



emotion, development & brain lab

Royal Holloway, University of London



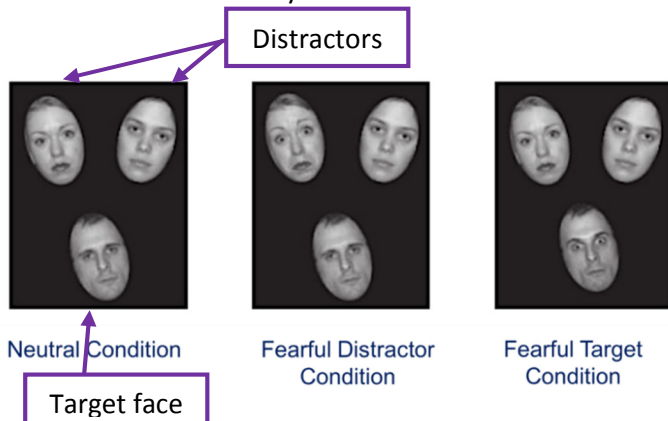
Newsletter June 2016

Current Research

What have we recently been working on?

We are currently very busy in the EDBL! Progress has been made in our most recent project, Characterising Emotion Regulation Development in Adolescence (CERDIA). CERDIA is a school-based longitudinal project, which looks at the development of emotion regulation across time in adolescents aged 11-16, and its relationship to mental health and wellbeing. This research is important given that adolescence is a time when parts of the brain that help us to control emotions are still developing, and when emotions can be particularly strong. Ultimately we want to help young people to manage their emotions well.

We have now completed testing for CERDIA. **A huge thanks to the schools who took part!** We are now looking at the data to see what we've found. 365 pupils took part from **Greenford High School, Slough and Eton CE Business and Enterprise College, Thomas Knyvett College, and Hampstead School.** At two different points from one year to the next, these pupils completed questionnaires and short computer games looking at how they respond to emotion. One game looked at the use of conscious strategies in controlling emotion (e.g. 'that spider I see is just a photo: it can't hurt me'), whilst others measured more automatic processes outside of awareness. An example is the Emotional Capture Task, shown below. Participants have the very simple task of finding the male face (target) among female faces (distractors) and indicating whether it is tilting left or right. However, we looked to see if the presence of an emotional face interferes with the ability to do this.



Recent Results

And what do we know so far?



CERDIA PRELIMINARY FINDINGS:

Our Emotional Capture task measured whether participants were slowed down when fearful, angry or happy faces were presented. On average this did happen, and is entirely normal. Emotional faces are interesting, after all, as they may signal something important. However, too much emotional capture means emotion is taking up a lot of attention, even when it's not relevant to the task. Interestingly, we did not find any change in the amount of 'emotional capture' as adolescents got older. However, we did find that adolescents who reported that they lose their temper more easily also showed more emotional capture when fearful faces were onscreen. This suggests these individuals are more sensitive to emotion in their surroundings.

We also looked at how participants reacted to emotional photos, and whether they could use strategies to reduce how upset they felt when seeing sad or scary pictures. The good news is that adolescents age 11-16 were generally very good at doing this. However, there's room for improvement as adults did slightly better. Another positive finding was that adolescents usually became less upset by sad or scary photos as they got older.



Adolescent emotion regulation review

We recently had an article published in the scientific journal *Developmental Cognitive Neuroscience*. We reviewed how emotion regulation develops in adolescence, and how this is related to brain development in both typical adolescents and in those with mental health and behavioural difficulties. The review '*Neurocognitive bases of emotion regulation development in adolescence*' has already influenced other researchers, and was mentioned in an article in the very reputable medical journal *The Lancet*. You can read it for free online.

When you feel low, try travelling through time...

EDBL PhD student *Saz Ahmed* won a study visit grant to spend 6 weeks last summer studying the development of emotion regulation in adolescence in Dr Leah Somerville's world-leading Affective Neuroscience & Development Laboratory at Harvard University. Saz had the opportunity to collect data from adolescents and investigate the use of 'mental time travel' to regulate emotions. Results from this study suggest that thinking about the future ('this will not affect me in 5 years' time') is an easy and effective strategy that even quite young adolescents can do. However, those who find it harder to control their temper also found this strategy less helpful.

Saz will be presenting this in more detail at our 'Working Together' event and at a national conference in Belfast in September. *Learn more about these events...*



Events

Upcoming events...

In collaboration with other developmental psychology labs at Royal Holloway, our first annual '**Working Together: Research and Practice**' event will be held here at Royal Holloway on the **5th July 2016**. This aims to bring together researchers and practitioners working with children in schools and beyond. The goal is to work together to make sure that research is guided by practice and vice versa. Lab leader *Cat Sebastian* will give a talk, and Saz will present a poster.

Both Cat and Saz will also be presenting at the **BPS Developmental Section Annual Conference** in Belfast on the **14th-16th September 2016**.



The British Psychological Society

Recent events attended...

Along with having our research published in scientific journals, attending and presenting at conferences is an important way we get our research out into the world!

In March last year the EDBL team presented a symposium talk and poster at the International Convention of Psychological Science in Amsterdam, the Netherlands. Last year Cat was also invited to speak at the 17th European Conference on Developmental Psychology in Portugal. More recently, both Cat and Saz presented posters at University College London (UCL) for the Experimental Psychology Society 2016 Meeting.

Get involved!

The Emotion Development & Brain Lab is recruiting schools and students to take part in our research projects. We are particularly interested in forming partnerships with schools local to Royal Holloway, so if you represent an interested school, we would love to hear from you.

On completion of a project we contact schools to provide a summary of the findings for staff and parents. Further, we often give school talks. Please let us know if there is anything that we could offer that would be of benefit for your school, staff, or students!

We also conduct studies with adults, so if there is a particular project you wish to be involved in, please contact us on edbl@royalholloway.ac.uk or email the researcher directly.



We hope to hear from you soon!

Alternatively, if you just want to know more please...

Visit our **website**: <http://www.pc.rhul.ac.uk/sites/edbl/>

Follow us on **Twitter**: <https://twitter.com/clsebastian>

New team members!

Last, but certainly not least, we would like to introduce the new members of our lab. *Rachael Lickley* (left) will be joining EDBL as a PhD student in September, and *Georgia Rankin* (right) has just started working in the lab as our new research assistant. Both Georgia and Rachael have been involved with EDBL research before, and we are very happy to welcome them both back into the fold!



Since the CERDIA project began, we have also welcomed two mini lab members! Cat gave birth to *Cara* (left) in February 2015, and research assistant *Amanda Bittencourt-Hewitt* gave birth to *Lorena* (right) in August.

