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Introducing the Child Development Labs at Boston University!

Six existing developmental psychology research labs at Boston University have come together to form the Child Development Labs (CDL)! Our mission is to investigate how children think, behave and learn through fun and interactive studies. Each of our labs focuses on a different area of child development with interests spanning from early brain and language development to science learning! We conduct kid-friendly research studies here at BU, the Boston Museum of Science, and at various community organizations in the Boston area. Take a look at our newsletter to

find out what your kids helped us discover!



CDL in the News

What have you helped us learn about child development?



Infant-directed speech may help babies manage stress. Preliminary results from BEE lab's Social Experiences and Early Development study (SEED) showed that babies who

heard more infant-directed speech at 6 months had lower levels of the stress hormone cortisol at 12 months.



Self-control and Sensitivity Matters:

Past studies in the ACEI lab have demonstrated the role of specific parenting styles in influencing children's emotional intelligence, the

protective effects of maternal sensitivity, and the importance of emotions and selfcontrol on both mental and physical health.



Why do giraffes have long necks?

The Huffington Post summarizes the Child Cognition Lab's upcoming publication in *Psychological*

Science showing that young children can be taught within-species adaptation at much younger ages than education policy currently recommends. Click here to read the full article.

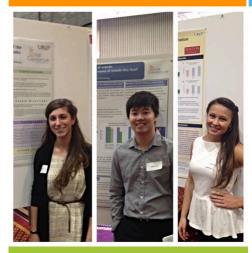


I should but I won't.

At the Museum of Science in Boston, SDLL researchers showed that even 3 year olds know that they *should* share stickers equally with

another child, but they also accurately predict that they will keep more for themselves.

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What our Research Assistants have been up to:

Undergraduate Research
Opportunity Program award
winners from the CCL and the
SDLL presented their research
projects at BU's 16th Annual
Undergraduate Research
Symposium.

The Symposium, held during Parents' Day weekend, featured poster presentations of undergraduate research projects in the social and natural sciences, medicine, humanities, education, and the arts.

Clockwise from top left: Maya Raad, Arthur Fu, Carolyn Lee, Babi Bose, Raika Nasirullah



What's new at the

Boston University Twin Project

At the BU Twin Project, we are interested in understanding the development of children's early temperaments. Working



with twins, we are able to explore the extent to which children's temperament is influenced by their genes and their environments. Our current study explores *patterns of change* in children's temperaments. As children get older, they may become less shy, more cheerful, have better attention spans, be less active, etc. The goal of our study is to understand the influences on child temperament across the preschool period. Is change in temperament due to maturation (genes) or is it environmentally influenced? Do changes in child temperament influence parents' behaviors toward their children? Does change in temperament tell us anything about developmental outcomes such as behavior problems, early learning skills, and prosocial behaviors? A better understanding of temperament change and its links to child outcomes may lead to the development of appropriate interventions for at risk children.



News from the

Advance Cultural and Emotional Intelligence Lab

At the Advance Cultural Emotional Intelligence Laboratory, we are interested in the development of emotional intelligence abilities in early childhood, and how they relate to both cognitive and

physical health outcomes. We are particularly interested in how family, culture and children's biology interact to predict children's social and emotional competencies.

Currently, we have some exciting projects going on, including one where we are looking at individual differences in children's ability adapt to challenging tasks. In this study, we are also interested in the roles of mothers and fathers and how they may affect children's self-control and stress physiology. We also have several cross-cultural studies, examining how children across cultures regulate their emotions. Finally, several of our ongoing studies are focused on the deleterious effects of poverty on children's emotional intelligence, and identifying protective factors.

Updates from the Child Cognition Lab

At the Child Cognition Lab (CCL) we are interested in how children conceptualize the natural and human worlds. Our current projects explore topics such as how children learn about biological processes, how children learn moral beliefs, how they figure out other



people's likes and dislikes and how infants understand music.

We recently published exciting new findings from a large National Science Foundation project showing how picture storybooks are a great way to teach kids about a complex process like natural selection. It turns out young children may find it easier than adults to learn why elephants have trunks and how animals' bodies adapt over time! Right now, we are exploring whether young children are similarly good at learning about the complexities of genetic inheritance. Our other recently published papers explore children's tendency to believe life is eternal, whether young children are always likely to cave to group pressure and how adults morally reason about tragedies such as murder and suicide. Click here to read more about these findings.



Findings from
The Social Development and
Learning Lab

The Social Development and Learning Lab (SDLL) seeks to discover how children become cooperative members of their societies.
In ongoing research, Dr. Peter Blake of the

SDLL has shown that maybe it isn't the thought that counts; while children are happy to receive a gift, they don't pay much attention to the intentions of the giver. Four- to 9-year olds received a nice toy from another child who, they were told, either gave the gift voluntarily or were forced to do so by their mother. Children did not seem to care about the different intentions, but they did tend to give more candy to the child who gave them the gift than to another child who had done nothing for them. Receiving the gift also boosted giving in general with many older kids giving more than half to pay back the original gift-giver.

Future research at the SDLL will include online economic games for kids! We are currently developing interactive computer programs to study how children behave in cooperative, competitive, and inequitable economic situations with peers.

For more on the SDLL in the news, click here.

How to Get Involved!

Our research would not be possible without help from families like yours!

- Who can
 participate?
 Our projects focus
 primarily on infant
 and child
 development from
 birth to 12-yearsold.
- When are visits scheduled?

We are happy to work around your schedule and appointments are scheduled at your convenience! Many of our studies take an hour or less.

How can my family participate?

Fill out a family information form by clicking here!

Or call us at: 617-358-0561



What's new:

Boston University's Center of Autism Research Excellence

The Center for Autism Research Excellence recently moved into our suite at 100 Cummington. We currently have four projects underway which focus on understanding language, social and communication development in autism spectrum disorder:



The Infant Sibling Project, conducted in collaboration with colleagues at Children's Hospital aims to identify risk markers for autism or language delays that may be present during the first year of life. Identifying at this early stage could allow for early intervention much sooner, greatly increasing the potential for such treatments to have lasting, positive impacts.

The ACE addresses the question of why some children with autism do not acquire spoken language. Our main studies for children and adolescents investigate behavioral and brain systems related to speech production and sound processing. We are also testing a novel behavioral treatment for promoting speech in nonverbal children that has shown promise in prior work.

The BILD project focuses on how the brain processes language using MRI. We are interested in whether children with autism use different brain pathways for language, and how they compare to children with other language-based learning disorders and typically developing children.

Finally, The Deaf Autism Research Project looks at autism in deaf children learning sign language. We hope this will lead to better treatment options for deaf children as well as a better understanding of how autism affects learning in both deaf and hearing children.

Click here to learn more about the work done at CARE!



All about the Brain and Early Experiences Lab

The Brain and Early Experiences Lab recently ran preliminary analyses on our biggest study, SEED (Social Experiences and Early Development). SEED examines babies' social skills at 6 months and how they relate to their social behavior and the development of their social brain at age one. We are also interested in how stress may impact babies' social development. We know that infant-directed speech (AKA "baby talk") helps your baby

learn language, but now the SEED study is finding a new benefit of infant-directed speech: talking to your baby also may help him or her manage stress! Babies who heard more infant directed speech at 6 months had lower levels of the stress hormone cortisol at 12 months. Furthermore, moms' levels of cortisol are higher when they are experiencing more sleep disruption. Moms had higher cortisol levels if their 6-month-old babies slept in the same room with them, woke up at least once per night, and slept fewer minutes at night. Moms' stress hormone levels did NOT relate to whether they reported feeling stressed. So, even if you're managing the stress of parenthood well, sleep deprivation still takes a toll on your body! For tips on solving common sleep challenges, check out:

http://www.zerotothree.org/child-development/sleep/sleep-challenges.html



The CDL's

"As educators, we seek to share

important findings from

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conduct our science."

Parent Outreach Project

What is POP?

The Parent Outreach Project (POP) is a new initiative at the Child Development Labs at BU that aims to establish stronger ties with our community. POP has a dual mission to both facilitate our research in developmental psychology and to extend education about child development to a broader range of families.

We depend on families, schools and community groups that are willing to participate in our studies. As

researchers and educators, we seek to share important findings from developmental psychology with others and explain how we conduct our science. As life-long learners ourselves, we have also found that parents, teachers, children and others have a great deal to teach us about child development! Through the POP initiative we plan to create a productive and ongoing conversation with the community about child development.

Connecting with diverse populations.

Families living in the Boston area come from a wide range of backgrounds, and diversity is one of the strengths of our hometown. Diversity exists on many levels: racial and ethnic, cultural and religious, economic and educational. One of the goals of POP is to extend our contact with diverse communities across the Boston area. We recognize the

importance of individual and group differences and seek to understand the many pathways of healthy child development. We

also recognize that large segments of the population are often left out of conversations about child development research and policy. We hope to bridge this gap by establishing a two-way conversation with parents, teachers and community organizations. We do this by partnering with local organizations that are trusted and established in serving their communities.



Parent Outreach Project

continued...

What does partnering mean?

Through the Parent Outreach Project, we establish voluntary associations with organizations that serve local parents and families. We meet with each organization to determine how we can work together. Our developmental psychologists give talks and hold discussions with parent groups and

staff members tailored to their interests.

We attend family events where we talk to parents about our research and invite them to participate in studies at our labs. We also bring fun activities for children to these events. As a new initiative, we are interested in creative approaches to advancing our research and educational missions with our partners.

"We are interested in creative approaches to advancing our research and educational missions with our partners."



POP Directors Dr. Amanda Tarullo, Dr. Stacy Doan and Dr. Peter Blake

Educational resources.

As part of our educational mission, we have a web page listing trusted educational resources for parents and educators. We update this page weekly with news articles on child development research. We are currently setting up Twitter and Facebook accounts so that people can receive notifications of these

updates and information about new studies at BU.

Board of Advisors

To guide the Parent Outreach Project, we are creating a board of advisors consisting of diverse representatives from parent groups and community organizations. For more information about POP. or if you are interested in joining our board of advisors, please contact Peter Blake. pblake@bu.edu.

For more information visit our POP page!

Thank you!

The Child Development Labs are grateful to all the families who participated in our research over the past year! Without your efforts, our research would not have been possible!

We love meeting new families and those who visit our lab have a great time participating in our studies because they are designed as fun games. To find out more, feel free to check out our website: bu.edu/cdl.

To participate in studies, please click here!



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You may have heard about us from CBS Boston, Channel 4, NPR, Bostonia Magazine, Boston Globe, Boston.com and more!



