

Newsletter

Spring/Summer 2022

Kingston University London

Foreword

Welcome to the Spring/Summer 2022 Developing Minds Newsletter. We would like to thank you for your interest and continued support of the Developing Minds Lab.

It has been lovely seeing some of you at our recent events. You can read about these on pages 3-6. To follow on from our Young Scientist Event, you and your child may be interested in participating in some of our current research studies on pages 15-18.

In relation to our recent 'Researching Autism' event, this newsletter's feature article is written by Norlina Sexton about "Participatory autism research for developing further knowledge about university transition challenges" and can be found on pages 7-10.

An interview with lecturer and Developing Mind Lab member, Dr Stone Hsieh, can be seen on pages 11-14.

You can also view some of our recent publications, conference presentations and funding awards on pages 19-20.

We hope you have a wonderful summer!

Kind regards, Dr Elisa Back

Director of the Developing Minds Lab e.back@kingston.ac.uk





Recent Events

Young Scientist Virtual Event 30th May 2022

Thank you to those who attended our Virtual Young Scientist Event during the summer half-term.

The event started with an introductory group session where children and parents learnt about Developmental Psychology and participated in interactive group activities.



This was followed by children (aged 4-11) participating in a range of research tasks that varied between 15-40 minutes and investigated how children develop. This included carefully created schedules of tasks that were individual live video calls with researchers and tasks that could be completed in their own time.

Some of these tasks (and a few of our other research studies) require more participants, so if your children are interested in taking part, please see details on pages 15-18.





Pint of Science – Ready to play and re-behave through Regoal! 9th May 2022

Pint of Science is a worldwide science festival which brings researchers to local pub/cafe/space to share their scientific discoveries. During 9-11 May 2022, Pint of Science 2022 hit nearly 25 countries and 500 cities globally!

Dr Birsu Kandemirci hosted the event, alongside Ifigeneia Manitsa (event manager and presenter) and Beren Barklam (event manager).

The presenters for this event were Ifigeneia Manitsa with a talk entitled "Service provision amongst young people with behavioural problems: The need to revamp" and Dr Maria Livanou with a talk entitled "A coproduced game-based intervention for young people with behavioural problems".

Five percent of young people in the UK have conduct disorder. Young people living in deprived neighbourhoods and low-income households are three times more likely to present with behavioural problems. Many families currently receive little or no help until the young person's behaviour has escalated to involvement in crime. However, digital programmes have been found to moderate behavioural symptoms and are user-friendly giving easy and immediate access and support to parents. Maria and Ifigeneia discussed the development of a game-based programme (Regoal intervention) for adolescents 11 to 16 years at risk of behavioural problems. This study will pilot and test out the feasibility of Regoal to reduce behavioural problems.









Researching Autism Spectrum Disorders 22nd June 2022

This event presented research undertaken by the Developing Minds Lab at Kingston University's Festival of Research. It was well attended by a variety of stakeholders. An interactive discussion took place about issues related to researching autism with valuable input from attendees.













The first talk by Dr Elisa Back focused on predicting intervention use in autistic children based on demographic and autism specific characteristics. Findings from their study suggested that intervention use is mostly guided by co-occurring difficulties rather than autism-specific characteristics. This talk emphasised the need for more transdiagnostic interventions for autistic children who have additional problems.

The second talk by Mrs Hayley Spurin (PhD researcher) discussed social attention strategies of autistic people. It focused on the details of their current study. It highlighted that highly visually distracting scenes may produce visual processing difficulties for autistic people and could better explain their social communication differences.

The final talk by Mrs Norlina Sexton (PhD researcher) addressed co-producing a university transition programmed with and for students with autism and their stakeholders. It provided insight into the need for meaningful involvement for autistic students, incorporating their lived experiences and voices in research.

Visiting speaker 13thJuly

The Developing Minds Lab had a visit from Professor Danielle Ropar (University of Nottingham) where she gave a talk to the Department of Psychology about "How the Double Empathy problem affects autistic/non-autistic communication in research settings and the real world".





Congratulations

Hayley Spurin (Social Attention Strategies and Theory of Mind Understanding in Autistic Children and Adolescents)



Ifigeneia Manitsa (The social inclusion of adolescents with visual impairments: A multidimensional approach)

They have recently successfully defended their theses and have both been awarded with a PhD.



Congratulations Dr Spurin and Dr Manitsa!

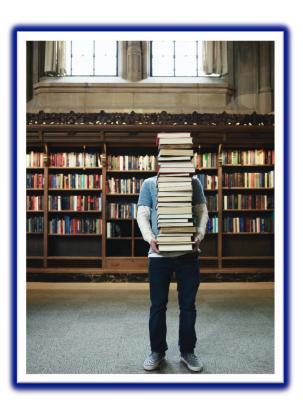
PARTICIPATORY AUSTISM RESEARCH FOR DEVELOPING FURTHER KNOWLEDGE ABOUT UNIVERSITY TRANSITION CHALLENGES.

Written by: Mrs Norlina Sexton (PhD researcher)

Supervisors: Professor Muthanna Samara, Dr Maria Livanou, and Dr Fiona Barlow-Brown

The prevalence of autism in the United Kingdom (UK) has been increasing, with 4 out of 10,000 having autism in 1966 (Lotter, 1966) compared to 22 out of 10,000 in 1979 (Wing & Gould, 1979). Currently, the autism prevalence worldwide is about 1% across the life span, with 42% of adults having co-occurring anxiety disorder, 37% depressive disorder, and 32% probable post-traumatic stress disorder (PTSD) (Elsabbagh et al., 2012; Haruvi-Lamdan et al., 2020; Hollocks et al., 2019).





Increasing numbers of students are attending university with a declared autism diagnosis, reflecting a two-fold increase in first year UK domiciled university students with a declared autism diagnosis, in 2020/21 compared to 2014/15 (Higher Education Statistics Agency, 2022). Data shows that 11.9% dropped-out in 2016/17, and for those who graduated, only 76.8% achieve a first-class or upper second-class honours degree compared to 79.7% non-disabled students (Bolton & Hubble, 2021).





Transition to university for the first time is stressful for all students, as it involves moving away from a familiar support structure and social network, and having to establish new ones, whilst managing the increasing academic, social, and daily living demands (Fisher & Hood, 1987).

his challenge is magnified for autistic students due to likely autistic traits, such as insistence of sameness and sensory hyper/hypo sensitivities (Wigham et al., 2015), and co-occurring mental health conditions (Maddox & White, 2015; Spain et al., 2018). There is also the developmental challenges around independent living and emerging adulthood, with the need to self-regulate, self-initiate, self-advocate, and self-identify (Ratner & Berman, 2015). Moreover, this period marks the transition in healthcare services, which has been reported as poorly organised and experienced (Batchelor et al., 2020).







The Covid-19 pandemic adds further challenges for autistic students, precipitated by the need to navigate various changes, uncertainties, and heightened fears about the COVID-19 virus (Cage & McManemy, 2022). These combined challenges can impact their confidence in forming new friendships during the university transition process, resulting in smaller social network size compared to non-autistic students (Lei et al., 2020).

Therefore, considering the multifaceted challenges faced by autistic students when transitioning to university, it is vital to recognise the greater level of parental and support professionals' (stakeholders) involvement in providing social, academic, and practical daily living care (Rispoli et al., 2019). Understanding the extent to which autistic students and their stakeholders perceive the university transition challenges can lead to developing further knowledge about improving university outcomes and retention rates.



Starter Pack: Participatory Autism
Research by CRAE - Issuu (Pellicano et al 2017)

Additionally, improving autism knowledge and attitudes among university staff, with emphasis on enabling better relationships, adapting teaching approaches, and modifying the environment can make an important difference to autistic students' university experience and academic success (Scott & Sedgewick, 2021).

For this reason, involving autistic students and their stakeholders as partners in all stages of research will not only include their active voices to further develop the knowledge of autism, but also provide opportunities for empowerment for this often-excluded group. It would be epistemologically and ethically questionable if this knowledge is not done with autistic voices and their stakeholders in autism research (Milton, 2014).

As a parent to a late diagnosed autistic daughter, who was a high achiever at GCSE and GCE, but had to withdraw from her university studies following the worsening of her mental health, I can only emphasise that the correct use of models should be about understanding the lived experience of university transition and improving autistic students' academic success, mental well-being, and long-term outcomes.



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Meet the Researcher



As you may now know, Developing Minds is a research group consisting of academics, PhD students and researchers with a broad range of interests and expertise in how children learn and develop.

We are very happy to tell you more about lecturer Dr Stone Hsieh in this interview.

Stone, you are interested in a specific area of biological psychology that investigates experience-driven development in both typical and atypical individuals. Can you tell us how/why you got interested in it?

I was originally trained in exercise physiology during my master's degree and was fascinated by how exercise can affect our hormonal responses. Later, I switched my attention to how changes in hormones may thereby affect our behaviours and cognition after exercise. This was where I started to seek how exercise change our brain and behaviours. I was fortunate to be involved in a series of study looking at the effects of exercise on brain function and cognition in neurotypical and atypical children (e.g., ADHD) using EEG and biological measures (e.g., salivary cortisol) during my PhD and postdoc and I decided to commit to this line of research ever since.



One of your research interests is how interventions such as exercise impact neurocognitive development. Can you tell us a bit more about it and why it is essential to conduct this research?

Based on the experience-dependent neural plasticity, our brain can be shaped by external stimulants, such as exercise. From science we know that both acute, short bouts of exercise and long-term exercise can change our brain function and cognition via different mechanisms. Such modulatory effects of exercise are most significant in children and older adults. In children, a wealth of data has shown that aerobic-based exercise, such as brisking walking on a treadmill, is effective in improving higherorder cognitions, such as attention and memory. A few studies further showed that exercise induced benefits can transfer to applied outcome measures such as children's performance on standardized academic subject tests. More recently, scientists start to explore the effects of other modalities of exercise, such as exercise that incorporates both physical and cognitive stimulation (such as football and tennis), and the results showed that this modality of exercise is also effective in improving children's brain and cognition. I think this line of research is relevant because it tells us about lifestyle choices that can actually benefit children's brain health, academic attainment, and overall health. Exercise can be considered as a cost-effective and easily implemented intervention for children. Therefore, I am interested in seeking effective protocols of exercise (or in combination with other lifestyle factors, such as diets) that can maximize the exercise induced benefits to cognition in

children.



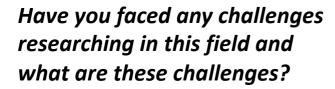




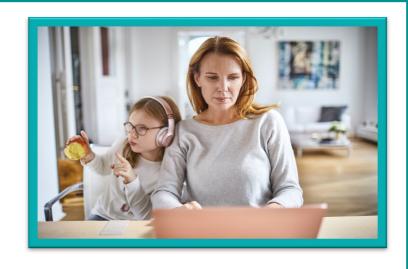


What research project are you working on currently?

My current research agenda can be divided into two themes: a) how exercise and non-invasive brain stimulation affect our appetite and eating via changes in brain function, and b) how different protocols of physical activity affect brain function, cognition, and academic attainment in children with ADHD.



Cognitive neuroscience and sports science are two fast changing fields and are very competitive. Hence, I would say collaboration is a must-do in these fields to increase the novelty and quality of research. This would also increase the productivity of research. However, sometimes it takes efforts and times for scientists from different fields to understand different scientific languages and to have good communication with each other. I think this would be an ongoing lesson to learn, not only for me but for many other researchers in these field.



Of all the projects you have worked on so far, which one is your favourite and why?

I would say my master's thesis looking at how acute bouts of resistance exercise affect memory in older adults because I received many positive feedback from participants saying that they enjoyed the study and continued doing resistance training even after the study was completed. Some participants told me that they started to go to the gym and to be active for the first time in their life because of my study!



What is the thing you love the most about being a scientist/researcher?

The best thing of being a scientist is that I can enjoy the process of seeking answers for my own research questions and have flexible working hours.





What do you like to do when you are not working on research?

I am a basketball fan. I also enjoy having a walk by the Thames or having a picnic in Richmond Park with my wife.

Finally, what advice would you give to a student researcher or a researcher early in their career?

- 1. Always remember to find times to relax.
- Not only read papers specific to your research topic, but also papers from other fields. You would be finding surprises as you go.
- 3. keep asking questions and be critical.





CALLING ALL PARENTS/CAREGIVERS OF MONOLINGUAL CHILDREN AGED 57 WHO SPEAK ONLY ENGLISH.

We are inviting English speaking children to participate in our study on language and memory development. The sessions last 30 mins and your child will receive a £10 Amazon voucher as thanks.



Kingston University, Penhryn Road

Campus

When? July 2022

Sign up at

K2051171@kingston.ac.uk





Face masks and emotion recognition?





Who can take part?

Parents and children aged between 6-17.

What does it involve?

Taking part in this research will involve parents completing an online survey about your child's personality and behavior. This will be followed by your child completing an emotion recognition task. This research study will take approximately 30 minutes to complete.

The first 50 people to complete this study will receive a £5 amazon gift voucher as an appreciation for your time.

Details

If you would like to participate in this study please click the link which will take you to more information about the study. If this does not work please copy and paste the link into your web browser.

https://kingston.eu.qualtrics.com/jfe/form/SV_a5zTbOfJ2REFwsC

If you have any questions please contact a member of our research team: Liberty: <u>K1836576@kingston.ac.uk</u>



Kingston **University** London

Emotion understanding in parents and children

Who can participate?

Children between the age group 4-11 and their parents.

What does it involve?

- 1. Parents completing an online survey.
- 2.A video call session with parent and child to complete two tasks.

How to participate?For further information and to take part in the research, please click here:

https://qsharingeu.eu.qualtrics.com/jfe/form/SV aY1T3iDB6lD4Ljw

If you have any questions please contact a member of our research team at the following email address:

Student Researchers:

Tehreem- k2149765@kingston.ac.uk Rute- k2002581@kingston.ac.uk

Research Supervisor: Dr.Elisa Back- e.back@kingston.ac.uk

Video game preferences in adolescents aged 11-16 years and the development of a game-app intervention





Do you know any adolescents aged 11-16 years who may wish to take part in a 15-minute survey that examines their video game preferences?

If yes, please contact Ifigeneia at i.manitsa@kingston.ac.uk. All participants will win £10 Amazon vouchers.

Who are we looking for?

Six female participants aged 11-16 years to participate in an online focus group where we will further discuss their video game preferences. If you know someone who could take part, please, email Ifigeneia.

All participants will win £20 Amazon vouchers.



Recent Publications

Jonkman, K.M., Back E., & Begeer, S.M. (2022). Predicting intervention use in Autism: Demographic and autism Specific Characteristics. Autism. Advanced online publication: https://doi.org/10.1177/13623613221102748

Kao, S. C., Tsai, Y. J., **Hsieh, S. S.,** Chen, I. F., Schimtt, S., & Hung, T. M. (2022). The relationship of muscular endurance and coordination and dexterity with behavioral and neuroelectric indices of attention in preschool children. Scientific Reports, 12: 7059. https://doi.org/10.1038/s41598-022-11161-4



Montague, A., Manitsa, I. & Barlow-Brown, F. (2022). Factors which explain alcohol and cigarette consumption among young adults during the COVID-19 outbreak. Emerging Adulthood, 10(2), 511-518.

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'Making the Future': An interdisciplinary series of postgraduate conferences at Kingston

Kingston University London

Grant amount: £900

Supervisors: Dr Maria Livanou & Prof Muthanna Samara

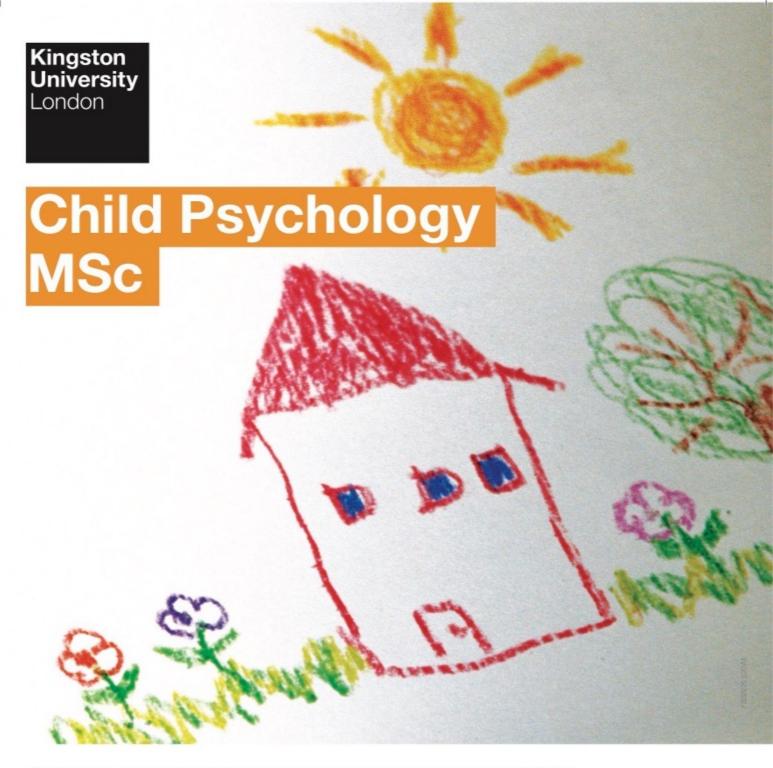
Co-Organiser: Ifigeneia Manitsa

Conferences

- **Back, E.**, Jonkman, K.M., & Begeer, S.M. (12th May 2022). Predictors of treatment choice in Autistic Children. *International Society For Autism Research*. Austin, Texas (hybrid event).
- **Kandemirci, B.** (18th May 2022). UK Creativity Researchers' Conference titled "How Creative are Children -Linguistically Speaking?"
- Heneghan, A., **Manitsa, I.,** & **Livanou, M.** (July 2022). A systematic review into siblings' experiences of having a brother or sister with an eating disorder. Oral presentation at the FBSS Research Conference 2022, Kingston University London.
- **Hsieh, S. S.,** Kao S. C., Raine, L. B., McDonald, K. M., & Hillman, C. H. (July 2022). Effects of acute aerobic exercise on inhibitory control and frontal theta oscillations in preadolescent children. Conference of the Federation of European Neuroscience Societies (FENS), Paris, France.
- **Livanou**, **M., & Manitsa, I.** St. Vincent's Family Project: Creating Community with Children and Family in Westminster https://www.svfp.org.uk/ (May 26). Co-organisation and delivery of the community engagement workshop: "When things can go wrong in intimate relationships: Raising awareness" and "Let's create healthy eating habits"
- **Livanou, M.**, Bull, M., **Manitsa, I.**, Lane, R., Heneghan, A. (2022). Coproducing a psychosocial intervention with young people transitioning from adolescent secure hospitals to adult services in England: Moving Forward intervention. European Association for forensic Child & Adolescent Psychiatry, Psychology EFCAP 2022 (online).
- **Livanou, M.**, & **Manitsa, I.** (May 2022) Organisation and delivery of the community engagement workshops "When things can go wrong in intimate relationships: Raising awareness" and "Let's create healthy eating habits", at St. Vincent's Family Project: Creating Community with Children and family in Westminster https://www.svfp.org.uk/
- Manitsa, I. (March 7) Co-organisation and delivery of the
 Postgraduate Conference "Institutional and self-stigma amongst children and adolescents with additional and complex mental health needs as a barrier to accessing services", Kingston University

 London





This course offers an advanced study of developmental psychology which covers psychological theory and research as well as implications for practice.

This course is aimed at professionals (e.g., educators or clinicians) working with children and adolescents or for those of you who would like to start or promote a career working with children. It also provides an excellent foundation for pursuing a research career in child/developmental psychology.

Duration: 1 year full time, 2 years part time

Course intake: September

Find out more today:

kingston.ac.uk/childpsychology or contact course director Dr Elisa Back e.back@kingston.ac.uk



Developing Minds Group members

Academics

Dr Elisa Back

Dr Fiona Barlow-Brown

Dr Stone Hsieh

Dr Birsu Kandemirci

Dr Maria Livanou

Prof. Muthanna Samara

PhD Students

Rashma Hirani

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Ifigeneia Manitsa

Milani Pathmanathan

Norlina Sexton

Research

Assistants

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Let us know if you have any questions.

You can leave a comment on our FB page or tweet us

Did you read our previous newsletter?
You can find it <u>here</u>

Let us know what you would like to read in our next newsletter

Stay tuned: more updates and events will follow

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