

Plymouth BabyLab

Newsletter • Summer 2009



Research Update

This is our third annual newsletter since the launch of our website and press campaign in the winter of 2006. It is exciting to see how far we have come, with so many of you visiting us and lots of little ones leaving with baby and young scientist certificates. In the short time we have been operating, we are pleased to report the following figures as an illustration of how we are getting along.

936 parents have signed up to the BabyLab

1287 children have been registered

492 BabyLab visits (81 in 2006, 154 in 2007, 257 this year)

Where is your accent from?

You may remember this question from when you signed up, and we would like to take this opportunity to explain to you why we needed to know.

Some of the studies we are running explore how children perceive accents around them. Why is that interesting? An accent, which can be regional (Scottish, Welsh, American, etc.), or foreign (French, German, etc.), is a set of variations that can affect many aspects of speech. For example vowels can be produced differently whether your accent is from the

North or the South of England (how do you pronounce "grass"? And "bath"?). The melody of speech can be very different too: in Glasgow for example, and in many Northern cities, intonation rises at the end of sentences.

As adults, we usually can understand all these dialects, but machines that do automatic speech recognition are very bad in dealing with

these kinds of variations. Usually they are trained with a particular voice or accent, and when the accent changes, their performance decreases dramatically.

So the question is: how do humans adapt to these variations so well? Is it something we are born with, or is it due to a long exposure to speech in our maternal language? It then becomes very interesting to look at how babies respond when presented with accents. You will find a summary of studies related to that topic on our website.

When you register with us, we do not know in advance whether you will be involved in one of these studies but, if you do, we will need to find out then what kind of accents your child hears everyday.

If a child has a Scottish Mum and an American Dad for example, his



Miles, aged 12 months
Word Learning Task

Of these 257 visits, this includes...

40 visits by 5 and 7 month babies investigating early accent perception

33 visits by 16 month babies helping us with our study of word learning

40 visits by 12 & 18 month babies helping us with discrimination of speech sounds

49 visits by 4 year olds to look at understanding of emotions of story characters

30 visits by 18 month babies investigating perception of simple sounds

Please visit www.plymouthbabylab.org to read a summary of our research findings. If you want more details, please contact us on 01752 584865 or email us at info@plymouthbabylab.org

Have you moved house? Had another baby? Update your details using the form on page 4

experience with accents is very different, even at 5 months which is the youngest age we explore, from a child whose two parents are from Plymouth. This is why we ask you this information!

Does your child hear a language other than English at home?

The reason why we ask you whether your child hears a language other than English at home is a more general issue. The vast majority of studies carried out in BabyLabs all around the world are carried out with monolinguals, because 1. It is assumed that results are simpler to analyse, and 2. The vast majority of BabyLabs are located in countries or cities which are mainly inhabited by monolingual families. However the world changes! The construction of Europe for instance has favoured the multiplication of mixed couples, and more and more children are raised in multilingual environments. As a natural consequence, more and more studies explore the development of language in bilinguals. Bilingual children are without any doubt, very lucky children: they are given the opportunity to learn two languages without explicit effort, and very often they will achieve perfection in their two languages when they become young adults. We, adults, do not have that chance: we struggle to learn a second language, and whatever our efforts, our foreign accent always gives us away. Try to order a coffee in France with your lovely English accent, nobody will confuse you for a native!



Arthur, aged 7 years
ERP Study

However, raising a child bilingually is not that easy: as parents we receive mixed messages from nearly everyone: grandparents are afraid that the child would be confused by the two languages, the teacher may be concerned that reading might be slowed down because English is not spoken at home, friends feel that you are being rude if you talk to your kids in your own language because they do not understand it. It is sometimes so challenging that many parents give up at some point.

Recent research in bilingualism has helped to clarify all these ideas. We know for example that infants and toddlers do not get confused if they are exposed to two languages, even though they can do code-switching very often, that is, switch from one language to the other in the same sentence. This code-switching does not reveal confusion, but is simply the sign that children pick up the “first available book” when they are selecting the right words. For example, if they have heard the word “teacher” more often in an English context than in their other language, chances are that this word will be used more often, even when producing a sentence in the other language. At the Plymouth BabyLab we are very interested in bilingualism, and that

is why we ask you when you register whether your child hears a language other than English at home. So if you and/or partner is not an English native speaker, and speaks to your child with this (these) other language(s), please let us know!

CDI questionnaire: what is it for?

Most of you who came to the BabyLab were asked to fill in the CDI questionnaire (Communicative Development Inventory), which is a list of 416 words that are presumably part of children’s early

vocabulary. What we do afterwards is count the number of words that you reported your child could produce when she/he came to the BabyLab, and compare it to the curves which have been computed by the BabyLab team in Oxford University. The reason for this is that we always need to show to our colleagues, when we publish our data, that our little participants were developing language “normally”.

This term “normally” entails actually much more variation than you may imagine. For example, at 16 months, 50% of children produce a maximum of 3% of the entire CDI word list (which means they can say on average 12 words), 10 % of them produce NO words at all, and another 10% produce 18% of the list (about 75 words).

At 20 months, 50% produce up to 10% of the list (so the average is 40 words at that age), but 10% produce 1%, and 10% produce up to 40%! So, as you see, the variation is huge!

Thank you to all of you who have already visited us at the BabyLab - your input is of great value to us and an equally big thank you to all of those who are still waiting to visit. Your patience is much appreciated and we will be contacting you as soon as an appropriate study comes up. We are expecting an influx of projects starting in October so, if you haven't already visited us, we may be contacting you in the Autumn.

All studies have received ethical clearance from the Faculty of Science Human Ethics Committee (University of Plymouth). All members of the BabyLab have had CRB checks over the past 3 years.

Besides, your child's vocabulary score at these ages does not predict their later ability to speak or to perform academically. Some children walk earlier than others, some talk earlier, each goes at his/her own rhythm. You can check the developmental curves of the CDI for yourself at:

<http://psyweb.psy.ox.ac.uk/babylab/cdi.html>

We found that many parents would have preferred not to fill in the CDI during their visit at the BabyLab, as it is time-consuming (between 15 and 20 minutes). So now what we do is email it to you before your visit and ask you to complete, and return, it to us before the day of your visit. This way you all have the opportunity to enjoy the visit! However, please make sure that you fill in the questionnaire at a time close to your visit, because toddlers learn words extremely fast at that age, and therefore from one week to the next the CDI score might change!

Why we contact you - and why we don't!

As you see, each study targets a very specific age range. For most of them, we need to see children when they are, for example 5 months old, plus or minus 3 weeks. So, when we start a study, we look on our database for children who will be within this range at the moment of testing, and therefore you may simply have been unlucky because your child was just a little too young or too old to participate.

Another reason might be multilingualism. For most of the studies, the tradition in the field is to see monolingual children, because this is the "simplest case". It is already extremely complicated to study how language develops in a monolingual child, and it adds to the complexity by including little bilinguals or trilinguals. However,

as you can see in studies 2 and 4 (see www.plymouthbabylab.org for summary), we do also include bilingual children, because sometimes of course this is precisely what we look at: how do bilingual children develop languages compared to monolinguals. Having said that, when the study we carry out is not about language, as in the case of studies 5 & 6 (see www.plymouthbabylab.org for summary), then it doesn't matter whether the children are or are not bilingual, and then you may be contacted too!

Another very common reason is that your contact details have changed in between, or we have made a mistake when writing down your email address, for example. When this happens, we try every way we can to find you (email and telephone). If you think you might have been in that situation, please let us know (use the FREEPOST coupon on page 4, give us a ring, or email us). However, if for any reason you don't want to be contacted in the future, please let us know.

Starting this year: BabyLab T-shirt for your child!

Up until now, whenever you came to the BabyLab, we offered you £3 to cover your travel expenses. Starting this year, we are very pleased to be able to offer you this amount or your child a BabyLab T-shirt! These lovely T-shirts come in different sizes, colors and logos, and they have all been designed especially for the BabyLab. So now, with a BabyLab T-shirt, a BabyLab balloon and a BabyLab certificate, your child will leave the BabyLab fully customized!

New BabyLab certificates

As many of you have visited the BabyLab on a number of occasions, we felt the need to revise our



Alex, aged 13 months
Picture Pointing Task

popular baby and young scientist certificates. So now, when you come, your child will receive a one star certificate on their first visit, two stars on their second, and so on. Regular visitors can work towards their rocket certificate!

Want to know where we are?

The BabyLab has moved a number of times over the year. Thank you for your patience during this time. We will be moving again in the autumn but to a permanent 'home'. Directions to the BabyLab can be found on our website: www.plymouthbabylab.org

Deborah Prior is leaving us, hopefully not for long!

Who is she, you may ask? Deborah has been behind the scenes of the BabyLab for 18 months. She decided to work for the BabyLab after she visited with her own 5-month-old daughter, Rosie. She has done a fantastic job for us, but she is soon to leave us to have her second child in August. Hopefully she might return next year! In the meantime, we are looking forward to meet Junior Prior... in the BabyLab!

New details to register? Got a friend to join?

Have you moved house, had another baby or changed your telephone number/email address?

If yes, then we would like to update your details. Please complete the form below and return to us at the FREEPOST address below (no stamp needed).

Friends You can also use the form to pass on to friends who are interested in signing up to the BabyLab. This helps us a great deal as the more children we see, the better the reliability of our research.

Email If we have sent you this newsletter by post, it probably means we do not have a functioning email address for you. If you have one, and can help us keep our costs down, please let us know by emailing: info@plymouthbabylab.org

Want to contact us?

Email info@plymouthbabylab.org

Telephone 01752 584865

Address FREEPOST
BabyLab
Room A215
Portland Square
Drake Circus
Plymouth, Devon
PL4 8AA

If you have any queries, concerns or you wish to withdraw from the BabyLab at any point, we are always happy to speak with you. If you ring us, and are asked to leave a message, please feel assured we will attempt to get back to you as soon as possible. There is also further information available through our website: www.plymouthbabylab.org

Please delete as appropriate:

- I would like to change or update my details
- I would like to sign up to the BabyLab (if you are new to us and wish to sign up to the BabyLab, we will contact you soon for further registration details).

Title.....

Forename.....

Surname.....

Address.....

Postcode.....

Tel:.....

Email.....

Child's name (if new to database)

Child's date of birth.....



We look forward to meeting you at the BabyLab for what we hope will be a fun experience for you and your child! Thank you for your support.

The BabyLab Team: Caroline Floccia, Deborah Prior, Kirsten Abbot-Smith