



Dear Friends of BabyLab

As we reflect on the remarkable journey from June 2023 to present, I'm thrilled to share the exciting milestones we've achieved as a community.

BabyLab Podcast Season 2 is popular, and we'd like to extend our heartfelt gratitude to parents who have participated in the production and everyone who has tuned in and shared it far and wide.

The Family Science Day event at PHIVE Parramatta in August was another triumph, with hundreds of families expressing interest and waiting in line to experience the EEG first-hand. Your enthusiasm keeps us motivated and determined to continue making science engaging and accessible for all.

We've also made new connections through our library talks at Wentworth Point, Parramatta, and Dundas. It's always fun meeting new parents, exchanging ideas, and sharing knowledge.

Lastly, I'm delighted to announce that our new BabyLab at Bankstown City Campus has been up and running smoothly for the past two months. We look forward to seeing you at Bankstown BabyLab.

Thank you for being an integral part of our journey. Here's to 2024 filled with excitement, exploration, and growth.

Sue

Professor Susan Hespos
Leader of BabyLab
The MARCS Institute of Brain, Behaviour, and Development
Western Sydney University

Research Discoveries

Communicating with your baby: Does baby's temperament affect the interactions?

We all know that it is important to start building language skills in early childhood as it not only helps with the baby's cognitive development, but also their social and emotional skills. When communicating with your baby, these two factors matter:

- a) Method: How you talk to them
- b) Amount: How much you talk to them

What about the baby's personality (temperament)? Does it impact the method and/or amount of interactions? BabyLab researcher, [Dr Antonia Goetz](#), conducted a study to look at how a baby's temperament at 4 months old affected the parent-child interaction.

Here are some key findings:

- 1) The way parents talk to their babies remain unchanged regardless of the baby's temperament. Parents still used certain speech patterns such as emphasising the sound of vowels (this type of speech is known as "Infant-directed speech" / "Parentese" / "Baby talk" – more tips [here](#)).
- 2) However, the amount of talking between the parents and their babies changed with the baby's temperament. Babies who appeared to be more introverted tended to be more talkative and had more 'conversations' with their parents than extroverted babies.

It is important to understand that our babies enjoy talking to us.



Through this study, we learnt to appreciate the unique communication styles and needs of each child, whether introverted or extroverted. As their primary caregivers, we should continue to create a nurturing environment to extend upon their emerging language skills regardless of temperaments. We could do this by:

- Being sensitive to their learning interests and needs and making them feel secure and comfortable expressing themselves.
- Creating communication opportunities and using a variety of tools to help make these interactions engaging and fun (e.g., puppets; books; songs; dance).



Early language perception and learning

Recent studies have shown successful learning via screen media (Lytle et al., 2018; Roseberry et al., 2014). Although the Australian national guidelines recommended no screen time for children younger than two years old (Department of Health and Aged Care, updated in 2021), we understand that restricting access to screen media could be challenging for some families given that access to screen content is almost inevitable in today's world.

Our team is therefore exploring ways to promote healthy screen use and support children in navigating the digital world more purposefully. A study led by [Dr Liquan Liu](#) started looking at the way babies engage and learn a new language through extended reality (XR).

Australian babies below 24 months old participated in an activity where they

learnt Bengali and Mandarin contrasts using XR by watching live or recorded language presentations – learning from life-sized human projections. Some of the key findings include:

- 1) Australian babies can perceive and learn Bengali and Mandarin after training via XR
- 2) Babies learn better at the second year over the first year after birth
- 3) Babies learn better with more prominent sounds
- 4) Overall, babies *perceive* better after training from live than recorded projections, indicating the importance of social interaction
- 5) Overall, babies *learn* better after training from recorded than live projections, suggesting other factors influence learning besides social interaction

This pilot study highlighted XR's potential for early childhood education. Dr Liu and team has commenced with the extended study to delve deeper into this area of research.

News & Events

Bankstown BabyLab (our newest lab!)

Our newest lab is now up and running at the new Bankstown City Campus. It's a nice and cosy space with plenty of amenities nearby. We look forward to having you and your little ones!

Address:

74 Rickard Road, Bankstown, NSW 2200
Bankstown BabyLab, Level 2, Room 1.2.21
Western Sydney University



Pregnancy, Birth and Children (PBC) Expo

10 to 11 February 2024 | 10am to 4pm
Sydney Showground, Sydney Olympic Park
Meet our friendly researchers and ask us anything!

Follow us on [Instagram](#) and [Facebook](#) to get the latest updates on events and studies.



Giving back to the community

BabyLab partners with early learning centres and local community groups to host talks and information sessions for parents and educators. If you would like us to visit your centre or group, contact us at babylab@westernsydney.edu.au

Keep in Touch

We love seeing your little ones grow. Feel free to tag us in your posts. Let's stay connected.

[Instagram](#) | [Facebook](#) | [Website](#) | [Register with BabyLab](#)

For enquiries, email us at babylab@westernsydney.edu.au