Developing Developing Minds Exploring Cognitive Diversity

Newsletter January 2023



Kingston University London

Foreword

Welcome to our first newsletter of 2023!

We were recently awarded funding from Santander Universities UK to set up a peer support network for autistic students and an affiliated research study. Please see pages 3-4 about our first few meetings.

We would also like to congratulate Dr Ifigeneia Manitsa and Dr Hayley Spurin for successfully obtaining their PhD's (see page 5).

Our feature article is about "Educational Transitions for children with a visible difference" on pages 6-10. We would like to welcome two new members of the Developing Minds Lab - Dr Katharine Clifford and Dr Dina Spano who are newly appointed lecturers in Psychology at Kingston University London. Please see pages 11-14 for an interview with Dina.

You may also be interested in participating in some of our current research studies on pages 15-17.

Our popular Young Scientist event will run in the summer half-term (1st & 2nd June). So please watch this space for further information. If you haven't yet done so, please 'like' our <u>Facebook page</u> so we can keep you informed about our research and future events.

With very best wishes,

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







The aim of the Autism Peer Network is to develop a community where autistic students share their university experiences in a supportive environment.

Thank you to the students who joined the network and attended the welcome Autism Peer Network meeting in December 2022. It was a pleasure to meet some of our autistic students.

The festive welcome meeting involved playing board games and chatting with one another about their experiences. We also had a Christmas quiz and enjoyed delicious food.









Our January meeting was attended by a larger number of autistic students who enjoyed chatting to each other and our Developing Minds Lab members.

Activities included board games and using the wipe-boards for drawing and a mindfulness activity (led by Dr Hayley Spurin). We also enjoyed some tasty pizza.

We look forward to informing you about the Autism Peer Network in our next newsletter!









Graduation Ceremony January 2023

Congratulations are in order!

A huge congratulations to our MSc Child Psychology graduates and to two of our Developing Minds lab members on achieving their PhDs.

Dr Ifigeneia Manitsa: The social inclusion of adolescents with visual impairments: a multidimensional approach.

Dr Hayley Spurin: Social and Attentional Strategies and Theory of Mind Understanding in Autistic Children and Adolescents.

Great achievements have been made and we are all very proud!









EDUCATIONAL TRANSITIONS FOR CHILDREN WITH A VISIBLE DIFFERENCE

Written by: Dr Katharine Clifford

In the UK, a headcount of up to 9 million children attended school in 2021/22 (Department of education [DoE], 2022). This number of children includes state funded nursery, state funded primary and secondary schools, independent schools and some alternative provision provided by local authorities (DoE, 2022). Starting school in early childhood is seen as an exciting event that families look forward too. It is also viewed as an unknown setting that children enter and are unfamiliar with. Research in this area about educational transitions continues to develop using a range of methodologies to include wider populations of children and schools. This article considers the transition from primary to secondary school for children with a visible difference, notably a cleft lip and/or palate (CL/P).







The School Transition

Moving from primary to secondary school is viewed as a transition process that signals both a step up and a step down in terms of socially reflected maturity, which has been termed a transfer paradox (Hallican & Hallican, 1992). In Year 6 in the UK, children are deemed to be at the topmost end of the school and when they start secondary school, they experience a shift to the lowermost part of the year groups. Feelings of anxiety and worry persist for some children starting secondary school because of concerns about bullying, getting lost, peer relations and an increased workload (Zeedyk et al., 2003).



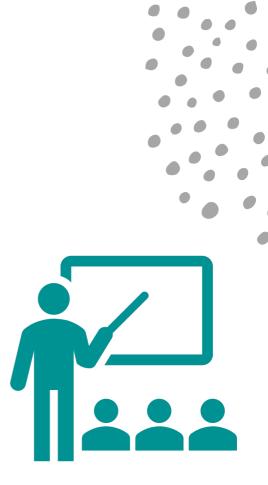




The successful adaptability of children starting secondary school was found to be important to the child's well-being and relevant to achievement in all subjects during this time (Jindal-Snape et al., 2019). Theorist Urie Bronfenbrenner termed this normative change, an ecological transition, which involves the child moving from one known environment to a new setting with varied experiences and interactions, which may impact on roles (Rosa & Tudge, 2013). Starting secondary school sets the scene for qualitatively exploring how processes work when a child engages and interacts with the new school microsystem (i.e., immediate environment - home, school and peer group) during this transitional phase (Bronfenbrenner, 1986).

Children with a Cleft Lip and Palate

According to the Cleft Lip and Palate Association (CLAPA), around 1200 babies in the UK are born with a cleft each year. The cleft is seen as an abnormality which occurs during the sixth to 13th week of pregnancy when the facial features begin to merge (Yu et al., 2009). The cleft lip varies in size and location, occurring on the upper lip. It can appear on one side of the lip as unilateral or on both sides as bilateral (Chapados, 2009). Children with a palatal cleft, which affects the center of the mouth may incur speech barriers and changes to their facial appearance (Chapados, 2009). From birth to early adulthood, children born with a CL/P have a variety of surgical interventions and need several courses of orthodontic treatment (Sharif et al., 2013).





Prior to and at times during the secondary school transition, children with a CL/P will need an Alveolar Bone Graft to support the growth of teeth (Great Ormond Street Hospital [GOSH], 2017). This surgical procedure impacts school attendance because of recovery time, and the child's involvement in physical activities will be lessened. The developmental phase in late childhood and early adolescence leads to an increased focus on appearance and shape, and for many young people, the link between outward appearance and perceptions of self are particularly strong (Rumsey & Harcourt, 2007). In particular, the most recurrent difficulty faced by children and adolescents with a visible difference relates to their negative selfperception and struggle with social interactions (Rumsey & Harcourt, 2007).



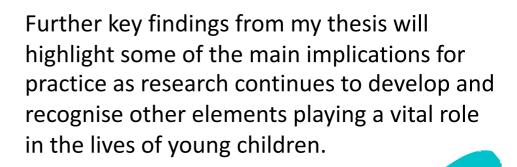
Social interactions and peer groups are an important feature of the secondary school transition. Therefore, children with a CL/P face an added risk when starting secondary school. However, from recent research in my thesis some useful implications for practice were identified with regards to transitions and children with a visible difference.

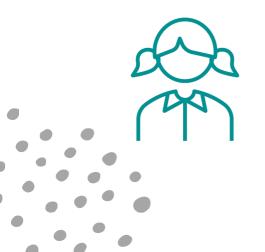
Some of these include:

- The secondary school transition for children with a visible difference should be seen as a bespoke process for each family.
- A clearer understanding and knowledge of what a cleft lip and/palate is for all developing children. This understanding should be extended to other visible differences (i.e., skin conditions).
- The importance of peer groups for children with a visible difference as they start secondary school and engage in new social interactions.









References

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- 2. Chapados, C. (2009). Experience of teenagers born with cleft lip and/or palate and interventions of the health nurse. *Issues in Comprehensive Pediatric Nursing*, 23(1), 27-38.
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- Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., & Lindsay K. (2003). Negotiating the transition from primary to secondary school. *School Psychology International, 24*(1), 20-29.





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 Dr Dina Spano in this interview.

Dina, your research in developmental cognitive neuroscience focuses on memory, neurodevelopmental disorders, sleep, and the interaction between them. Can you tell us more about this and how/why you got interested in it?

I am a developmental cognitive neuroscientist, which means that I study how children's cognition changes as their brain develop. I am particularly interested in how children develop the ability to remember, because this plays a significant role in facilitating their overall cognitive development, affecting all aspects of development—perceptual, motor, cognitive, and social. Based on this theme, my research aims to understand the development of memory across the lifespan and in memory disorders. In addition, given sleep's influence on learning, my work aims to uncover the link between altered sleep and memory difficulties in neurodevelopmental and hippocampal disorders.

I am passionate about atypical development. I developed this passion early in my undergraduate career. After working with children with neurological and neurodevelopmental disorders I have come to the realization that to improve the quality of life in these populations I need to better understand what happens to the brain when something unexpected occurs during development.



One of your research interests is how naps can disrupt the memory of children with Down Syndrome while naps consolidate the memory of typically developing children. Can you tell us more about this and why it is important to continue to investigate this?

My study shows that naps benefitted memory performance in typical preschool children but hindered performance in children with Down syndrome (DS) and were linked to reduced REM sleep. These findings demonstrate that naps function differently across different populations and that healthy sleep is crucial for learning. My study provides a possible mechanism for learning difficulties in this population, which could have implications for pharmacotherapies and behavioural interventions being developed for individuals with DS. Given that sleep disturbances have been reported in infants with DS ≤6 months of age, our findings also suggest that sleep interventions must begin as early in development as possible in this population. This may result in positive outcomes for language and memory. Finally, the study highlights the benefits of sleep for memory and cognitive development in general, potentially directing the public's attention (e.g., practice and policy) to the importance of sleep for all children.









You have a wide range of research in the field of developmental cognitive neuroscience, of all the projects you have worked on thus far, which one is your favourite?

The goal of my work is to inform therapies and policy interventions that help improve the lives of children and their families. Therefore, my favourite projects are those that have important practical implications such as implications for the design and treatment protocols that affect learning in children with neurodevelopmental disorders. I have many favourite projects, but if I were to choose one, it would be the study in which we designed a cognitive assessment battery specifically developed for individuals with DS to use as outcome measures for clinical trials in this population. This is very important, as it allows us to understand the cognitive trajectory for any given child in a sensitive way, and what might be the most appropriate forms of intervention.











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

There are many aspects I love about being a scientist, but the thing I like most is that, through research, we can make a difference in people's lives and eventually, empower the community and society at large. I also enjoy teaching and sharing knowledge and hopefully inspiring other people to think about things differently and critically.

Has there been any challenges you faced during your research career and what were the challenges?

One of the biggest challenges I faced during my PhD was to find the right worklife balance. It is natural to work more when you love what you do, but it is also important to schedule personal time for things you love, without feeling guilty.



Have you had any other jobs besides being an academic?

I always had academic-related jobs, but since I was young, I had many volunteering experience that helped me realise what was my passion. What activities do you like to do when you are not working on research?

During my spare time, I enjoy spending time with my family, cooking, traveling, meditating, and going for a walk in the nature.





Lastly, if there was any advice you would give to aspiring researchers and researchers early in their career, what would it be?

If you find something that you are curious/obsessed about and you want to continue to seek answers, then academia might be the right place for you. While curiosity is important for any aspiring researcher, it is crucial to develop critical thinking by questioning the status quo as early as possible.



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Get involved in our Autism research!

We are looking for volunteers to take part in exciting Autism research. You will be compensated for your time with a £10 Amazon voucher.

"What do people really mean? Understanding others in Strange Situations"

We are interested in seeing how individuals process information in realistic scenes of everyday social situations. The study will involve you watching various clips of these interactions via video call and answer a few questions regarding the clips. You will also be asked to complete a few questionnaires and a short IQ test.

This study is conducted remotely so you can take part on a large-screen device (>13-inch laptop/computer).

Who can take part?

Individuals with or without an Autism Spectrum Disorder diagnosis aged 16 years or over, who can speak fluent English.

If you are interested or know someone who might like to take part, please contact Milani Pathmanathan. Email: m.pathmanathan@kingston.ac.uk

Kingston University London	iversity co producing a aniversity transition programme		
	🗸 Are you a	n autistic undergraduate student aged 1	8+?
	🗸 Are you a	parent or guardian of an autistic underg	graduate student?
	✓ Are you a staff ?	NMH specialist mentor/study skills tuto	r or KU mental health and well-being
	If you answered yes to AN	Y of the above, a UK resident, and communicate in En	glish, then we would like to collaborate with you
We would like to ask you about your views on what university transition preparation and support would benefit autistic students.			
Participation involves one focus group interview via MS Teams lasting 90 minutes, which is recorded. You can take breaks at any time.			
To take part, pl	ease consider signing up	https://kingston.eu.qualtrics.com/jfe/form/SV_bjzy	2td6XsMJI0a or scan QR code
Participants will re	eceive £50 Amazon voucher	UK residents, communicate in English, and belong to ANY of the groups above	If you have any questions, please email <u>N.Sexton@kingston.ac.uk</u>

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PARTICIPANTS INVITED

Factors that shape the university transition experiences of autistic and non-autistic undergraduate students

We would like to ask your views and lived experiences of transitioning into the first year at university around the academic, social, and daily living expectations.

Participation involves completing an online survey that takes 20-30 minutes.

To take part, visit: <u>https://kingston.eu.qualtrics.com/jfe/form/SV_aVGYS0rqKO42GI8</u> or scan QR code



You can be an autistic, self-identified, or non-autistic undergraduate university student currently enrolled in a UK university, aged 18+, and a UK resident

If you have any questions, please email <u>N.Sexton@kingston.ac.uk</u>

Emotion understanding in parents and children

Kingston University London

What does it involve?

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

If you have any questions, please contact a member of our research team:

Student researchers:

Suprim Gurung - K2O2132O@kingston.ac.uk Amira Ali - K2OO1323@kingston.ac.uk Juzel Capitan - K2O53455@kingston.ac.uk Josephine Kuniwa Musa - K2O23683@kingston.ac.uk Liwia Sobocinska - K2O49213@kingston.ac.uk Nicole Savin - K2O24O2O@kingston.ac.uk Sade Richards-Blair - K2O54387@kingston.ac.uk Nikita Makarovas - K2154315@kingston.ac.uk **Research supervisor:** Dr Elisa Back - E.Back@kingston.ac.uk

Who can participate?

Children aged between 4-8 and their parents



If you would like to further information or wish to take part, please click/scan here:

https://qsharingeu.eu.qualtrics.com/jfe/f orm/SV_899NFJmyY941Who



The first 50 people to complete this study will receive a £10 Amazon gift voucher as an appreciation for your time **17**

Recent Publications

Jonkman, K., **Back, E**., Staal, W.G., Benard, L., van der Doelen, D.M. & Begeer, S. (2022). Alternative treatments for autism: prevalence and predictors. *Research in Autism Spectrum Disorders, 98,* p. 102046.

Manitsa, I. & Barlow-Brown, F. (in press). The role of habilitation services in the lives of children and adolescents with visual impairments. *British Journal of Visual Impairment.*

Ling, C. C., **Hsieh, S. S.,** Huang, C. J., Kao S. C., Chang, Y. K., & Hung, T. M. (In press). The unique contribution of motor ability to visuospatial working memory in school-age children: evidence from event-related potentials. *Psychophysiology*.

Hughes, K., Kholsa, P., Pisani, L., **Spanò, G**., & Edgin, J.O. (in press). Sleeping to dream, develop, and resist decline: Down Syndrome as a life-span sleep disorder. To appear in In J. Burack, J. Edgin, L. Abbeduto, & J. Busciglio, (Eds.), *The Oxford Handbook of Down Syndrome and Development*. Oxford University Press. New York, NY.

Edgin, J.O., Combs, D., **Spanò, G**., Luongo, A., Parent-Johnson W. (in press). Sleep's role for development in autistic youth. *Pediatrics*.











Media Engagement & Invited Talks

Dr Elisa Back was interviewed by Spectrum (a news outlet in the US) about her published paper: Jonkman, K, **Back, E.,** & Begeer, S (2022). Predicting intervention use in autistic children: demographic and autism-specific characteristics. *Autism*, 1-15. The following news article was published:

https://www.spectrumnews.org/news/factors-otherthan-autism-traits-guide-therapies-for-autisticchildren/.

Manitsa, I. (2022). *Conceptualising social inclusion and finding new ways to move forward.* In-person workshop at Vision Impairment Centre for Teaching and Research (VICTAR) Weekend Residential 26-27 November, School of Education, University of Birmingham.

Dr Stone Hsieh: ADHD Embrace. *"How exercise and physical activity shape brain function, cognition, and academic attainment in children with ADHD"*. 29 Nov 2022.

Dr Stone Hsieh: China Medical University (Taiwan), Department of Sports Medicine. "*Run for stronger mind and brain! Physical activity and brain health across the lifespan*", 22 Nov 2022.

Dr Stone Hsieh: King's College London, Experimental Psychopathology and Neuro-Development (ExPAND) group. "*Run for stronger mind and brain! Physical activity and brain health during childhood*", 28 Jun 2022.









Conferences

Back, E. (Presenting Author), Roche, M. & Van Herwegen, J. Parental Perspectives on the use of Fidget Toys in Autistic and Typically Developing Children. BPS Developmental Section, Sheffield, 15th September 2022.

Manitsa, I. (2022). *The development of social relationships at school and their impact on the academic inclusion of adolescents with visual impairments.* Oral presentation at the 3rd Panhellenic School Psychology Conference.

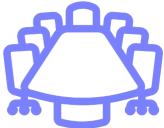
Manitsa, I. (2022). *The social inclusion, self-esteem and social competence of adolescents with visual impairments.* Oral presentation at the BPS Developmental Psychology Section Annual Conference 2022.

Heneghan, A., **Manitsa, I**. & Livanou, M. (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.

Livanou, M. (Presenting Author), 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).

Hsieh, S. S., Kao S. C., Raine, L. B., McDonald, K. M., & Hillman, C. H. (Jul 2022). Effects of acute aerobic exercise on inhibitory control and frontal theta oscillations in preadolescent children. Poster presented at the 2022 Conference of the Federation of European Neuroscience Societies (FENS), Paris, France.





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Funding

Supporting Autistic Students in Higher Education

Funder: Santander Universities Grant amount: £26,609 Awarded to: Dr Elisa Back and the Developing Minds Lab Summary: awarded a grant from Santander Universities to set up a peer support network for autistic students and an affiliated research study.

Meeting the social-emotional needs of adolescents with sight impairment and preventing school exclusion: the development of a digital intervention based on an adolescent and adult advisory group

Funder: Public Engagement Fund, University of Birmingham Grant amount: £1990

Awarded to Principal Investigator (PI): Dr Ifigeneia Manitsa Co-investigators: Dr Maria Livanou (King's College London), Dr Vedad Hulusic (Bournemouth University), Dr Huiwen Zhao (Bournemouth University), Professor Muthanna Samara (Kingston University London), Dr Stephanie Burnett Heyes (University of Birmingham), Mr Alberto De Caro (Bournemouth University)

The neurocognitive and psychopathological profiles of socioeconomic disadvantages during early childhood

Funder: KU Kick Starter Grant Scheme Grant amount: £9,571 Period: Mar 2023—Jun 2023 Awarded to: Dr Stone Hsieh

Virtual Reality Eye-tracking Funder: KU Research Capital

Grant amount: £10,000 Awarded to: Prof. Muthanna Samara and Dr Elisa Back













Child Psychology MSc

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 <u>Dr Elisa Back</u> <u>Dr Fiona Barlow-Brown</u> <u>Dr Katharine Clifford</u> <u>Dr Stone Hsieh</u> <u>Prof. Muthanna Samara</u> <u>Dr Dina Spano</u>

Researchers Dr Ifigeneia Manitsa Dr Hayley Spurin

PhD Students <u>Rashma Hirani</u> <u>Milani Pathmanathan</u> <u>Norlina Sexton</u>

Research

Assistants

Swane Parchment





Let us know if you have any questions. You can leave a comment on our <u>FB page or tweet</u> 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

