

# iTEDS

YOUR NEWSLETTER FROM THE TWINS EARLY DEVELOPMENT STUDY

SPRING 2020



## Celebrating 25 years of TEDS!

*Our 25<sup>th</sup> anniversary is an opportunity for me to reflect on the marvellous experience of watching thousands of pairs of twins grow up and share their lives with us. From the start, TEDS seemed as if it was meant to be. When I came to the UK in 1994, I wanted to launch a systematic long-term study of twins' psychological development using birth records. Out of the blue, I called the research director of the Office for National Statistics (ONS) and asked if*

*we could have lunch. Two hours later, TEDS was born. It was lucky that the UK had just begun to computerise birth certificates and at the same time began to record whether a birth was a multiple birth. This made it easy to find about 7500 twin pairs born each year in 1994, 1995 and 1996. ONS agreed to contact parents of newborn twins to ask if they would be willing to participate in a study of twins' development. The rate of participation was off the scale – about 85 per cent agreed to participate. This goodwill has continued and carried TEDS through these 25 years.*

*It was also extremely fortunate that the Medical Research Council (MRC) recognised the importance of TEDS from the start. The MRC has funded TEDS generously and continuously for these 25 years. We have submitted an*

*application to the MRC requesting funding for the next five years, from 2020 to 2024. In this next phase of TEDS, the Deputy Director, Professor Thalia Eley, will take over as Director and I will become Deputy Director. We will find out in March if the MRC has approved our request for funding. We will let you know the result as soon as we can. We hope this will mean that we have yet another reason to celebrate in 2020!*



TEDS Director, Professor Robert Plomin

### FROM YOUR TEDS-21 DATA ...

8%

VEGETARIAN  
OR VEGAN

27%

HAVE  
VAPED

27%

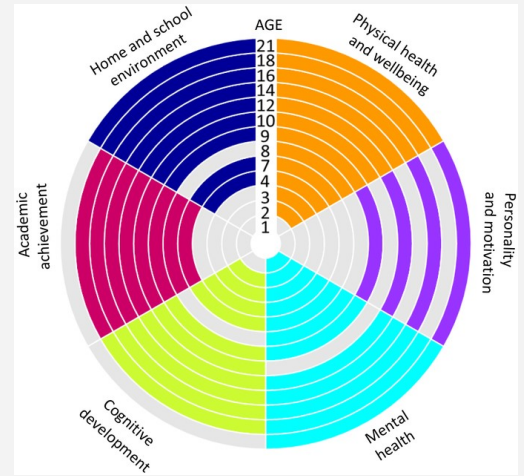
CHECK SOCIAL  
MEDIA SEVERAL  
TIMES AN HOUR

46%

HAVE USED  
ONLINE DATING

## TEDS OVERVIEW

As part of our 25<sup>th</sup> anniversary celebration, we published a paper that gives an overview of 25 years of TEDS research, which can be found on the TEDS website. Fifty million pieces of data have been collected in TEDS in 13 waves of assessment from infancy through early adulthood across six broad categories, such as academic achievement, mental health and home and school environment (see figure to right). These data have contributed to over 400 scientific papers involving more than 140 researchers in 50 universities. TEDS has made a real difference in science and society – and we hope in your lives as well!



## SCIENCE NEWS! FINDINGS FROM TEDS!

### Predicting alcohol use



“My project focuses on the role of genetic factors on the development of alcohol use and the contribution of the environment in shaping this behaviour. An individual’s genetic propensity (aka the polygenic score) for drinking can be calculated by looking at the unique composition of the genetic variants associated with alcohol use occurring across the genome. For this project, I used the information available on alcohol use at ages 16 and 21 from the TEDS study. The preliminary results show that as we get older (comparing alcohol use at age 16 vs 21) genetic factors explain more of the variability in alcohol consumption. Having said that, these genetic variants still only explain 2.5% of the variance in alcohol use in the general population. The next step will be to look at how different

factors such as lifestyle factors, home environment and adversity, interact with genetic factors in predicting alcohol use.”



Dr Radhika Kandaswamy PhD (Research Fellow)

### Forget the X Factor, everyone’s talking about the P factor!



Individuals who score highly for certain psychopathological traits tend to also score highly on others. Consequently, individuals diagnosed with one psychiatric

disorder are more likely to be diagnosed with another. Many researchers think that these overlaps may be explained by a single underlying entity that reflects general risk for a wide range of psychopathologies: the “p factor”! This idea goes back to the 20th century, but has recently become a popular research area for developmental psychologists and behavioural geneticists.

TEDS presents the perfect opportunity to examine the p factor, because the data are so rich! TEDS has collected diverse measures of behaviour problems (such as depressive traits, emotional problems, and antisocial behaviour), rated by children, parents and teachers when twins were aged 7, 9, 12 and 16 years old. Our recent study investigated the nature and nurture of the p factor across time. We found that a genetically influenced general psychopathology factor could be identified across different measures, raters and ages.

These findings have implications for research and clinical practice. For example, the p factor might be used as a control variable in research studies aiming to isolate risk factors for specific mental health problems. In clinical practice, identification of individuals at risk may be made easier by assessing general psychopathology instead of specific symptoms. Similarly, clinicians might want to assess symptoms from a variety of disorders, not only the one that has been diagnosed.

Rosa Cheesman & Andrea Allegrini (PhD students)

### The long and winding road to adulthood

During the past year, we have been busy analysing data from the last round of data collection when twins in TEDS were in their early twenties. This is the first time that systematic information has been obtained in a twin study about what has been called ‘emerging adulthood’. In the 21<sup>st</sup> century, emerging adulthood has stretched from the late teens through the twenties, as jobs for life disappeared with the rise in the gig economy and early marriage gave way to fluid relationships. TEDS twins provided extensive information about issues that are critical during this transition such as aspirations, attitudes, autonomy, identity and relationships.

We are using the twin method to estimate the relative contribution of genetic and environmental factors to these issues. We will let you know about papers that report these results, but for now we thought you would like to see a few basic results about how twins in TEDS are doing in their twenties (see below and front page ).

**53%** agree, or strongly agree, they are ‘doing reasonably well financially’



**82%** gave money to charity in the last 12 months



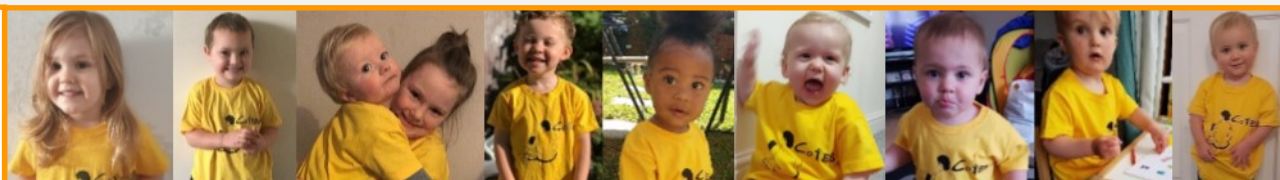
**74%** agree, or strongly agree, they have a hobby



**26%** eat five fruit and veg five or more days a week







## THE CHILDREN OF TEDS TWINS (COTEDS)

CoTEDS is our study for the **children of TEDS twins**. The project is ever growing, currently involving more than **650 children**. We send **questionnaires** to all parents, including those who are new to TEDS after becoming **co-parents with a TEDS twin!** We hold regular **prize draws** for our CoTEDS families, to win gifts such as iPads and Love2Shop vouchers.

Our questionnaires cover a range of topics, from your child's behaviour to your own opinions on parenting. For example, our data suggest that most 1- and 2-year-olds wake their parents up every night of the week – although 40% of parents feel that their child does not disrupt their sleep quality. Thank you to everyone who has taken part so far!

**We are always looking for TEDS twins to join CoTEDS with their children!**

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 the QR code!



Email: [coteds-project@kcl.ac.uk](mailto:coteds-project@kcl.ac.uk)  
 Website: [www.teds.ac.uk/co-teds](http://www.teds.ac.uk/co-teds)  
 Facebook: [www.facebook.com/CoTEDSProject](http://www.facebook.com/CoTEDSProject)  
 Twitter: @Co\_TEDS  
 Text: +44 7557 846823

Lots of our questions are the same as the ones completed by TEDS twins and their parents when the twins were growing up!

*"I remember doing the questionnaires when I was little and seeing my son enjoy doing them makes me reminisce."* (Rebecca Silcox)

We've even managed to find some twins who didn't realise that they were part of TEDS!

*"When I was informed that I was entered to this twin research when I was a baby with my twin I didn't at first believe it ... It's a lovely experience to do if you have the time. Thankyou TEDS and CoTEDS for getting in contact and somehow managing to find me"* (Jasmine Perkes)

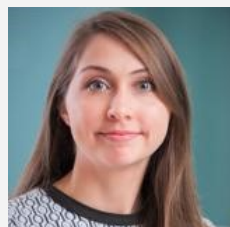


**We send  
T-shirts & art  
sets!**

**Win iPads &  
vouchers!**

## NEW TO TEDS TEAM

**Damien** recently joined the TEDS team as a PhD student after completing his MSc here at King's College London. Damien's PhD will investigate how the genetic and environmental contributions to adult socioeconomic outcomes have changed over time. Before starting his PhD, Damien worked in climate change policy and advocacy, campaigning for stronger carbon budgets in the UK and securing major environmental reforms to the European carbon market. In his spare time, Damien enjoys Brazilian Jiu Jitsu and gymnastics!



**Amy** joined the TEDS team as a Research Assistant in September. Before starting at TEDS, Amy completed her Masters of Research in Psychology at the University of Bath. Amy is interested in how genetic and environmental factors affect cognitive ability across the lifespan. While at TEDS, Amy has helped to analyse your TEDS-21 data and is contributing to the development of a gamified measure of general intelligence. Amy enjoys playing a variety of sports including squash, tag rugby and indoor rock climbing!

## TEDS PHD GRADUATE

**Congratulations to Saskia!** As part of her PhD, Saskia investigated DNA differences in non-identical twins, using the DNA you provided! As expected from genetic theory, non-identical twins are fifty per cent similar in their DNA scores, but that means they are fifty percent different as well. So, there can be

big differences between non-identical twins in their genetic scores. We have shown that these DNA differences within pairs of non-identical twins are related to their psychological differences. What's especially important about this is that members of a twin pair grow up in the same family and usually

go to the same school so that this DNA analysis of non-identical twins controls for many potential confounding factors. (In case you wondered why we only studied non-identical twins, identical twins have identical DNA scores so that we can't study DNA differences within pairs of identical twins.)



## NEW PRIVACY POLICY FOR TEDS TWINS

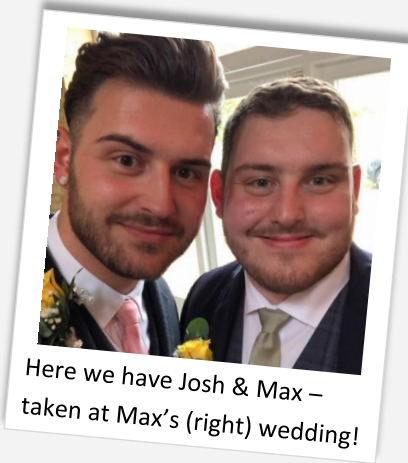
Our research only exists thanks to the valuable data contributed by you, the TEDS twins and their families. We take data confidentiality very seriously and we are sending a copy of our updated privacy policy along with this newsletter. You can also read the TEDS privacy policy on our web site at <http://www.teds.ac.uk/about-teds/privacy>. This policy explains how we protect your privacy in accordance with all current laws and guidelines.



## YOUR MEMORIES OF TEDS!!



"Here's our photo for the 25th anniversary of TEDS, we also celebrate our 25th birthday this year!" Issie & Vicci



Here we have Josh & Max – taken at Max's (right) wedding!

"I would like to say that myself and my twin sister, Emma, have had many fantastic experiences with TEDS and truly value being part of this study! What we will remember most about TEDS is being pictured in the book 'Blueprint' by Robert Plomin." Claire & Emma

"Being part of TEDS is like a secret organisation that only we know about when we go out in our TEDS hoodies only fellow TEDS twins know what it is and we can talk about it." Kayleigh



"As TEDS celebrate their 25th year anniversary we also celebrate our 25 years of being twins." Nancy & Lily



"Our best memories of TEDS are probably when we used to have to fill out all the surveys and questionnaires!" Joe & Victoria



"We have fond memories of completing lots of different questionnaires and sending over our DNA through the post. It always felt special to be a part of TEDS." Victoria & Alice



"Not only is 2020 TEDS 25th year, it's ours too!" Tanya & Layla

This photo of an old TEDS t-shirt has been sent in by Emily & Sophie, who are now 25 and have been with TEDS all their lives!

