

MARGHERITA MALANCHINI

Department of Psychology
University of Texas at Austin
108 E. Dean Keeton
Austin, Texas 78712-0187, USA
m.malanchini@utexas.edu

EDUCATION

- 2013-2016 Ph.D. in Psychology
Goldsmiths University of London, United Kingdom
Funding: Economic and Social Research Council
- 2011-2012 M.Sc. in Developmental Sciences
Birkbeck University of London, United Kingdom
- 2007-2010 B.Sc. in Psychology
Goldsmiths University of London, United Kingdom

POST-DOCTORAL EMPLOYMENT

- 2017–Present Post-doctoral Fellow
Lifespan Development Lab (<https://labs.la.utexas.edu/tucker-drob>)
Department of Psychology, The University of Texas at Austin, USA
Mentored by Dr. Elliot Tucker-Drob & Dr. Paige Harden
- 2016–2017 Post-doctoral Researcher
Twins Early Development Study (www.teds.ac.uk)
King's College London, United Kingdom
Mentored by Professor Robert Plomin

RESEARCH WORK AND COLLABORATIONS

- 2015–Present Director of the Longitudinal Study MILES–A Multi-cohort
Investigation into Learning and Educational Success
www.projectmiles.com

2016–Present	Collaboration with the FP7 European consortium: ACTION - Aggression in children: unravelling gene-environment interplay to inform treatment and interventions www.action-euproject.eu
2014–Present	Research collaboration with the Twins Early Development Study King’s College London, United Kingdom
2013–Present	Research collaboration with the International Centre for Research in Human Development, Tomsk State University, Russia
2013–2014	Research collaboration with the Psychological institute of the Russian Academy of Education, Moscow, Russia
2013	ESRC International Partnership Scheme, State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, China
2012–2013	Project Co-ordinator and Research Assistant, InLab, Goldsmiths University of London, United Kingdom www.inlab.co.uk

TEACHING

2017–Present	Lecturer in <i>Individual Differences</i> MSc Human Development: Genetics, Neuroscience and Psychology Tomsk State University, Russia (<i>postgraduate</i>)
2016–2017	Lecturer in <i>Individual Differences and Behavioural Genetics</i> MSc Human Development: Genetics, Neuroscience and Psychology Tomsk State University, Russia (<i>postgraduate</i>)
2016–2017	Guest Lecturer in <i>Psychology and Education</i> Goldsmiths University of London (<i>undergraduate and postgraduate</i>)
2015–2017	Dissertation Supervision (<i>undergraduate and postgraduate</i>)
2015–2016	Lecturer and Programme Co-ordinator in Research Methods AIR summer school (www.gold.ac.uk/short-courses/air) Goldsmiths University of London (<i>undergraduate and postgraduate</i>)
2014–2015	Associate Lecturer in Psychology Goldsmiths University of London (<i>undergraduate</i>)

2014-2015 Lecturer and Programme Co-ordinator in Research Methods,
AIR summer school, Goldsmiths University of London
(*undergraduate and postgraduate*)

2013-2014 Associate Lecturer in Psychology
Goldsmiths University of London (*undergraduate*)

RESEARCH TRAINING

2018 Seminar Series in Behavioural Epigenetics, The University of Texas at
Austin (USA)

2018 Statistical Genetics and Individual Differences Workshop, The
University of Texas at Austin (USA)

2017 Advanced Structural Equation Modelling Course, The University of
Texas at Austin (USA)

2017 Interdisciplinary Research Workshop - Sociality and Health
Ecosystems, University of Texas at Austin (USA)

2016 International Workshop - Statistical Genetic Methods for Human
Complex Traits, Institute for Behavioural Genetics, University of
Colorado Boulder (USA)

2015 Summer School - Twin Model Fitting, Social Genetic and
Developmental Psychiatry Centre, King's College London (UK)

2015 Spring Workshop - EEG Data Analysis, Social Genetic and
Developmental Psychiatry Centre, King's College London (UK)

2014 Summer School - Introduction to R, Social Genetic and
Developmental Psychiatry Centre, King's College London (UK)

2014 Postgraduate Course - Univariate and Multivariate Genetic Analyses,
Goldsmiths University of London (UK)

2014 Postgraduate Course - Structural Equation Modelling with Mplus
Goldsmiths University of London (UK)

2014 Postgraduate Course - Molecular Genetics, Goldsmiths University of London (UK)

GRANTS & AWARDS

2017 David Wechsler Early Career Grant for Innovative Work in Cognition, American Psychological Foundation. Principal Investigator (\$24,986.80)

2017 Fellowship Award, Pop-Up Institute, Individual & Population Variation in Biology, Medicine & Society, University of Texas at Austin (\$4,000.00)

2016 Travel Award, International Society for Intelligence Research, St Petersburg, Russia (\$1,000.00)

2015 Travel Award, International Society for Intelligence Research, Albuquerque, New Mexico, USA (\$1,500.00).

2015 Travel Award, Society for Research in Child Development, Philadelphia, USA (\$300.00).

2014 Best Poster Presentation Award, International Society for Intelligence Research, Graz, Austria

2014 Travel Award, International Society for Intelligence Research, Graz, Austria (\$1,000.00)

2013 Advanced Quantitative Methods Award, UK Economic and Social Research Council (£9,000.00 over 3 years).

2013 PhD Fellowship Award, UK Economic and Social Research Council (~£70,000.00 over three years)

CONFERENCES AND WORKSHOPS ORGANISATION

2015 Chair of the Award Committee
Building Bridges: Mobilizing International Interdisciplinary Science to Benefit Societies Conference, Goldsmiths University of London

- 2014 Workshop Organiser
ESRC Doctoral Training Centre Workshop in Behavioural Genetics and Education, Goldsmiths University of London
- 2013 Chair of the Organising Committee
International Conference: Interdisciplinary Approaches to the Study of Individual Differences in Learning, Goldsmiths University of London

PEER REVIEWING ACTIVITIES

Reviewer for the following scientific publications:

Intelligence
Developmental Psychology
British Journal of Educational Psychology
Journal of Educational Psychology
Personality and Individual Differences
Behavioral Genetics
Emotion

INVITED TALKS

- October 2017 Aggressive behaviour in childhood and adolescence: the role of smoking during pregnancy. Fourth Plenary ACTION Meeting and Workshop. Vrije University Amsterdam (The Netherlands)
- November 2017 'Same but different': Twin differences in self-regulation, character and school achievement. Opening the Black Box: Inequality WITHIN Families–Consequences for Child Development Workshop. Kaiserin Friedrich-Haus, Berlin (Germany)

PRESENTATIONS AT ACADEMIC CONFERENCES

1. **Malanchini, M.** (June 2018). 'Same but different': Phenotypic and genetic associations between executive functions, impulse control and character. *48th Behavior Genetics Annual Meeting*, Boston (USA)
2. **Malanchini, M.** (May 2017). The non-cognitive factors of educational achievement: Motivation and anxiety. *5th Annual Big Data in Biology Symposium*, Austin (USA).

3. **Malanchini M.** et al. (June 2016). Preschool drawing and school mathematics: The nature of the association. *International Society for Intelligence Research*, St Petersburg (Russia).
4. **Malanchini, M.** et al. (September 2015). The etiology of spatial anxiety and its relationship with mathematics anxiety, general anxiety and spatial ability. *International Society for Intelligence Research*, Albuquerque, New Mexico (USA).
5. **Malanchini, M.** et al. (July 2015). Mathematics motivation: stability and change in its aetiology and its longitudinal association with mathematics achievement. *European Congress of Psychology*, Milan (Italy).
6. **Malanchini, M.** et al. (May 2015). Preschool drawing and school mathematics: the nature of the association. *American Psychological Association Conference*, New York City (USA).
7. **Malanchini, M.** et al. (March 2015). The brain correlates of mathematics anxiety: evidence from an EEG paradigm. *Society for Research in Child Development* biannual meeting, Philadelphia (USA).
8. **Malanchini, M.** et al. (March 2015). The trivariate interaction between academic motivation, achievement and objective and perceived socio-economic status. *Society for Research in Child Development* biannual meeting, Philadelphia (USA).
9. **Malanchini, M.** et al. (March 2015). The aetiology of the longitudinal relationship between academic motivation and achievement in reading and mathematics, *International Convention of Psychological Science*; Amsterdam (The Netherlands).
10. **Malanchini, M.** et al. (December 2014). Do achievement and motivation for learning a second language influence each other longitudinally beyond the impact of general intelligence and emotion regulation factors? *International Society for Intelligence Research*, Graz (Austria) –poster presentation.
11. **Malanchini, M.** et al. (November 2014). The nature of the relationship between preschool drawing and school mathematics: insights from a large twin study. *International Society for Twin Research*, Budapest (Hungary) –poster presentation.

CO-AUTHORED PRESENTATIONS AT ACADEMIC CONFERENCES

1. Toivainen, T., **Malanchini, M.**, Oliver, B.R., & Kovas, Y. (July 2018). Creativity at age 9 and later educational achievement – a longitudinal investigation. *International Society for Intelligence Research*, Edinburgh (UK). -Poster
2. Allegrini, A., **Malanchini, M.**, Krapohl, E., Selzam, S., Rimfeld, K., EU-ACTION, & Plomin, R. (June 2018). A multi-polygenic score approach to the prediction of harmonized aggression. *48th Behavior Genetics Annual Meeting*, Boston (USA). –Oral presentation

3. Rimfeld, K., **Malanchini, M.**, Selzam, S., Dale, P.S., Allegrini, A., & Plomin, R. (June 2018). DNA provides the best child-specific prediction of educational achievement from birth. *48th Behavior Genetics Annual Meeting*, Boston (USA). -Oral presentation
4. Harden, K.P, **Malanchini, M.**, Tellekat, M., Gosling, S.D., & Pennebacker, J.W. (February 2018). Digital Micro-Behaviors in the Online Learning Environment New Tools for Understanding Disparities in Higher Education Outcomes. *NSF Science of Learning Meeting*, Washington DC -Poster.
5. Zheng, A., Briley, D., **Malanchini, M.**, Tackett, J., Harden, K.P., Tucker-Drob, E.M. (June 2018). Genetic and Environmental Influences on Achievement Goals Shift with Age. *48th Behavior Genetics Annual Meeting*, Boston (USA). -Oral presentation
6. Wang, Z., Shakeshaft, N.G., Schofield, K.L., & **Malanchini, M.** (May 2018). When I Feel in Control, Anxiety is My Propeller. *30th Association for Psychological Science Convention*, San Francisco (USA). -Poster.
7. Yang, Z., Wang, Z., Shakeshaft, N.G., Schofield, K.L., & **Malanchini, M.** (May 2018). The Longitudinal Role of Math Anxiety in Boys' and Girls' Mathematics Development. *30th Association for Psychological Science Convention*, San Francisco (USA). -Poster.
8. Toivainen, T., **Malanchini, M.**, Oliver, B., & Kovas, Y. (July 2017). Creative storytelling at age 9 is related to success in GCSE English. *International Society for the Study of Individual Differences*, Warsaw (Poland) -Oral presentation
9. Rimfeld, K., **Malanchini, M.**, & Plomin, R. (June 2017). Stability and change in the etiology of educational achievement across the school years. *47th Behavior Genetics Annual Meeting*, Oslo (Norway) -Oral presentation.

PUBLICATIONS

2018

1. **Malanchini, M.**, Smith-Wooley, E., Ayorech, Z., Rimfeld, K., Krapohl, E., Vuoksima E., Korhonen T., Bartels, M., van Beijsterveldt, T.C.E.M., Rose, R.J., Lundström, S., Anckarsäter, H., Kaprio, J., Lichtenstein, P., Boomsma, D.I. & Plomin, R. (2018). Aggressive behaviour in childhood and adolescence: the role of smoking during pregnancy, evidence from four twin cohorts in the EU-ACTION consortium. *Psychological Medicine* 1-9.
<http://dx.doi.org/10.1017/S0033291718001344>
2. **Malanchini, M.**, Rimfeld, K., Krapohl, E., Hannigan, L.J., Dale, P.S., & Plomin, R. (2018). Stability and change in the etiology of educational achievement across the school years. *Nature Science of Learning*. <https://doi.org/10.1038/s41539-018-0030-0>

3. Toivainen, T., Pannini, G., Papageorgiou, K. A., **Malanchini, M.**, Rimfeld, K., Shakeshaft, N.G., & Kovas, Y. (in press). Sex Differences in Spatial Ability: Exploring the Twin Testosterone Transfer Hypothesis. *Scientific Reports*.
4. Papageorgiou, K. A., **Malanchini, M.**, Denovan, A., Clough, P., Shakeshaft, N., Schofield, K., & Kovas, Y. (2018). Longitudinal association between narcissism, mental toughness, and school achievement. *Personality and Individual Differences*. <https://doi.org/10.1016/j.paid.2018.04.024>
5. Wang, Z., Shakeshaft, N., Schofield, K., & **Malanchini, M.** (2018). Anxiety is not enough to drive me away: A latent profile analysis on math anxiety and math motivation. *PLoS One* 13(2) e0192072. <https://doi.org/10.1371/journal.pone.0192072>

2017

6. **Malanchini, M.**, Rimfeld, K., Shakeshaft, N. G., Rodic, M., Schofield, K. L., Selzam, S. ..., Kovas, Y. (2017). The genetic and environmental aetiology of spatial, mathematics and general anxiety. *Scientific Reports*, [42218]. [10.1038/srep42218](https://doi.org/10.1038/srep42218)
7. **Malanchini, M.**, Wang, Z., Voronin, I., Schenker, V., Plomin, R., Petrill, S.A., & Kovas, Y. (2017). Reading Self-perceived Ability, Enjoyment and Achievement: A Genetically Informative Study of Their Reciprocal Links Over Time. *Developmental Psychology*, 53(4), 698-712. doi.org/10.1037/dev0000209
8. Rimfeld, K., Shakeshaft, N.G., **Malanchini, M.**, Rodic, M., Selzam, S., Schofield, K.L., Dale, P.S., Kovas, Y., & Plomin, R. (2017). Spatial ability or spatial abilities? Investigating the phenotypic and genetic structure of spatial ability. *Proceedings of the National Academy of Sciences*, 114(10), 2777-2782. <http://www.pnas.org/content/114/10/2777>
9. Toivainen, T., **Malanchini, M.**, Oliver, B.R., & Kovas, Y. (2017). Creative Storytelling in Childhood is related to Exam Performance at Age 16. *The European Proceedings of Social and Behavioural Sciences*, 33, 375-384. <http://dx.doi.org/10.15405/epsbs.2017.12.40>

2016

10. Shakeshaft, N.G., Rimfeld, K., Schofield, K.L., Selzam, S., **Malanchini, M.**, Rodic, M., Kovas, Y., & Plomin, R. (2016). Rotation is visualisation, 3D is 2D: using a novel measure to investigate the genetics of spatial ability. *Scientific Reports*, 6, 30545 [10.1038/srep30545](https://doi.org/10.1038/srep30545)
11. **Malanchini, M.**, Tosto, M., Garfield, V., Czerwik, A., Dirik, A., Arden, R., Malykh, S., & Kovas, Y. (2016). Preschool Drawing and School Mathematics: the nature of the relationship. *Child Development*, 87(3), 929-943. [10.1111/cdev.12520](https://doi.org/10.1111/cdev.12520)

2015

12. **Malanchini, M.**, Voronina, I.D., Soldatova, E.L., Maslennikova, E.M, Malykh, S.B., & Kovas, Y. (2015). Private environment and the ability to draw at an early age: a study of differences in monozygotic twins. *Theoretical and Experimental Psychology*, 8(4), 22-35.
13. Savostyanov, A.N, Dolgorukova, T.A, Esipenko, E.A., Zaleshin, M.S. **Malanchini, M.** ... & Kovas, Y. (2015). EEG Correlates of Trait and Mathematical Anxiety during Lexical and Numerical Error-Recognition Tasks. *World Academy of Science, Engineering and Technology Linguistics and Language Sciences*, 2 (7), 303.
scholar.waset.org/1999.9/10002036

2014

14. Bogdanova, O., Ginku, E., Bogdanova, E., Zueva, D., **Malanchini, M.**, & Kovas, Y. (2014). Mathematical Anxiety and mathematical learning: Multidimensional approach. Abstract. *Personality and Individual Differences*, 60, Supplement, p. S9.
15. Filer, K., **Malanchini, M.**, Voronina, I.D., Akimova, K.K., Zueva, D.E., & Kovas, Y. (2014). Longitudinal relationship between second language motivation and achievement feedback. *Theoretical and Experimental Psychology*, 6(4), 61-75.

MANUSCRIPTS UNDER REVIEW

1. **Malanchini, M.**, Engelhardt, L.E., Grotzinger, A., Harden, K.P., & Tucker-Drob, E.M. (under review). 'Same but different': Associations between executive functions, impulse control and character. *Journal of Personality and Social Psychology*.
2. Nogueira Avelar e Silva, R., van de Bongardt, D., **Malanchini, M.**, de Graaf, H., Harden, K.P., & Raat, H. (under review). Psycho-social Predictors of Adolescents' Sexual and Reproductive Health: A Comparison across the Netherlands, the United States, and Brazil. *Pediatrics*.
3. Malanchini, G., Stefanini, G.G., **Malanchini, M.**, Condorelli, G., Lombardi, F. (under review). Higher mortality during weekend admission for Acute Coronary Syndrome; a large-scale cross-sectional Italian study. *European Heart Journal*.
4. Rimfeld, K., **Malanchini, M.**, Hannigan, L.J., Allen, R., Dale, P.S., & Plomin, R. (under review). Teacher ratings are reliable predictors for exam performance. Are exams necessary? *Journal of Child Psychology and Psychiatry*.
5. **Malanchini, M.**, Rimfeld, K., Wang, Z., Petrill, S.A., Tucker-Drob, E.M., Plomin, R., & Kovas, Y. (under review). Common genetic influences underlie the association between anxiety, motivation and performance in mathematics. *Translational Psychiatry*.

6. Zheng, A., Briley, D.A., **Malanchini, M.**, Tackett, J.L., Harden, K.P., & Tucker-Drob, E.M. (under review). Genetic and Environmental Influences on Achievement Goals Shift with Age. *European Journal of Personality*.

MANUSCRIPTS IN PREPARATION

1. **Malanchini, M.**, Rimfeld, K., Shakeshaft, N.G., Schofield, K.L., Rodic, M., Rossi, V., Dale, P.S., Kovas, Y. & Plomin, R. (in preparation). A common genetic network underlies small and large scale spatial abilities: Evidence from two comprehensive gamified batteries. *Current Biology*
2. **Malanchini, M.**, Engelhardt, L., Fries, S.M., Harden, K.P., & Tucker-Drob, E.M. (in preparation). Correspondence between diurnal, stress-reactivity and hair cortisol.
3. **Malanchini, M.**, Ayorech, Z., Smith-Woolley, E., Rimfeld, K., Bartels, M., Boomsma, D.I., & Plomin, R. (in preparation). Multidimensional risk scores for aggressive behaviour in early and late adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*.
4. Wang, Z., Shakeshaft, N.G., Malanchini, M., Schofield, K.L., & **Malanchini, M.** (in preparation). The longitudinal role of domain-specific anxiety in boys and girls academic development. *Developmental Science*.
5. **Malanchini, M.**, Voronin, I., Wang, Z., & Kovas Y. (in preparation). The co-development of self-efficacy, enjoyment and achievement in reading and mathematics across eight school years. *Journal of Educational Psychology*

SELECTED MEDIA COVERAGE AND OUTREACH

- **September 2018 - Paper in *Nature Science of Learning* covered in:**

The Conversation

<https://theconversation.com/genes-shown-to-influence-how-well-children-do-throughout-their-time-at-school-102520>

- **June 2018 - Paper in *Personality and Individual Differences* covered in:**

BBC News

<https://www.bbc.com/news/education-44601198>

Science Daily (United States)

<https://www.sciencedaily.com/releases/2018/06/180626113003.htm>

Teen Vogue (United States)

<https://www.sciencedaily.com/releases/2018/06/180626113003.htm>

The Times (United Kingdom)

<https://www.thetimes.co.uk/article/narcissists-do-better-at-school-study-finds-59bsdnavqm>

The Irish News (Ireland)

<https://www.irishnews.com/magazine/science/2018/06/26/news/narcissism-growth-linked-to-better-school-achievement--1366079/>

Business Insider (United States)

<http://www.businessinsider.com/why-it-pays-to-be-a-narcissist-2018-6?r=UK&IR=T>

RT News

<https://www.rt.com/uk/430893-narcissistic-personality-success-study/>

ITV News (United Kingdom)

<http://www.itv.com/news/2018-06-26/narcissism-growth-linked-to-better-school-achievement/>

- **February 2017 – Paper in PNAS covered in:**

Ars Technica (United Kingdom)

<https://arstechnica.com/science/2017/02/twin-study-finds-that-spatial-ability-is-more-than-just-intelligence>

- **February 2017 - Paper in *Scientific Reports* covered in:**

Science Daily (United Kingdom)

<https://www.sciencedaily.com/releases/2017/02/170221101035.htm>

State of Mind (Italy)

<http://www.stateofmind.it/2017/03/ansia-spaziale-e-matematica-eziologia/>

MedicalXpress (United Kingdom)

<https://m.medicalxpress.com/news/2017-02-maths-nervous-genes.html>

OK Salute e Benessere (Italy)

<https://www.ok-salute.it/psiche-e-cervello/lansia-e-genetica/>

Medical Daily (United Kingdom)

<http://www.medicaldaily.com/genetic-causes-poor-math-skills-genes-may-be-blame-doesnt-mean-youre-destined-411649>

EurekAlert (International)

https://www.eurekalert.org/pub_releases/2017-02/kcl-mam022017.php

Daily Mail (United Kingdom)

<http://www.dailymail.co.uk/sciencetech/article-4247006/Are-genes-blame-struggles-math.html>

La Razon (Spain)

<http://www.larazon.es/sociedad/ciencia/perderse-con-un-mapa-es-culpa-de-los-genes-HG14565460>

NU (the Netherlands)

<https://www.nu.nl/gezondheid/4486422/angst-wiskunde-mogelijk-genetisch-bepaald.html>

Twins Early Development Study Research Video Channel (United Kingdom)

<https://www.youtube.com/watch?v=2sdRNpqcB6Y>

- **April 2016 -Paper in *Child Development* covered in:**

Goldsmiths University Press Office (United Kingdom)

<https://www.gold.ac.uk/news/preschool-drawing-and-school-mathematics/>

Twins Early Development Study Research Video Channel (United Kingdom)

<https://www.youtube.com/watch?v=c9GHXEFBZY0>