



Exciting news!

TEDS Medical Research Council funding renewed for 5 years

This next phase of TEDS will be directed by **Prof Thalia Eley**, prior Deputy Director, with **Prof Robert Plomin** remaining actively involved. They have worked together for 25 years. Below, they look both back and forwards...



Thalia: I remember first meeting Robert in 1994 and being so excited to hear he was moving to the UK, setting up a department and starting a new longitudinal twin study. I really wanted to go and work with him! A year later, I asked him to consider hiring me. Luckily, he did, and the rest as they say, is history!

Robert: I feel lucky to have worked with Thalia for more than 25 years, from new PhD to Professor. It is wonderful that

TEDS has been funded by the Medical Research Council (MRC) for another 5 years with Thalia as Director. TEDS is now one of the MRC's longest continuously funded research programmes, which testifies to its scientific importance and the value of our participants' contribution.



Thalia: I am so honoured that Robert has trusted me with steering TEDS for the next 5 years. We have three important themes. Young people are experiencing conditions such as anxiety and depression more than ever, so we will first ask all the TEDS twins to complete an assessment focused on mental health. Second, we are planning an exciting new project linking TEDS twins' NHS health records to the information we have about them (see below). Finally, we will continue to recruit and assess TEDS twins' children through CoTEDS (see page 2).

Robert: With every new wave of assessment, TEDS becomes tremendously more valuable because the new data capitalises on the wealth of data you have provided for the past two decades. You might wonder about the 'E' in TEDS, but from my perspective your lives are just beginning. Thalia and I hope you will continue to participate in TEDS for decades to come.

Medical Record Linkage Project. The aim of this project is to link your medical records to the information you provided us with over the years, for health research purposes. This is a great way to ensure we have **accurate**, **complete data**, **that represents everyone's experiences**. We aim to send out more information about this project later in the year, including instructions of how to opt out if you don't want to be included in this work.



WE NEED YOUR UP-TO-DATE EMAIL ADDRESS PLEASE!

Email addresses are a really good way for us to keep in touch, and to make it easier for you to be involved in the study. For example, for our mental health assessment, if we have your email address, we can simply send you a link to sign up.













The Children of TEDS Twins – helping us to better understand child development!

CoTEDS is our study for the children of TEDS twins. So far, there are over 750 children from more than 525 TEDS families registered with CoTEDS. We are always looking for TEDS twins with children to join! We send **questionnaires** to both our TEDS twins and their co-parents, to ask about how their children are getting on as they grow up, and parents' experience of raising their children.



We send CoTEDS rewards such as t-shirts and art sets to the children and enter all participating families into prize draws to win iPads and vouchers!



'Plenty of fresh air and enjoying the outdoors! Bailey, my 5-year old, has adapted really well to home schooling for such a young age' - Rochelle & Bailev



'Isabella playing with a sensorv bin!' - Christie & Isabella

Thank you all for supporting our research! Here's how some of the CoTEDS children have made the most of lockdown **during 2020!**



'Ida has enjoyed being out in the snow' - Staci & Ida

'I'm enjoying my third trimester and Thea is loving the kicks and wriggles from her sister.

She claps every time we cuddle and she feels a kick.

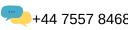
Thea also enjoys waving to our elderly neighbours who walk past our house the same time daily to see her cheeky antics and wave to her.'

- Rachael & Thea

We would love any children of TEDS twins to join our new generation of research with CoTEDS! If you would like to join the study, you can register your children or pregnancy using this short form: https://goo.gl/Cr7Kxy (also on our website), or scan this QR code:













Recent TEDS publications

Pathfinder: A gamified measure of general cognitive ability to foster scientific discoveries.

Developing reliable and engaging tests that can be easily administered online has never been as important as it is nowadays. The TEDS team created a 15-minute, online, gamified measure of general cognitive ability (aka intelligence) that is highly reliable and psychometrically valid. We called this Pathfinder, because it takes participants through five 'journeys': mountain, tower, woodland, space and ocean (see below). Over 4,700 TEDS twins have completed Pathfinder. Importantly, this gamified and engaging test can be freely accessed by all researchers, and can be easily integrated within existing studies. We hope that Pathfinder will help scientists to answer important questions about cognitive development and health throughout the biological, medical and behavioural sciences. If you'd like to see what Pathfinder looks like, here is a short video!











Emerging Adulthood. The survey TEDS twins completed in their early twenties was unusual in reflecting a period of life called "emerging adulthood". Measures ranged from aspirations and attitudes, to autonomy, identity and relationships. The major finding was that the environmental uncertainties (e.g. unemployment, fluid relationships, social media) of emerging adulthood in the 21st century have not diminished the importance of genetics. As you travel into adulthood, your journey is substantially influenced by genetic tendencies that nudge you down different paths leading to different destinations. These results are reported in a paper, 'The winding roads to adulthood: a twin study' by Dr Kaili Rimfeld and nine other TEDS authors.

COVID-19 Study. A big thanks to the 5000 of you who have told us about your experiences during the COVID-19 pandemic. There are many media reports about how devastating lockdown has been, but you've told a very different story.

We asked about 30 diverse psychological traits such as mental health, relationships, alcohol use and online behaviour. We compared the feelings you reported one month after the first lockdown with your report of how you were feeling in 2018. As always, there was a wide variation in how everyone felt, but most of you felt similar to how you were before the pandemic. The same genetic and environmental factors were at work. In other words, the pandemic did not shuffle the deck of individual differences. Perhaps TEDS twins are especially resilient! These results are reported in our COVID-19 paper, 'Genetic correlates of psychological responses to the COVID-19 crisis in young adult twins in Great Britain', by Dr Kaili Rimfeld and a dozen other TEDS authors.



of you said the pandemic has led to a positive change in your lives



42% of you are essential workers



of you have given unpaid help to a charity group or organisation



of you currently live with your co-twin



77%
of you have attended online social gatherings

NEW to TEDS Team



Elisavet joined our team as an MSc and PhD student in September after completing her BSc in Psychology at the University of Surrey. She is currently undertaking her MSc in Developmental Psychology and Psychopathology here at King's College London (KCL) and is due to start her PhD in September. Elisavet is interested in investigating how genetic and environmental factors interact and subsequently influence anxiety disorders in early adulthood. In her free time, Elisavet enjoys running, rowing, and travelling.

Joanna joined our team in January as a research assistant and is helping to run the CoTEDS project. Joanna did her BSc in Neuroscience and Psychology at the University of Manchester, and then spent 2 years working on brain imaging research at the University of Southern California, Los Angeles. She is hoping to start her PhD in June, working with data from TEDS and CoTEDS! During lockdown, Joanna has been trying out new baking recipes – ready to share with the TEDS team when we're all back in the office!





Celestine joined our team as a research assistant in February and is working on both TEDS and CoTEDS projects. Celestine completed her BSc in Psychology at Goldsmiths, University of London, where she also worked as a research assistant on a parenting intervention study. She is interested in how genetic and environmental factors influence anxiety within families, in particular how family processes shape children's mental health. In her spare time, Celestine enjoys knitting jumpers and perfecting her doughnut recipe.

Shannon joined our team in March 2020. Shannon's work for TEDS involves preparing for the medical records linkage project and gaining participant views around this work. Before Shannon came to us, she completed her MSc at KCL in the Psychology and Neuroscience of Mental Health, and is also a qualified psychology teacher and teacher trainer. Shannon's research interests are in anxiety and depression and how inflammatory disorders may be related to these.



TEDS PhD Graduate



Congratulations Andrea!

During his PhD, Dr. Andrea Allegrini investigated how our genes and our environments interact and influence psychological development. He used genetic-based scores that were calculated based on the DNA you provided and showed that there is a substantial overlap in the DNA-based and environment-based predictions that are made about a person's educational achievement. In other words, this means that the genetic and environmental factors relevant to educational achievement do not act independently, but are correlated. Dr Allegrini has now moved to a research position at UCL.

We asked: How did you and your twin keep in touch during lockdown? ... and you answered



This is a photo of us when we went travelling, in an RV, around Australia together with our partners'. -Gemma & Sammy



'My twin and I have been meeting outdoors for walks'.



THE 'I live in London and my twin sister Fran is all the way over in Belfast! During lockdown we have been using video calls to catch up and to see what each other has been doing. I have been getting used to online teaching and Fran is currently completing a lockdown project converting an old minibus into a travelling camper van ready for an adventure soon'. Go follow @cocothevana! - Dhanya



'Ellie and I live together and ran weekly quizzes throughout the whole of Lockdown 1 to keep in touch with family and friends. We did it every Sunday night in our pyjamas and had neighbours, netball and school friends, family and even our work colleagues join the quizzes and we raised over £1000 for a Nottingham-based charity helping people throughout the Pandemic'. - Lucy



'I moved back home just before Lockdown 2 and have started back at our family Business, with my twin Conor. It is a health food store, Peppercorn Natural Foods in Romsey, Hampshire serving customers supplements and healthy food'. - Molly



'We run an Etsy shop together. Our shop is called Twin Moon Supply, you can probably guess why! It's been an incredible way for us to work closely together, while being apart!' - Joe & Victoria



'We have been keeping in touch by doing video calls, online quizzes, escape rooms and Netflix parties. The experience has given us some independence and made us less reliant on one another, but we will always be there to support each other'. - Louise & Lucy

'We haven't seen each other since last June and we miss each other very much! We are both key workers - $\,$ we speak on the phone nearly every day and tell each other about our days and our own experience of lockdown. Christmas 2020 was the first one I didn't spend with Amy as we were both working, but we sent each other Christmas presents and opened them on FaceTime! I hope to see her very soon!' - Abigail & Amy

Rosa Cheesman is a TEDS twin and recently completed her PhD based on TEDS data. Rosa and her identical twin Margie reflect on their experiences of TEDS over the years.

Margie: Looking back, TEDS has been part of our show 'Babies', and in Nadiya Hussein's BBC lives from the very beginning. What are your early documentary 'Anxiety and Me'. Talking with you memories of being a TEDS twin?

TEDS researcher when we were about 8. There was a and nurture of anxiety was a highlight for me. spoonerisms exercise I found hilarious. She would say two words like 'top cat' and we had to swap the first Rosa: True! Through TEDS, we've also had the letters of each ('cop tat'). I was laughing so much I chance to meet other twins from across the UK. It's couldn't finish the test!

interesting trying to work out what the questions were times, I feel lucky to have been with you through supposed to tell the TEDS scientists. How do you the lockdowns. I had your support when I was think being a TEDS twin influenced your career in finishing my PhD this summer and it was good to science?

Rosa: I think participating in TEDS really informed my too much like being in the womb again... research interests. Over the years, I became interested in the nature and nurture of mental health and was lucky to get funding to do a PhD on the topic with TEDS. During my PhD, I saw how TEDS creates an amazing diversity of knowledge, and how dedicated the team are to making things fun for the twins. Hopefully my twin's eye view was helpful.

Margie: Having the twin's eye view has also opened up some great science communication opportunities, hasn't it? We both got to represent TEDS in the Netflix

and Nadiya from the Great British Bake-off about Rosa: I remember being guizzed over the phone by a what TEDS research has revealed about the nature She didn't give us any cake though...

fascinating to hear about other Margie: Oh yeah, that was good. It was always experiences of being a twin. Reflecting on recent have been together, even if it was sometimes a bit



Rosa (right) passes her (Zoom) PhD exam (2020).