Developing Minds

Exploring Cognitive Diversity

Newsletter

Autumn / Winter 2020

Kingston University London

Foreword

Welcome to the fourth newsletter of the Developing Minds Lab. Since our last newsletter, we have been busy seeking out innovative ways to carry out our research during Covid-19 times. You can read about our suggestions and tips for working during the pandemic on page 4. Some of this guidance was co-produced by those of you who attended our online Networking Event in October. This event was well attended and had an international flavour with people joining us from Europe, Middle East and the USA. You can read more about the event on pages 3-5. We also wore odd socks on 16th November to raise awareness of anti-bullying week and you can read about our research in relation to bullying on pages 7-8.

Our feature article is about raising awareness of the abilities of people with autism in areas related to mind-reading, this can be found on pages 9-11. We would also like to welcome a new member of the Developing Minds Lab at Kingston University, Aroosa Bano, who is a research assistant and will be working on various projects related to autism with Dr Elisa Back.

We will be hosting an upcoming webinar about the "impact of Covid-19 on children and their caregivers: An international perspective" on Wednesday 3rd February 2021 and a virtual Young Scientists event in April/May 2021. In the meantime, you can find a list of online educational resources to keep your children occupied and entertained during Covid-19 times on pages 16-17.

Please remember you can keep up to date with our research activities and events by following our Facebook page and joining our mailing list.

We would like to wish you a joyful holiday season and a Happy New Year.

Kind regards,

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

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Recent Events

Our Virtual Networking Event took place on the evening of 13th October 2020. We were extremely excited to host this event in-person earlier this year but due to the pandemic, we decided to move it online. This then meant that our event was not only more accessible to participants in the UK but also from around the world. We were very happy to connect with researchers, teachers, students and practitioners from countries such as the USA, Netherlands, Lebanon, Saudi Arabia, Turkey and Russia.

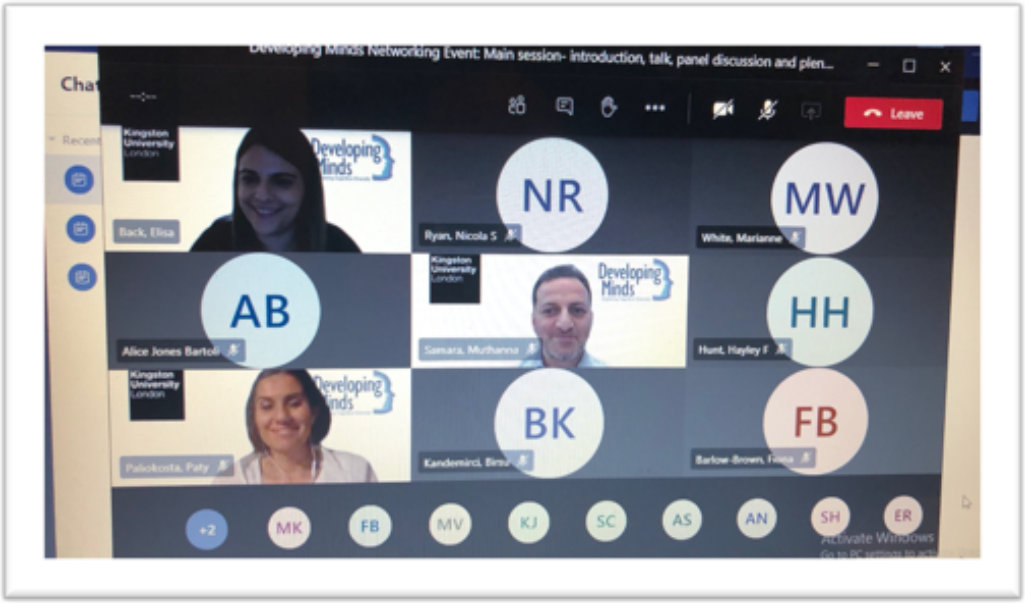
Dr Elisa Back started the event with a warm welcome and an explanation of how the event would work, since this was novel to most people, including us! Dr Alice Jones Bartoli from Goldsmiths, University of London delivered her excellent keynote speech on the impact of school exclusion, specifically for vulnerable populations. Dr Jones Bartoli's work uses interdisciplinary methods to focus on school behaviour and mental health, looking to understand the influences on socio-emotional development and functioning across a child's school life. She has conducted translational research, working with schools and third sector organisations to develop intervention strategies that work for students with complex and chronic difficulties, we were delighted to have Dr Jones Bartoli share her knowledge and expertise.

The keynote talk was followed by questions from an enthusiastic audience and a plenary session with contributions from Dr Paty Paliokosta and Prof Muthanna Samara, who both have expertise in this field. They stated that fundamental change was required in how we address the needs of children. Dr Paliokosta mentioned policies and pinpointed social and intersectional factors to consider in order to promote inclusive environments. The complexity of this with increased demand and decreased funding was highlighted. Prof Samara talked about the importance of keeping children engaged in school with various activities to avoid and reduce the likelihood of bullying occurring.

The next part of the event was dedicated to a virtual networking session. The participants were divided into smaller groups in separate virtual rooms, and in each room, there was a networking leader to chair the session. Participants from different research or practice interests came together to discuss ways in which networking can be made possible in an online environment. In four different rooms chaired by Dr Fiona Barlow-Brown, Dr Birsu Kandemirci, Hayley Hunt, and Erica Ranzato, participants shared their ideas about how collaborations can be built in the current conditions where networking opportunities such as conferences and seminars are all taking place online as a result of Covid-19 restrictions.

Here are some ideas that were suggested:

- Maintain communication with team/collaborators to avoid isolation with virtual meetings.
- Conduct research online! We can reach more participants by using one of the many online platforms dedicated for research such as Qualtrics, Gorilla, Labvanced and Inquisit.
- Use video calling tools such as Skype, Zoom, MS Teams to collect qualitative data through interviews and other experimental tasks can potentially be administered during a video call.
- Attend more online webinars and events such as this one!



Finally, we provided links for attendees to 'visit' various research posters from our lab, with researchers presenting their work and answering questions, as they would at a face-to-face research conference. We presented the work of the following researchers affiliated to the Developing Minds Lab:

Dr Elisa Back- 'Adolescents with and without autism use similar strategies when inferring mental states from facial expressions.'

Fatma Bakir- 'The effects of the Syrian war on children, adolescents and parents: Prevalence, predictors and intergenerational transmission of psychopathology.'

Angela Barhouch – 'Emotion Understanding in children with ASD.'

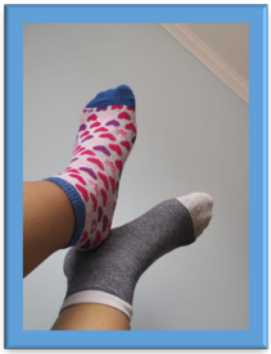
Hayley Hunt – 'Real time language production and theory of mind assessment in ASD.'

Mahitab Sherif- 'The stability of bullying and victimisation over time amongst adolescents in schools.'

We tremendously enjoyed hosting this virtual event- it combined the presentation of key research as well as networking to establish contacts for future collaboration. We look forward to seeing you at our next event!

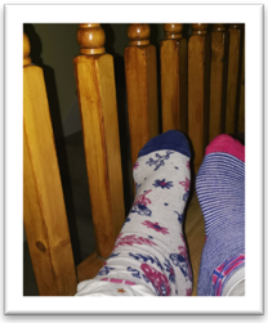
ODD SOCKS DAY 2020

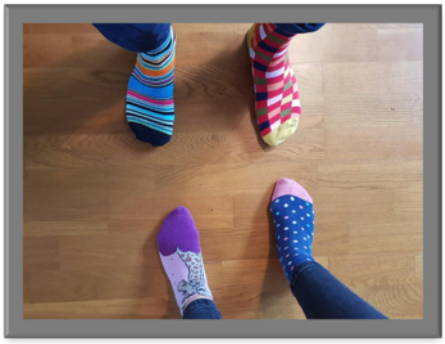
Odd Socks day was held on Monday, 16th November this year, on the first day of Anti-Bullying Week. We encouraged everyone in the Developing Minds Lab and those around us to wear odd socks. This was a great way to highlight Anti-Bullying Week and celebrate what makes us all unique!





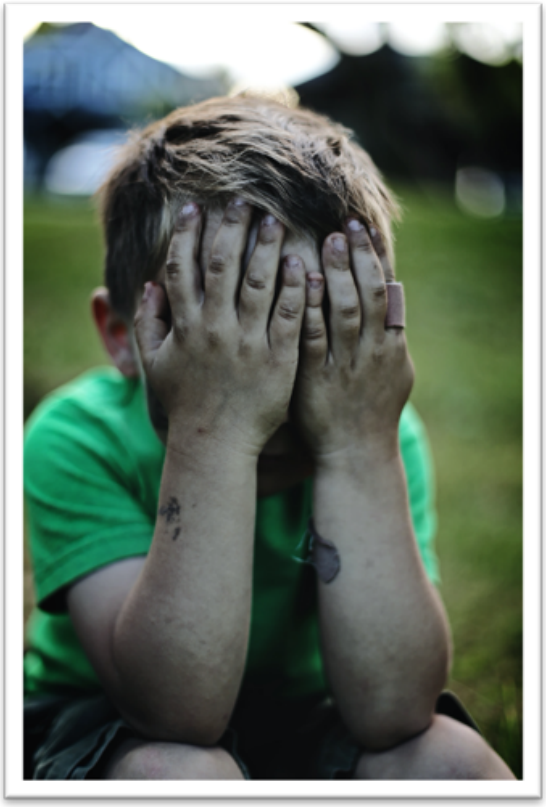






United Against Bullying

The theme for Anti-Bullying Week (16th-20th November 2020) was United Against Bullying. Anti-Bullying Alliance produced a manifesto for change: "Anti-Bullying Week is no different. Bullying has a long-lasting effect on those who experience and witness it. But by channelling our collective power, through shared efforts and shared ambitions, we can reduce bullying together. From parents and carers, to teachers and politicians, to children and young people, we all have a part to play in coming together to make a difference."[1]



Professor Muthanna Samara and colleagues have recently published two studies in relation to bullying.

In the first study involving refugee children aged 6–16 years and British born children revealed that young refugee children reported more peer problems, functional impairment, physical health, and psychosomatic problems compared to British born children. The differences between the groups were explained by friendship quality, number of friends, peer bullying/victimization, or sibling bullying/victimization (except for physical health and psychosomatic problems). The study points to the fact that social relationships including friendship quality and number of friends played an essential protective role. Conversely, bullying was a risk factor that explained many of the refugees' problems [2].

In the second study with over 2,000 adolescents aged between 12 and 15 years in Ireland, it was found that sibling victims at home were at increased risk of becoming peer victims of bullying at school. Poor friendship quality, disliking school, and peer and sibling bullying involvement predicted scores in the clinical range for outcome measures of internalizing and externalizing problem [3].

These studies have clinical and educational implications for working with all important stakeholders (i.e., schools, parents, siblings, refugee and anti-bullying charities and organisations) to reduce bullying and improve mental health amongst children and adolescents by proposing relevant intervention schemes specifically tailored to address their needs.

References

[1] https://www.anti-bullyingalliance.org.uk/anti-bullying-week/anti-bullying-week-2020-united-against-bullying

[2] **Samara, M.,** El Asam, A., Khadaroo, A. & Hammuda, S. (2020). Examining the psycho-social wellbeing of refugee children in the UK. *British Journal of Educational Psychology, 90(2),* 301-329. **https://doi.org/10.1111/bjep.12282**

[3] Foody, M., **Samara, M.** & O'Higgins Norman, J. (2020). Bullying by siblings and peers: Impact on depression and psychological wellbeing. *British Journal of Educational Psychology, 90,* 138–157.

Mind-reading in Autism

Written by: Dr Elisa Back

It is important to consider that autism is a heterogeneous condition with a range of individual differences in regards to characteristics. For example, whilst some individuals with autism have difficulties with reciprocal social interactions, other individuals are interested in engaging with people in social situations. One prominent explanation for the difficulties that individuals with autism experience in social communication is an impairment in understanding mental states (e.g., desires, beliefs, thoughts, intentions) and using these mental states to predict other people's behaviour (which has also been called Theory of Mind) [1].

Theory of Mind is very important in everyday life as often people do not directly tell you what they are thinking and therefore we have to infer thoughts and feelings during conversations. It is also essential for understanding emotions and pragmatic language such as jokes and sarcasm. Therefore a deficit in Theory of Mind could explain many of the social communication difficulties in autism.

However, there is mixed evidence regarding the ability to infer mental states in individuals with autism. The classic view that people with autism have a complete deficit in this area has been challenged as there is evidence that some people with autism are able to infer other people's mental states from facial expressions and understand that other people can have different beliefs to their own.

Therefore, there is emerging evidence to suggest that individuals with autism do not have deficits at the conceptual level of Theory of Mind since their understanding of mental states is not necessarily impaired [2]. However, they may have difficulties in applying Theory of Mind abilities in real-life situations such as in the school playground.

There is evidence supporting a developmental delay account, that individuals with autism acquire a theory of mind several years (e.g., on average seven years)[3] later than those without autism. This delay has also been attributed to poorer verbal abilities [4] and how often tasks used to assess Theory of Mind abilities rely on good verbal abilities as opposed to using non-verbal tasks. The relationship between language and social abilities also needs to be taken into consideration as without good language abilities then individuals tend to perform poorer on Theory of Mind assessments.

However, research has suggested that some individuals with autism use compensatory strategies that could help with social interactions such as recalling previously learned social rules as opposed to intuitive understanding of social cues [5]. In addition, even in typical development adults do not have a fully-fledged Theory of Mind [6] and mechanisms related to mentalising and more broadly social cognition are still developing late in adolescence / adulthood [7]. It is therefore important to assess social cognition across the lifespan in individuals with autism.

It is imperative to examine the full social cognitive profile (e.g., cogntive and affective Theory of Mind, empathy, emotion understanding, social attention, social motivation, social learning, imitation [8]). The use of Theory of Mind tasks (e.g., false belief, strange stories, inferring mental states from faces) is just one way of assessing social cognitive abilities and not all individuals with autism have difficulties in areas such as, interpreting mental states from facial expressions [9] and they have similar strategies to those without autism [10].

Therefore, social communication interventions should be tailored according to an individual's social cognitive profile that can be characterised by both strengths and areas that would benefit from further support using more real-world interventions. For example, using more naturalistic dynamic faces rather than static when assessing facial expression recognition abilities and using videoclips of social scenarios or staging real-life social encounters to assess empathy as opposed to vignettes of social stories.

Recommendations:

1. Consider the lifespan as social cognitive abilities should be investigated throughout development.

2. Target specific areas within Theory of Mind and social cognition that require support on an individual basis.

3. Use more naturalistic real-world tasks to assess social cognitive abilities.

References

[1] Baron-Cohen, S., Leslie, A. & Frith, U. (1985). Does the autistic child have a "theory of mind"? *Cognition*, *21*, 37-46.

[2] Scheeren, A.M., De Rosnay, M., Koot, H.M., & Begeer, S.M. (2013). Rethinking Theory of Mind in high-functioning autism spectrum disorder. *Journal of Child Psychology and Psychiatry, 54,* 628-635.

[3] Baron-Cohen, S. (1989). The Autistic Child's Theory of Mind: A Case of Specific Developmental Delay. *Journal of Child Psychology & Psychiatry, 30*, 285-297.

[4] Happé, F. G. E. (1995). The role of age and verbal-ability in the theory of mind task- performance of subjects with autism. *Child Development, 66*(3), 843–855.

[5] Livingston, L.A. & Happe, F. (2017). Conceptualising compensation in neurodevelopmental disorders: Reflections from autism spectrum disorder. *Neuroscience & Biobehavioural Reviews, 80,* 729-742.

[6] Apperly, I.A. (2010). *Mindreaders: the cognitive basis of "theory of mind"*. Hove: Psychology Press / Taylor & Francis Group.

[7] Blakemore, S.J. (2012). Development of the social brain in adolescence. *Journal of the Royal Society of Medicine, 105* (3), 111-116.

[8] Happé, F., Cook., & Bird, G. (2017). The Structure of Social Cognition: In(ter)dependence of Sociocognitive Processes. *Annual Review of Psychology, 68*, 243-267.

[9] **Back, E.**, Ropar, D., & Mitchell, P. (2007). Do the eyes have it? Inferring mental states from animated faces in autism. *Child Development, 78* (2), 397- 411. DOI: 10.1111/j.1467-8624.2007.01005.x

[10] **Back, E.** (2019). Inferring mental states from dynamic faces in adolescents with Autism SpectrumDisorder: Insights from eye-tracking. *Child Development*, *90*(5), 1589-1597. DOI: 10.1111/cdev.13302

Meet the Researcher

Developing Minds
Exploring Cognitive Diversity

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 our Associate Professor Dr Fiona Barlow-Brown in an interview.

Can you tell us about some of the research you do and how/why you got interested in it?

One of my main areas of research is trying to find out more about how blind children learn to read braille. What are the cognitive processes involved and how similar or different are they to sighted children reading print? It was actually a flippant comment I heard as an undergraduate that prompted my passion into this area and the more I worked with children, the more I wanted to find ways and strategies that would help children learn braille.

You are currently working with Sight for Surrey. Please could you tell us more about that?

Yes! Sight for Surrey are a fantastic charity who work to support people with a range of sensory impairments, they won an award from the National Lottery Community Fund to support our project looking at the impact of specialist vision rehabilitation services on the lives of children and adolescents with visual impairments. Ifigeneia Manitsa and myself are investigating the important role that rehabilitation services play in academic learning and socioemotional development. This work nicely relates to other research that we are doing with respect to the academic and social inclusion of visually impaired children and adolescents.

How did you decide to get into psychological research?

From the day I did my first lab report on an A level Psychology course I've been addicted to research!

Have you ever had any other jobs besides being an academic?

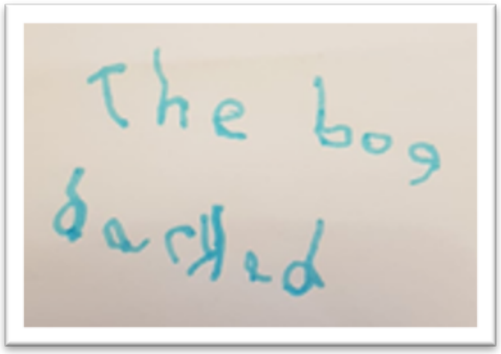
Only part time jobs before (and whilst) studying at University. Once I started my degree I found a career where I could combine a love for teaching with a love for research, I can't imagine doing anything else now!

What is the best thing about being a scientist/researcher?

Every day is different.

What is your favourite project you have worked on so far and why?

There are too many ones I love to have a favourite! I've been doing some fascinating work into the common letter reversals that children frequently make as they learn to read e.g. when they get their b's and d's mixed up. Myself and a colleague are writing a paper for publication at the moment that reports an intervention we did that might help with this in young sighted children.



Please give us one piece of advice you would give an early career researcher.

If you love it – stick at it! It's hard work, it can be intensely frustrating and pressurised and the boundaries between work and home life are frequently lost, but when you discover something that will help others or make a difference to those you work with – then its all worthwhile. If you don't passionately love what you do then it probably isn't the career for you.

New member's short presentation:

Aroosa Bano
Research Assistant
Supervisor: Dr Elisa Back

Hello, my name is Aroosa Bano. I have previously studied at Kingston University, obtaining a BSc in Psychology and an MSc in Clinical Applications of Psychology. Since graduating, I have worked in the clinical sector in a range of services including substance misuse, psychiatric services and community-based mental health services. I am currently practising as a Cognitive Behavioural Therapist within the Adult Community Mental Health Team. I am delighted to be joining Kingston University again and will soon begin working with Dr Elisa Back on a variety of research projects related to Autism.

We need your help!

We are always grateful for any help in recruiting participants for our studies which aim to understand how minds develop.

Ifigeneia Manitsa, one of our PhD students, who is also working as a Psychology researcher and assistant lecturer at Kingston University, is currently conducting her last two PhD studies focusing on the social inclusion of adolescents with and without visual impairments. Ifigeneia has conceptualised social inclusion as a multidimensional term which refers to students' social relationships with teachers and peers, their participation in school activities and to the development of the sense of belonging and acceptance in the school environment.
She is interested in involving in her studies adolescents with visual impairments, aged 12-14 years, their sighted peers, parents, and teachers.

If you would like to get involved, please click on the links below and show your interest OR contact Ifigeneia to k1738620@kingston.ac.uk.

Link for adolescents with visual impairments, their parents and teachers: here

Link for sighted adolescents, their parents and teachers: here

Links to helpful articles for parents and educational activities for teachers and children

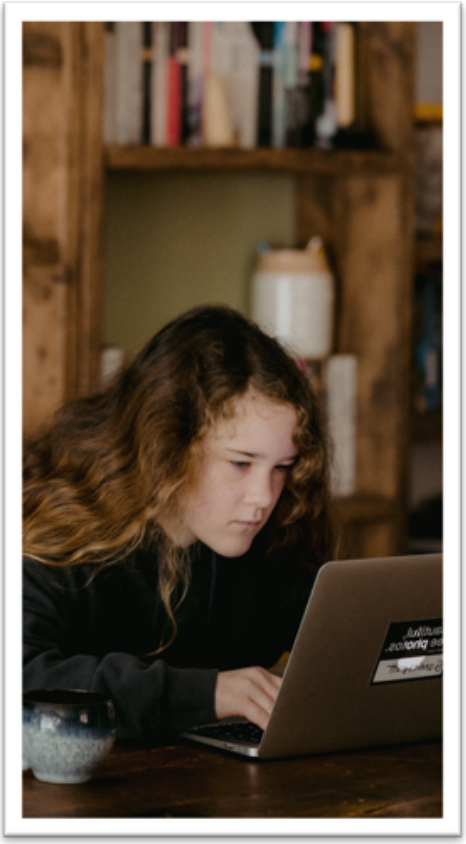
We completely understand that the current situation has put a lot of pressure on families, therefore we would like to do our best to support you in these challenging times. You can find below a number of useful links to children and adolescents' educational activities and educational articles for parents.

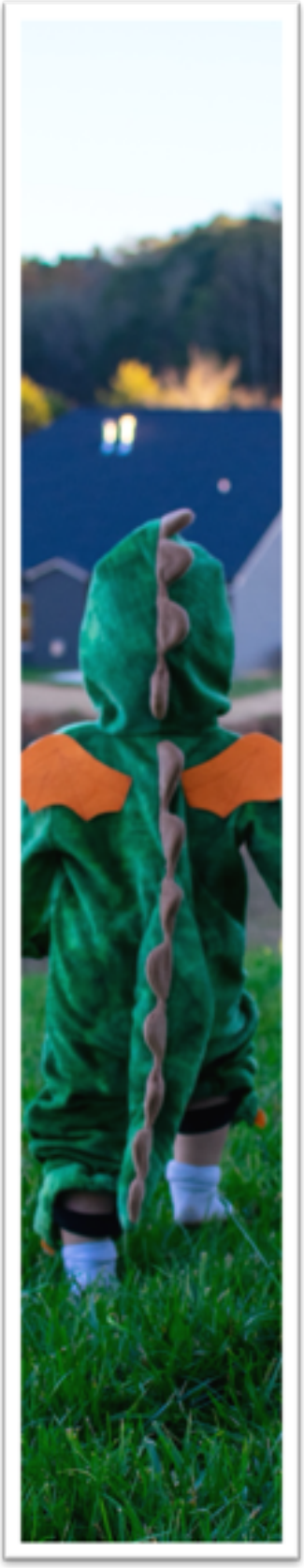
Helpful articles for parents

A useful guide published by the UK government for parents who are home-schooling their children: **click here**

Ideas for amusing and entertaining children during self-isolation: **click here**

Tips for developing routines, schedule, and an emergency plan during the COVID-19 outbreak: **click here**





Educational resources and fun activities for children and adolescents

FunBrain offers a range of online school games for students of all ages: **click here**

Free educational resources for parents who are home-schooling their children and adolescents: **click here**

Hundreds of indoor and outdoor activities for families with children and adolescents: **click here** and **here**

Natural activities for children and adolescents: **click here**

Learning4Kids contains a list of sensory play activities and ideas: **click here**

A portal for students, parents, and teachers, with educational games for young children: **click here**

Fun activities for self-isolation with young children by Kensington Mums: **click here**

Picto-Selector is a windows application for creating visual schedules. It is used by many teachers and parents: **click here**

Starsteam provides educational resources related to COVID-19, such as social stories that can parents and teachers use to explain the current situation to children: **click here**

Recent Publications

Livanou, M., Singh, S. P., Liapi, F., & Furtado, V. (2020). Mapping transitional care pathways among young people discharged from adolescent forensic medium secure units in England. Medicine, Science and the Law, 60(1), 45-53. doi: https://doi.org/10.1177%2F0025802419887287

Livanou, M. I., Lane, R., D'Souza, S., & Singh, S. P. (2020). A retrospective case note review of young people in transition from adolescent medium secure units to adult services. *The Journal of Forensic Practice*. doi: https://doi.org/10.1108/JFP-02-2020-0007

Mundy, N., Gurner-Smith, N., **Livanou, M**., Oddoye, M., Veness, V., Phillips, S., Chumber Stanley, N. (2020). *Child Death Review Partnership Thematic Review Deaths of Children and Young People through probable suicide 2014- 2020.* Surrey : Surrey Safeguarding Children Partnership. https://www.surreyscp.org.uk/wp-content/uploads/2020/09/Thematic-Review-of-Adolescent-Suicides-in-Surrey-Final.pdf

Manitsa, I., & Doikou, M. (2020). Social support for students with visual impairments in educational institutions: an integrative literature review. *British Journal of Visual Impairment*, 0264619620941885. doi: https://doi.org/10.1177%2F0264619620941885

Samara, M., Hammuda, S., Vostanis, P., El-Khodary, B., & Al-Dewik, N. (2020). Children's prolonged exposure to the toxic stress of war trauma in the Middle East. *bmj*, *371*. doi: https://doi.org/10.1136/bmj.m3048.

Ataullahjan, A., **Samara, M**., Betancourt, T. S., & Bhutta, Z. A. (2020). Mitigating toxic stress in children affected by conflict and displacement. *bmj*, *371*. doi: https://doi.org/10.1136/bmj.m2876.

Danese, A., McLaughlin, K. A., **Samara, M**., & Stover, C. S. (2020). Psychopathology in children exposed to trauma: detection and intervention needed to reduce downstream burden. *bmj*, *371*. doi: https://doi.org/10.1136/bmj.m3073.

Conferences

Invited talks

Manitsa, I. (2020). *Enterprise and Entrepreneurship Education: Students with special educational needs.* Oral remote presentation at the “Innovation and Entrepreneurship” event, IYDU (International Young Democrat Union). After the suggestions discussed in the "Innovation and Entrepreneurship at School" event, where she presented her ideas on employment and entrepreneurship of students with special educational needs, the Prime Minister of Greece decided to include youth entrepreneurship as a core subject in all schools in the country.

Dr Birsu Kandemirci was invited to deliver a workshop on “Tips to deal with stress and homesickness during uncertain times” to international students at Istanbul Aydin University. This workshop took place on 01.05.2020. During the strict travel restrictions in Turkey, international students were not able to travel back home and their lectures switched to online-only. They struggled with issues such as homesickness, time management, and how to keep active and healthy. Dr Kandemirci provided some tips for students to stay academically organised and socially connected while prioritising their wellbeing. The workshop was followed by a discussion where students exchanged ideas and strategies with each other.

Funding

Dr Livanou, M. received an Early Career Grant from KU in February 2020.

Montague, A., Manitsa, I. & Barlow-Brown, F. Kingston University funding for the research project "Factors which explain alcohol and cigarette consumption among young adults aged 18-25 years during the COVID-19 outbreak" (2020)

Professor Muthanna Samara has been awarded a grant from QNRF with the amount of $574,000 US dollars. The project will follow up premature children at preschool period to investigate their school readiness in comparison to full term children. To obtain a detailed view of their school readiness, the children will be assessed in the following areas: physical development, learning ability, early numeracy and literacy skills, general problem-solving abilities and socio-emotional development. In addition, their environmental status with parents, siblings and peers will be looked at. The purpose is to identify children at risk of developing learning and behavioural difficulties before they start school. The project has important clinical implications for early screening of children at risk in order to reduce the adverse effects of preterm birth on school performance with early intervention. The results will inform clinicians, policy makers and parents and promote standardized screening measures in order to identify those at risk with early and personalized interventions that focus on improving skills that underpin school readiness.

Future Events

'The impact of Covid-19 on children and their caregivers: An international perspective'

We are excited to announce that the Developing Minds Lab have organised a webinar on Wednesday 3rd February 2021, 5-6:30pm. Please make a note of this date and make sure to follow us on social media to receive updates of all future events.

Group members

Academics

Dr Elisa Back
Dr Fiona Barlow-Brown
Dr Birsu Kandemirci
Dr Maria Livanou
Prof. Muthanna Samara

PhD Students

Rashma Hirani
Hayley Hunt
Ifigeneia Manitsa
Milani Pathmanathan

Research Assistant

Aroosa Bano

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Let us know if you have any questions. You can leave a comment on our FB page

Did you read our previous newsletter? You can find it here

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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