



WELCOME

We'd like to send a huge thank you to all the families who have so generously supported our research over the past year. Our students have loved meeting the new babies and toddlers who visited and have greatly valued the hands-on experience of collecting data with our wonderful participants. As we look back on the past year in the DDLab, we're excited to share all our latest updates with you.

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2024 UPDATE ON THE LANGUAGE & PERCEPTION STUDIES

Prof Larissa Samuelson Principal Investigator



This year, we have seen a changing of the guard in the language side of the Developmental Dynamics Laboratory. PhD student Milena Bakopoulou, who started in the lab 7 years ago as an undergraduate volunteer, is completing her thesis this autumn, while Niki Theofilogiannakou has started collecting data for her thesis project. It is always exciting to have new projects and data collection in the lab, but it is also bittersweet when students finish their work and move on. Sometimes I am lucky enough to see former students again at conferences, as I did this past July when I spent time with Dr. Laia Fibla at the International Congress on Infant Studies. Some of your children may have participated in Laia's Early Language Processing task in the lab a few years ago. Laia presented the data from that study at the conference, and we met to discuss the paper we are writing on the data (and chat about her beautiful baby boy and life as a postdoctoral researcher in Canada).



I also had the pleasure of seeing former Master's students Amelia, Sharon, and Jade at UEA's graduation ceremony in July. Amelia and Sharon ran a cross-situational word-learning task with 12- to 28-month-old children in the spring of 2023. They are both doing well. Jade did her MA project on whether names help children remember pairs of visual objects better. I'm thrilled to say that she has accepted a PhD studentship working on the BLoCKS project with Prof Teodora Gliga.

Stacey Stuart, Milena Bakopoulou & Dr. Laia Fibla at the

International Congress of Infant Studies 2024



Postgraduate Researcher, Niki Theofilogiannakou, collecting data with a Child Scientist

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Over a hundred of you responded! The goal of this project is to see if we can use details of the early vocabulary - what specific kinds of words your child knows when they are 2 - to predict whether they will continue to learn words well or begin to have difficulties"

As for data collection this year, Niki's project is an extensive longitudinal study examining how children's performance on multiple tasks, assessing components of word-learning from 12 to 30 months of age, changes over time. We are, once again, very fortunate to have a dedicated group of parents and children who have committed to visiting the laboratory four times. Tasks examine how children find words in the speech stream, map words to referents (i.e. the thing in the world that a word or phrase denotes or stands for), the number of words they know, and their ability to remember objects. Parents also complete a vocabulary checklist regularly, so we can track how these word-learning skills relate to the number of words a child knows. The goal of this study is to understand better how different children go about the tasks of finding new words and objects in what they hear and see, linking words and objects together in learning, and build a vocabulary. By looking at multiple components of the word-learning system together, and how they change as vocabulary grows, we hope to get a better picture of the different paths children take to language learning.

In addition to Niki's data collection, I was fortunate to work with several undergraduate students on final year projects this year. Ysabelle, Charlie, and Becca conducted a study on how words influence children's attention to novel objects. We had over sixty 16- to 19-montholds visit the lab in January and February to participate in this study. The task involved seeing 30 presentations of two novel creatures whose arms moved up and down. One creature was the same in every presentation, while the other always changed. Twenty children heard the same name with every presentation, twenty others heard a different name each time, and the third group did not hear any words. We found that hearing a name can draw attention away from novel objects. In contrast to previous studies, our comparison of data from children who heard one name versus those who heard 30 names, showed that when children hear one name repeatedly, they start to learn that the name refers to the repeating object and look to that object rather than the novel one when they hear the name.

The other undergraduate students, Aamna and Emily, conducted a project examining how toddler vocabulary relates to later language outcomes. They contacted many of you who had previously visited the lab and completed a vocabulary checklist, providing information on what words your child knew. Aamna and Emily asked you to complete a survey about your child's current language, school performance, temperament, executive function, language or cognitive diagnosis, and your family history. Over a hundred of you responded! The goal of this project is to see if details of early vocabulary - what specific kinds of words your child knows at age 2 - can predict whether they will continue to learn words well or begin to have difficulties. This kind of work requires a large amount of data, so we cannot draw strong conclusions from this year's sample alone, and we may need to ask more of you to complete our survey to obtain the data we need, but we are excited to have a starting point for this research.

For my part, I capped off the academic year at the annual meeting of the Cognitive Science Society, where I served as conference chair. It was gratifying to see the hard work and planning come to fruition and to hear about all the wonderful work my colleagues are doing. I'm now looking forward to a new set of projects starting in the autumn, Niki's continued success in data collection (thanks to you!), and wishing Milena well in her future endeavours. We couldn't do any of this without you and your beautiful children. Thanks again for all your support!

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We couldn't do any of this without you and your beautiful children. Thanks again for all your support!"

Newsletter 2024



2024 UPDATE ON THE UK/ **INDIA BRAIN STUDIES**

Prof John Spencer Principal Investigator



Welcome to the 2024 edition of the Brain Studies Update! It's been another productive year as we continue to make new discoveries about early development thanks to your collective efforts.

The UEA Brain Studies started in 2016 in the UK and India. This past year, Ellie Johns finished data collection on the wonderful cohort of UK kids when they were about 6.5 years of age. The goal of this phase of the study was to obtain a set of 'outcome' measures to address a key question: can we predict children's thinking abilities in childhood (at 6.5 years) from all the data we collected in infancy (at 6 months, 18 months,

To explore this, we asked children to complete a set of tablet-based tasks designed to assess their thinking and attention skills. This included a card sorting task they did earlier in the study. We also gathered information about their maths and reading abilities and used a 'gift' task to see if they could delay gratification - to hold off receiving a gift now to receive a bigger gift later. Additionally, we collected valuable information from caregivers about the family, as well as some information from schools (e.g., SATs scores).

While we're still analysing all the data, Ellie has already begun exploring whether measures of cognition in infancy can predict measures of cognition in childhood. She has written a summary article later in the newsletter, so be sure to read on (spoiler alert: the answer is an exciting "yes!").

In other news, last year I shared that we hoped to follow up with the UEA Brain Study children at 9.5 years using brain imaging tools (fMRI). Well, to give you a sense of how the research world works, here's the update. We submitted a grant to the UK Medical Research Council in May 2023. The grant was reviewed favourably by external reviewers, receiving two scores of 'excellent' (5 out of 6...with 6 being 'exceptional'). These scores would normally have pushed the grant to the edge of funding; however, the review panel decided to reject the grant because we only showed preliminary data on one child. Thus, they were concerned about our ability to collect high quality brain imaging data with 9.5-year-olds. Sigh.

Thus, in May of this year, we invited five more children to the UEA Wellcome-Wolfson Brain Imaging Centre to help us with a new round of fMRI data collection. The families who participated were amazing and all the children successfully completed the sessions. On top of that, the data we gathered look fantastic! We have now re-submitted the grant, proposing to collect data on the UEA Brain Study kids at age 11 instead of 9.5 years. This slight change could actually be beneficial, as 11-yearolds tend to be more comfortable in the MRI scanning environment. Fingers crossed we'll be successful with this revised grant and can begin inviting families to participate in October 2025!

This work is incredibly exciting because there has **NEVER** been a study that has followed children from infancy into childhood using brain imaging measures"

2024 UPDATE ON THE UK/INDIA BRAIN STUDIES CONT...

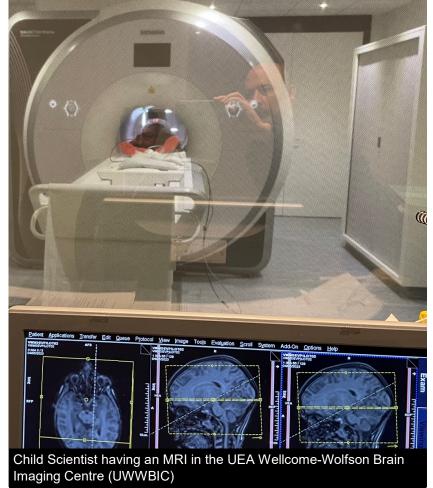
This work is incredibly exciting because there has NEVER been a study that has followed children from infancy into childhood using brain imaging measures. If successful, it could offer groundbreaking insights into child development. So fingers crossed we'll have a new opportunity for your participation in the coming year.

As I prepared to write this update, I reflected on past newsletters. Again, to give you a sense of how long some things can take, let me note that we had a big paper come out in January 2024 that I summarised in the 2022 newsletter. Wow...things can certainly be slow in the world of

Looking ahead to the coming year, we have lots of exciting projects on the horizon. Some of you might recall that last year we discovered that higher levels of myelin (the substance that makes brain signals more efficient) in children's brains were associated with greater language input. That study focused on myelin levels around 30 months of age when language abilities are starting to take off.

This year, we're poised to take that research further by examining how changes in brain myelin relate to language input over time. We'll also finally explore how these changes connect to improvements in working memory abilities. Stay tuned for more updates on these stories as the year progresses!

I want to end where I began - with a heartfelt thank you to all of you!! Research can be a slow, laborious process. But when I greet families coming into the lab, or when I get to participate in sessions, I am reminded how wonderful our East Anglian community is, how generous you all are with your time, and how much our work matters. In short, you make it all worthwhile.



Can we predict children's thinking abilities in childhood (at 6.5 years) from all the data we collected in infancy (at 6 months, 18 months, and 30 months)?"

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NEW BABYWAVES LAB OPEN! NEW STUDY: VSTEPS



NEW STUDY: VSTEPS

THE RELATIONSHIP BETWEEN **COGNITIVE PROCESSING & VOCABULARY DEVELOPMENT**

IN TODDLERS

Dr Kelsey Frewin



We are delighted to

announce that our new

Babywaves Lab is now

open at the UEA Dev

Labs"

We are delighted to announce that our new Babywaves Lab is now open at the UEA Dev Labs. This new lab features cutting-edge, babyfriendly EEG and eye-tracking technology to investigate learning during early development. EEG (or electroencephalography) is an exciting technique used to measure brain activity in babies and children. Our setup involves wearing a comfy cap (a bit like a swimming cap!) with sensors in it. The experimenter applies a small amount of water-based gel to each sensor to help obtain a clear signal. While babies wear the cap, we can show them pictures and videos on a screen while recording their electrical signals. These electrical signals appear as wavy lines, which represent brainwave patterns. In the BLoCKS project, these brainwave patterns help us understand which object categories (such as bananas, cats, and books) babies already know and which ones they

NEW BABYWAVES LAB

NOW OPEN!

Our setup has been carefully designed with babies in mind. It features a play area with lots of toys and playful wallpaper stickers. Since opening, we have been working hard to hit the ground running with the BLoCKS project, led by Prof Teodora Gliga. This project aims to better understand how babies learn categories in their day-to-day lives. In participated so far. Check out the picture here of one of our happy little scientists wearing their EEG cap!

preparation for this study, we have been running eye-tracking and EEG sessions in Babywaves, and we are grateful to all the families who have

Our next study will involve two visits to Babywaves to conduct exciting EEG, eye-tracking, and playtime tasks designed to explore category learning in 10- to 12-month-olds. We'll be looking for both hearing and deaf babies to take part, so get in touch with our research associates, Dr. Kelsey Frewin and Eryk Mejia, by emailing psy.blocks@uea.ac.uk or texting/WhatsApp/phone 07789 942976 if you are interested in





Niki Theofilogiannakou

Postgraduate Researcher

Time goes by so fast, and it was great catching up with everyone and seeing the little ones growing up!"



I'm excited to introduce our longitudinal study, VSTEPS, as part of my PhD project. VSTEPS was launched in October 2023 and is still going strong thanks to the incredible support of many wonderful families across Norfolk who are taking part.

Early vocabulary has been widely acknowledged to play a significant role, not only in early language development, but also in later academic success. Even though it has been well-researched over the years, and the common developmental paths are well documented, children's individual developmental paths are still hard to pinpoint and predict. The ability to understand individual vocabulary trajectories is crucial in order to build appropriate and individualised interventions that can support children's potential needs and help them reach their full potential. This is where our project comes in!

Our project is exploring how children's vocabulary develops over time and its relationship with specific cognitive processes like memory and speed of processing, which have been suggested to play a role in this development. One part of the project is a comprehensive literature review I have been doing that provides the theoretical background for this study. The second part is the longitudinal study itself. Eighty-two families have been signed up to visit the DDLab four times, once every six months, to take part in some exciting tasks with their children. During the first phase, our little scientists were 11 to 13 months old, and we just completed the second phase, where the families came back with their now 17-to-19month-olds. Time goes by so fast, and it was great catching up with everyone and seeing the little ones growing up! They have all been taking part in various lab tasks, from eye tracking to a structured play assessment of language and cognitive development and, of course, there has been plenty of playtime in between.

We are extremely grateful to all the lovely families that are part of this study, offering their precious time to help us out; this project would not be possible without them. We are delighted with the progress we have made so far and are looking forward to the next two visits, seeing how our little scientists and their families grow, gathering more data, and soon sharing some results with everyone.



NEW RESEARCH PAPER!

Dr Prerna Aneja Lecturer in Psychology



We are thrilled to share groundbreaking research from our DDLab led by Dr. Prerna Aneja and her team! Their latest paper, "Leveraging Technological Advances to Assess Dyadic Visual Cognition During Infancy in High- and Low-Resource Settings," explores how new technology is transforming our understanding of caregiver-infant interactions across different cultures.

What's New? Dr. Aneja and her colleagues have utilised advanced machine learning algorithms to study how babies and their caregivers interact visually during play. This research spans two very different settings: urban areas in the UK and rural areas in India. Here's what they discovered:

Key Findings:

- Similarities: Infants in both the UK and India show similar attention
 patterns, especially during infant-led joint attention. For instance,
 when babies lead the interaction, they tend to focus on objects for
 longer periods compared to when they are either looking alone or
 when the caregiver is leading.
- Differences: UK infants often take the lead in interactions, reflecting a more child-centered parenting style. In contrast, Indian infants exhibit different patterns influenced by local cultural practices.

Why It Matters: This innovative research uses advanced tools to streamline the analysis of caregiver-infant interactions, making it faster and more efficient. By eliminating the need for manual video coding, the team's method allows for large-scale studies across diverse settings, including those with limited resources. This advancement opens up new research opportunities and enhances our understanding of how different environments and cultural practices influence early cognitive and social development.

Understanding these interaction patterns is crucial for developing better support systems for families and improving developmental outcomes for children globally. The insights gained from this study could lead to more tailored parenting advice and enhanced early childhood development practices around the world.

Thank you to all the families who have supported our research and contributed to these exciting discoveries!

You can read the full paper <u>here</u> or scan the QR code.









This suggests that categorising in more real-world conditions may be much more complex than we previously thought"





FORMING OBJECT CATEGORIES FROM CHILD-PERSPECTIVE VIDEOS

Throughout this academic year, multiple families have kindly contributed to a very exciting study that has sought to understand how children learn about object categories in more realistic circumstances – a huge thank you for all your help!

The ability to form categories underlies how we learn about the world by classifying what we see into groups of the same kind (e.g., cats, dogs). However, what we know about categorisation in infancy largely comes from rigid, computerised studies that may not reflect how children learn in the real world. Our study therefore aimed to extend current knowledge of real-life category learning.

We first invited a few families to participate in a fun exploration session. During the session, we asked caregivers to go around different rooms with their infants and play with the toys that they encountered. Some of these toys belonged to the same category of a colourful, novel animal that we named "modi." We were particularly interested in how children perceive their interactions with the toys, so we recorded their first-person view during the play using a head camera.

After we collected these child-perspective play recordings, we wondered: "Could other infants learn about the modi category from them?" To investigate this, we invited families with 12- to 16-month-olds to the lab. We showed the infants the child-perspective video, followed by a brief categorisation task to determine whether they had successfully formed the modi category. We also tracked the infants' gaze throughout the study to capture their attention.

So far, we have seen that although children, on average, did not seem to have formed the modi category in our task, infants who paid more attention to the different modis when watching the child-perspective videos, were more likely to succeed in learning the category. This suggests that categorising in more real-world conditions may be much more complex than we previously thought.

We are very grateful to all the families that took time to participate in this study and contributed to advancing our understanding of conceptual development in infancy. We look forward to continuing this line of research in the near future with even more exciting studies!



Dr Prerna Aneja graduating this summer, with supervisors Prof John Spencer and Prof Larissa Samuelson



PHD THESIS: **DEVELOPMENT OF GAZE UNDERSTANDING**

Catherine Sayer Postgraduate Researcher

We now have a

gaze understanding

develops during the

preschool period,

which is the first



We know that children as young as 18 months can follow where other people look, but they have difficulty saying where people look until around 4 years old. We think this is a skill that children need to learn as a result of their increasing interest in other people's minds.

Understanding another's mind is an important skill that allows us to navigate the social world. By doing so, we can predict and interpret the behaviour of others. Therefore, children need ways to find out what is in another's mind. The eyes may be the solution. As the popular phrase goes, 'the eyes are the windows to the soul.' This is because where someone looks is a good indicator of their mental state. For example, if your friend looks towards a chocolate bar on the table, you may think they are going to eat it. This study aimed to test this idea.

So, in October 2022, we invited 60 children to visit the lab on four occasions across a year to see how their understanding changes from late 2- to early 4-years-old. Children took part in five games at every visit. This included identifying which object a person was looking at, hiding toys so that other people couldn't see them, and predicting what people would do depending on what they did and didn't know.

We now have a detailed picture of how gaze understanding develops during the preschool period, which is the first of its kind. We are currently analysing the data, but initial analysis suggests that understanding where people look develops later than the ability to follow where they look. There is some evidence that this may be related to an increased interest in other people's minds, but this may not be the full picture.

We are grateful to all the dedicated parents who went out of their way to return for multiple visits. We were honoured to see the children grow in personality and curiosity with each visit. Without you, this research would not have been possible.

detailed picture of how















PHD THESIS: **REVISITING THE BRAIN STUDY AT 6 YEARS+**

Ellie Johns Postgraduate Researcher





I'm very excited to share that we have found that we can predict children's executive function abilities at 6.5 years old from their visual working memory at 6 months old!"



After seven years, my time in the lab is coming to an end. As I enter the final few months of my PhD, I want to thank all our wonderful families for their contributions to our research, specifically the dedicated families from the "Brain Study". I have thoroughly enjoyed revisiting you all over the past three years to collect our follow-up data. Your children were all superstars, and I would not have been able to complete this research without their excellent participation. It's a bittersweet feeling, and I will always treasure the lovely drawings that I have been gifted by many of your children.

My PhD project focuses on executive function and visual working memory. Executive function is a set of cognitive skills that allow us to control our thoughts and actions. These skills are important for everyday life, for example: in allowing us to plan our day, motivate ourselves, and finish what we've started. These executive function skills are also important in school settings, as they are strongly related to maths and reading abilities. Working memory is our ability to temporarily hold, update, and use information to complete tasks. For example, when needing to enter a text-verification number when signing into an online account, you must be able to look at the string of numbers on your phone, temporarily remember the string of numbers while holding them in your working memory, and then engage with these numbers to type them into the verification box. However, common working memory tasks like this often involve an understanding of language. To look at this earlier in development, we used visual working memory, showing the children colour-changing squares to remember and engage with. By eliminating the language component, we could use this task with young babies.

Last year, I explained how we were planning to use the data collected in the visual working memory task when your children visited us over three years, either from 6 to 30 months old or 30 to 54 months old, alongside the recent executive function tasks and school data we have collected. I'm very excited to share that we have been able to examine this followup data and have found that we can predict children's executive function abilities at 6.5 years old from their visual working memory at 6 months old! Alongside this, we have been able to show stability in the development of visual working memory from 6 to 30 months and 30 to 54 months old. This is the first longitudinal study of its kind, so these findings allow us to see what typical visual working memory development should look like. These findings also help us to understand what is important for later executive function. From this, we may be able to identify children at risk of struggling with executive function and school much earlier than previously thought, even possibly as young as 6 months old. I am currently writing about these interesting findings in my PhD thesis, so

of its kind" there will be more exciting updates soon! 12 Newsletter 2024 ddlabs.uea.ac.uk



FAREWELL FROM PHD STUDENT, **MILENA BAKOPOULOU**

Milena Bakopoulou Postgraduate Researcher





I am deeply thankful to every family that participated in our research; none of this would have been possible without them"

You can read Milena's first research publication that you helped make possible here or scan the QR code



PHD THESIS: **HOW CHILDREN PERCEIVE** AND MAKE SENSE OF THE WORLD AROUND THEM

Lizzie Watson Postgraduate Researcher



Hello, my name is Lizzie Watson. I'm a postgraduate researcher and technician here in the School of Psychology at UEA. You might recognize me from my activity stands at the Norwich Science Festival or from our pop-up lab at the Millennium Library. My research interests focus on how children perceive and make sense of the world around them. Despite being a very rich topic area for researchers who work with adults, we know surprisingly little about how these complex and sophisticated mechanisms develop in childhood.

I've found a particular interest in how children piece together all the different parts of visual scenes. Scenes are highly variable, dynamic, and often very busy environments. Statistically speaking, different places are characterized by predictable layouts, and our brains take advantage of this to process information more efficiently.

My work, which is the first to investigate this type of scene categorization in children, suggests that it takes many years for this ability to develop fully. What we discovered from the data collected at the Norwich Science Festival, is that children, even at 5 years old, are surprisingly good at distinguishing between indoor and outdoor places after having only seen them for a fraction of a second.

What they struggle more with, including older children at 10 years, is distinguishing between specific places, such as a kitchen and a bathroom. This tells us that in the very earliest moments of perception, children's brains work differently from adults' in the way they extract the most critical, detailed information about a place.

Following this research, our next steps will be to apply neuroimaging techniques to pinpoint when children's brains are processing this important category-related information. In combination with our behavioural data, this will give us a much more robust and clear picture of how children process visual information.

This work wouldn't have been possible without the amazing researchers who helped collect data, and of course the many children and families who came to participate on the day - thank you!

It's unbelievable how fast my seven years have passed in the DDLab. It feels like yesterday that I started as a second-year psychology student passionate about working with children. From my undergraduate studies to my Master's and finally completing my PhD - researching children's word-learning and memory, which are critical aspects of their development—this journey has been incredibly fulfilling and fascinating.

Each stage of my academic journey has offered me invaluable experiences, for which I am very grateful. I've had the privilege of being involved in numerous studies in the lab. One of the most rewarding aspects of my work is the interactions with the children involved in our studies. Through the different studies, I have explored various types of learning, from playing with real objects to looking at novel objects on a screen. All of these experiences provide incredible insight into children's learning. Even just learning how to put stickers on a child's forehead without them noticing is crucial! The moment I think I have accomplished this, they discover it by looking at themselves in a metal spoon, resulting in having the parents, myself, and the child all involved in finding innovative ways to try and make sure the eye tracker sticker remains on their forehead - a story I will never forget!

From witnessing children remember and recognise me, to meeting a newborn in 2020 and seeing them again as spirited two-year-olds in 2022, these experiences have been nothing short of a gift. I am deeply thankful to every family that participated in our research; none of this would have been possible without them.

In the lab, I have grown as a person and researcher, from shadowing and supporting studies to leading my own—always under the guidance of Prof Larissa Samuelson and co-supervised by Prof John Spencer. Their mentorship has been instrumental throughout the years. What began as complex tasks became challenges that pushed my limits and eventually became second nature.

I must also express my immense gratitude to everyone at the DDLab. Nothing could have been achieved without this fantastic team. They have broadened my understanding and been a constant source of support and collaboration, from words of wisdom to innovative task creation.

Working with such a dedicated group of individuals has been one of the highlights of my time here. I am thankful for the wonderful people working in the DDLab, who have become friends along this journey. My heart will always be full of cherished memories of this extraordinary experience. There will always be a special place in my heart for the DDLab and all of



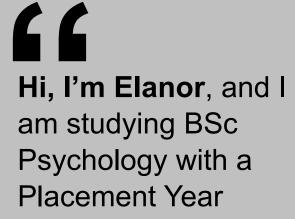
INTRODUCING ELANOR SMITH THE POP-UP LAB







Student Intern, **Elanor Smith**



This summer, I had the chance to work as an intern with the Developmental Dynamics Lab, which has allowed me to observe and aid current research focusing on early word-learning in toddlers.

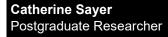
By observing participant sessions, I have seen how developmental research is conducted, which has helped cement the research skills I've learned throughout the first year of my degree. I've had the so much about the theories supporting each task opportunity to calibrate and use eye-tracking software, gaining insight into the intricacies of using an eye tracker to collect data.

Working with the child participants, our "child scientists," has been the highlight of my experience. Each session was unique, and seeing the children's curiosity and engagement with the tasks was incredibly rewarding.



It has been fascinating to observe the diverse ways children respond to different tasks. Their participation not only provided valuable data but also helped me develop my own interests within psychology.

Seeing the tasks involved in testing visual working memory, early language processing, and auditory processing has been very interesting. I've learned and what they aim to measure. This experience has helped me understand the practicalities of research better, which will greatly benefit my future studies, both in understanding research papers and when it comes to conducting my final year project."





It has been wonderful to meet curious young scientists and talk to them and their parents about the research that we do"

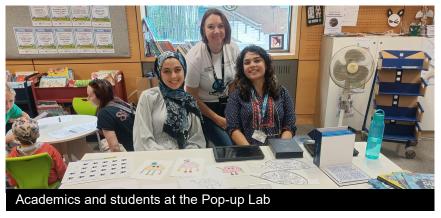
THE POP-UP LAB

Last year, we shared with you that we had completed the first 'pop-up lab' at the Norfolk and Norwich Millennium Library. It was so successful that we have hosted 13 more! It has been wonderful to meet curious young scientists and talk to them and their parents about the research that we

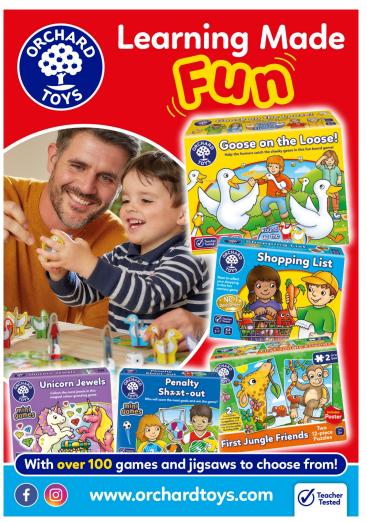
The main highlight of these sessions is offering families the opportunity to contribute to research while we are there. Children aged 2- to 12-yearsold have had the chance to take part in a variety of short research studies. For the older children, one study involved them looking for dogs and cats on a screen, and another involved identifying whether a space was indoors or outdoors. For the younger children, one study involved sorting shapes, and another involved hiding objects. There's obviously more to it than that, but we can't give too much away in case you end up taking part in one! We even got the parents involved by asking them about objects their children are familiar with.



We also bring along lots of activities for everyone to enjoy. One of the most popular is our 'Brain Caps,' where children can make their very own (paper) brain to take home. Here, children learn about where their brain is, what different parts of the brain do, and how it communicates with the body! Other activities have included illusions, Mother's Day gifts, and colour perception demonstrations.



A big thank you to Adam McGee and all the staff at the Norwich Millennium Library for all their help facilitating this initiative. We have more sessions planned, so be sure to follow our Facebook page to see when we'll be there next!





healthy snacks.

hot drinks & biscuits



Open Tuesdays (term time) @Lingwood Village Hall, NR13 4AZ 9.15-11.15am, £3 per family

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tinytotslingwood80@gmail.com





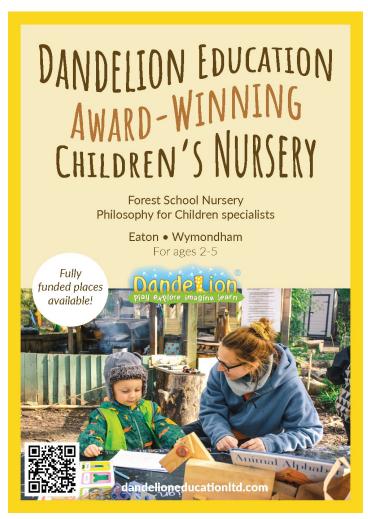


@EarlhamRoadPlaygroup





FROM OUR PARTNERS... FROM OUR PARTNERS...











baby club sensory massage





Horsford & Costessey Book at:

https://bookwhen.com/lulubabynorfolk









Our Start for Life and family hubs approach is bringing together and enhancing existing services to ensure parents and carers can get the help they need when they need it.

Families can access support:

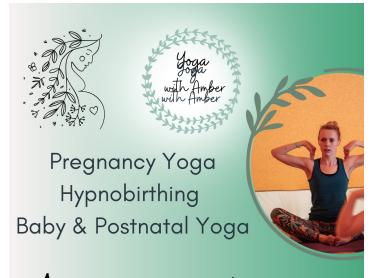
- within their community
- online
- by visiting a family hub site

From conception up to the age of 19 (25 for young people with special educational needs and/or disabilities). Norfolk family hubs are here to help.

www.norfolk.gov.uk/familyhubs







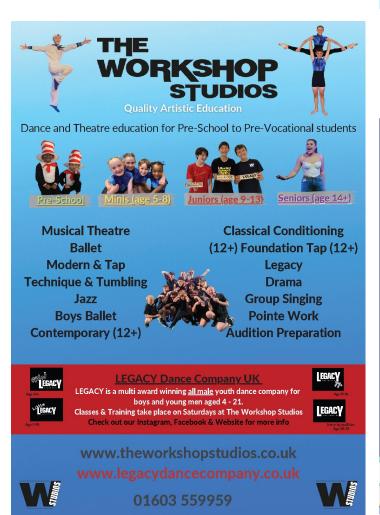


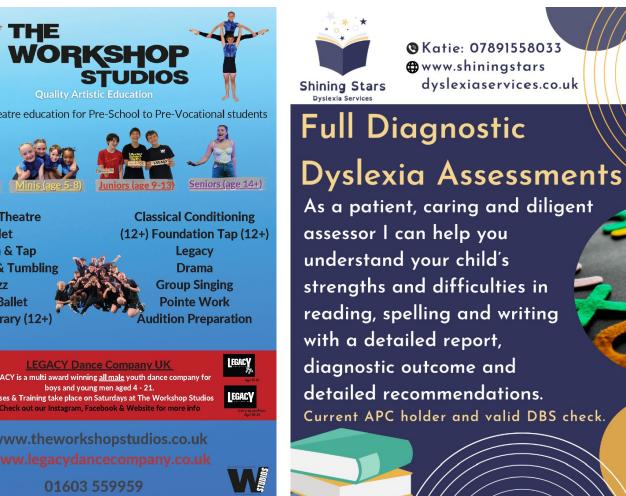
Hatha Yoga Children's Yoga Family Yoga



Contact Amber on 07307849476 www.yogawithamber.co.uk helloeyogawithamber.co.uk







NEW STUDIES STARTING...

If you are interested in taking part in child development research, please get in touch!

@DDPSYUEA

W: ddlabs.uea.ac.uk T: 01603 597376 E: child.scientist@uea.ac.uk

Following are just some of the research studies we need help with...



Are you a parent to a deaf baby?

The UEA School of Psychology is inviting parents nationwide with deaf* infants aged 10-12 months to take part in a research study in Norwich, UK.







07789 942976

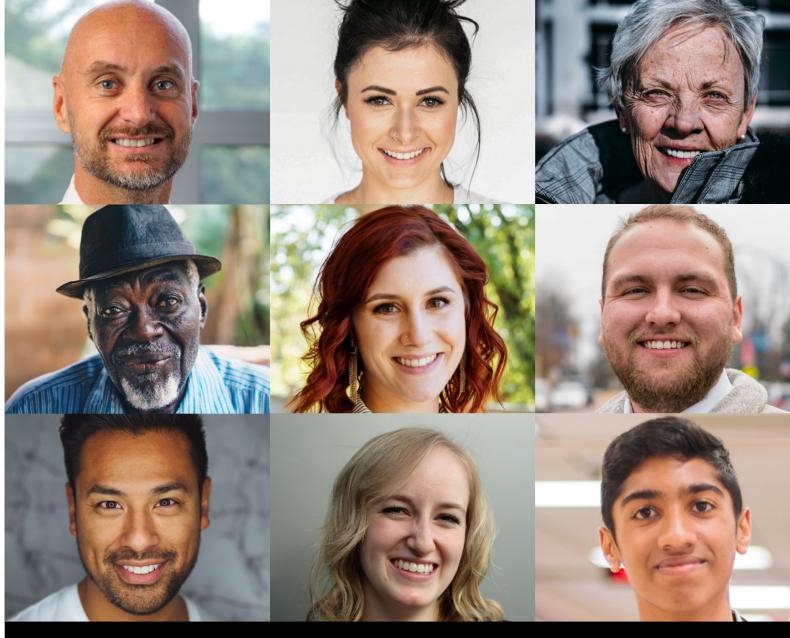
Get in touch or scan here to register!





- The aim is to understand how different language experiences can influence the objects babies learn to recognise in the world using EEG and eye-tracking
- There will be two visits, each lasting two hours
- Travel and accommodation is paid for, and your family will receive extra gifts and compensation as thanks

*We use the term "deaf" to refer to infants with moderate to profound hearing loss with hearing or d/Deaf parents. We recognise there are different terms that families may use when thinking about their baby's identity. If you aren't sure if your family meets the eligibility criteria, please get in touch.





PAID VOLUNTEERS NEEDED FOR PSYCHOLOGY RESEARCH

Can you spare an hour of your time to help us gain a valuable insight into how the mind works including how we think, feel, communicate and how we see and do things in the world around us?

Our goal is to better understand how the mind works which could have important implications for the care of people diagnosed with a number of clinical conditions (inc. stroke, dementia, autism)

We always need volunteers and would love to hear from you. Please get in touch to find out more:

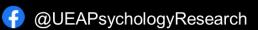
Telephone: 01603 597376

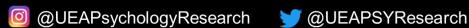
Email: psy.panel@uea.ac.uk













Do we have all your children registered?

Please stay in touch, we love to hear from you! Drop us a message to check that we have all of your children registered or to update your address or contact information. We have new studies starting soon for all ages!

W: ddlabs.uea.ac.uk

T: 01603 597376

E: child.scientist@uea.ac.uk

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Economic and Social Research Council

BILL & MELINDA GATES foundation









