

# **NEWS FROM THE** SWARTHMORE KIDLAB

Cognition and Development Lab, Department of Psychology, Swarthmore College

## Letter from the KidLab

It's been an exciting year at the Swarthmore KidLab! We have conducted numerous projects, which we are excited to tell you about in this newsletter. At the KidLab, we have studied how children learn about the world by using comparison learning. We looked at how children imitate others to learn about new things, how children convey information to peers, how they reason about their social worlds, and the impact of bilingualism on children's learning.

On behalf of our student researchers, we would like to sincerely thank all parents, teachers, principals, and business-owners who have collaborated with us in our research effort to better understand development and learning. Thank you so much for your time and help. We hope you will continue to join us in our research effort as we have many new studies in this upcoming school year. If you know any other families who would be interested in joining the Swarthmore KidLab, please spread the word!

If you are reading this and have not participated in the KidLab before but are interested in participating, there is a signup form on our website (kidlab.swarthmore.edu) or feel free to give us a call at (610) 328-7813. We have one-time, 30-minute appointments available at times convenient to any family. We will introduce you to our lab and play a fun game with your child—which informs our research questions. We also conduct research at schools and afterschool programs. If you receive a consent form, please sign and return the consent form to your child's teacher so your child can participate at her/his school.

If you have any questions or want to learn more about any of our studies below, feel free to reach out to us. We'd love to hear from you!



## Children use better evidence to learn about their social world

In this research we ask if 5-7-year-olds children can differentiate between better and worse samples of evidence. One thing that makes for better evidence is diversity. For example, if you wanted to learn if all animals had a femur bone, it would be more compelling to look at a gorilla and a squirrel rather than a gorilla and a monkey.

This is quite a sophisticated reasoning, one that we adults employ in scientific contexts. Amazingly, we learned from our research that even 5-year-olds are capable of selecting the better evidence. But they only do so when they are learning about the social world about people's preferences—but not when they are learning about animals. These results are exciting as they tell us how children can use sophisticated rationale in their reasoning about the social world.

Alexander Noyes '15 and Stella Christie gave a talk about this research at the CEU Conference on Cognitive Development, Budapest, Hungary, January, 2015

#### New publication from our Lab:

Noyes, A., & Christie, S. (in press). Children Prefer Diverse Samples for Inductive Reasoning in the Social Domain. Child Development.

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Special

Thanks!



## Three-year-olds use comparison to teach others

You may have noticed that children are natural teachers. For example, If their friends or siblings do not play with a toy in the correct way, children would not hesitate to correct them! Our study is investigating these abilities in 3- and 4-year-old children in greater details. In this study, children are asked to teach several new words to an individual who does not know English. In order to do this, participants will need to choose several picture cards; as shown above, some of which are more informative than others. Our question is whether children choose the most informative comparisons to teach others.

Stella Christie, Wynter Lastarria '15 and David Fialkow '15 presented this study in the Society of Research in Child Development Conference, Philadelphia, March 2015

## Bilingualism and Comparison Learning

Learning two (or more) languages at the same time present different learning challenges than learning just one language. We are investigating whether the learning challenges that are faced by bilinguals impact other cognitive domains beyond language acquisition.

To research this question we asked bilingual and monolingual children to complete analogical reasoning tasks. Analogical reasoning is a key cognitive ability that allows learners—adults and children alike—to gain new abstractions and generalizations.

For example, most scientific discoveries are results of analogical reasoning: being able to apply familiar knowledge to new, unknown areas.

We need more 4-7-year-olds bilinguals in this study. If your child speak 2 or more languages, let us know!

## Who do you imitate?

We learn a lot by imitating others, as this often provides a shortcut for learning. Developmental research has shown that children are good imitators—which make them good learners. Effective imitation, however, means that we should not just imitate everything and everyone. This is the question in this research: are children selective in their imitation learning? Who do they choose to imitate and why?

This is study is very much ongoing and we are beginning to discover exciting results. We hope you will participate in this study so we can fully understand imitation learning!

Stella Christie, Zachary Murphy'14 and Averill Obee'15 presented a portion of this study at the Cognitive Science Conference in Quebec City, Canada, August, 2014.

- · Bricks 4 Kidz Lego Camp
- · Chester Children's Chorus
- Children's Ark at St. George's
- Creative Living Room
- Delco Gymnastics
- Media –Swarthmore Chinese School
- Olympik Tots
- Rose Tree Day School
- Science Explorers Camp
- Swarthmore Community Center
- Swarthmore Friends Nursery School
- Swarthmore Playgroup and Wallingford Moms Club
- Swarthmore Presbyterian Nursery Day School
- Trinity Cooperative Day Nursery
- Explorers Kindergarten
- Swarthmore Recreation Association (SRA) Summer Activities
- · The Rock School West
- Middletown Free Library
- Media-Swarthmore Chinese School
- Delco Library System
  - · Helen Kate Furness Free Library
  - Media-Upper Providence Public Library
  - · Swarthmore Public Library
  - Aston Public Library

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