

January 2023

Dear student & parent/guardian,

We are contacting you from Professor Trevor Robbins' Research Group at the Behavioural & Clinical Neuroscience Institute (BCNI), Department of Psychology, University of Cambridge to invite you to take part in our brain research study!

Our group is investigating the brain bases of adaptive behaviour/learning in adolescents and the implications for Obsessive-Compulsive Disorder (OCD) (Ethical approval no. REC: 16/EE/0465 supported by NIHR Cambridge Biomedical Research Centre: Mental Health Theme). We previously carried out a similar study in adults and have found promising results that are in preparation for publication. We now aim to deepen our knowledge of brain development by testing the same neurocognitive processes in teenagers.

Specifically, our research aims to find out more about the brain chemicals relevant to adaptive behaviour and learning. To do this, we will use a non-invasive, well-tolerated brain imaging technique, called Magnetic Resonance Imaging (MRI). This will allow us to learn how the brain works by looking at the flow of chemicals to different brain parts while the brain is at rest. For this, we hope to gain a better understanding of the psychological, behavioural, and neural characteristics of the developing brain. Furthermore, by analysing brain data from people both



with and without OCD, we hope to identify possible differences between the two groups which could inform novel drug therapies for OCD.



For this study, we are looking for:

- Teenagers aged **16 to 19** years old
- Both **with and without OCD**
- No permanent dental braces or lingual wires (normal fillings are fine)

Study participation involves an MRI scan which takes place at the Wolfson Brain Imaging Centre in Cambridge, Addenbrooke's Hospital site and computerized games outside of the scanner. We will assess potential participants' eligibility for an MRI scan. We can see participants on weekdays, weekends and during the school holidays. For a more detailed description of the study, you can get in touch with us at robbinslab@psychol.cam.ac.uk – we are very happy to answer any questions you may have about our research or what it is like to be a part of behavioural neuroscience research. Thank you very much for your time and we hope to hear from you soon!

With very best wishes,

Handwritten signature of Mairéad Healy in black ink.

Ms. Máiréad P. Healy (PhD student)

Handwritten signature of Trevor W. Robbins in black ink.

Professor Trevor W. Robbins (Principal Investigator)

Handwritten signature of Shaira Y. Berg in black ink.

Ms. Shaira Y. Berg (PhD student)

Behavioural and Clinical Neuroscience Institute, Downing Site, Cambridge, CB2 3EB

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