child during the study will be kept anonymous and safe. This means we will not write your or your child's name or address on any questionnaires or score sheets. Information will be stored in a locked filing cabinet or in encrypted files on a password protected computer. When the study is finished, all information collected from questionnaires and other study measures will be stored in a locked drawer at the University of Exeter. If you agree to have your contact details added on to the Volunteer Register, we will contact you before 5 years passes to ask if you wish to remain on the Register.

At the end of each training session the anonymised data will be automatically and electronically uploaded to a server via the Internet. The company who own the training programme (and the server) may use the data for research purposes. The only time we would disclose any of the information that you or your child has given us, would be if criminal or other potentially harmful behaviour was made known. We would, however, aim to discuss this with you first.

What will happen to the results of the study?

The results will be written up as part of a PhD thesis completed by Jonathan Jones, which will be made open access via the University of Exeter library. The results may also be submitted to peer-reviewed journals and presented at conferences and meetings. Your and your child's names will not be included on any research outputs, and all data will be presented anonymously.

If you would like to know how your child performed on the standardised measures of cognitive function then we can give you a brief report summarising this. We can also give you an overall summary of the study findings for your information.

Who is organising the research?

The research study is being organised by the University of Exeter. The persons running this project include Jonathan Jones, and two project supervisors, Professor Tamsin Ford and Dr Fraser Milton.

Who has reviewed the study?

This study has been reviewed and approved by the University of Exeter Ethics Committee (Reference: 2016/1288).

What to do if you would like you and your child take part?

Please take all the time you need to discuss this with your family. If you would like to participate in this research and further our understanding of cognitive training, please register your interest on our website using the URL below. We will then send you a consent form which you will need to sign and return to the school reception.

www.exeter.ac.uk/ccnr/getinvolved/education/cognitivetrainingforkids

If you have any questions please get in touch with Jonathan over email:

jj256@exeter.ac.uk

Thank you for reading this information sheet.