Lab Overview

The MSU Autism Lab was founded in 2007 by Brooke Ingersoll, PhD, BCBA. Our lab is interested in studying social-communication development in children with ASD. In particular, we are interested in the development and evaluation of interventions to improve these skills. We are also interested in the effect of ASD on the family.

Special Topic: Siblings

Typically-developing siblings play an important role in the life of a child with ASD. However, like all sibling relationships, it can be complicated when one child has ASD. The relationship may range from supportive, to uninvolved, to antagonistic. Parents often report concerns about the effect that their child with ASD may have on the typically-developing sibling.

Research on this topic is very mixed. Some studies suggest that typically-developing siblings of children with ASD are at a higher risk of having adjustment problems than other siblings. Other studies find no difference in terms of adjustment, while some studies have found benefits for the typically developing siblings, including increased empathy and prosocial behavior. There are a number of factors that may affect how well typically-developing siblings cope with having a sibling with ASD. There are also some strategies that can help siblings better understand their sibling with ASD and may improve the sibling relationship. In this issue, we highlight some of our research in this area. In addition, one of our lab members, Sara Tischler, discusses her personal experience as a sibling of a child with ASD and provides some suggestions for parents.
Research Highlights

**Sibling Adjustment**
We asked 70 mothers who had a child with ASD and a child with typical development to complete questionnaires on their own symptoms of depression, the impact of the child with ASD on the family, the severity of child’s symptoms of ASD, and the behavioral adjustment and the Broader Autism Phenotype (BAP) in the typical sibling. The BAP refers to sub-clinical traits in first degree relatives that may be related to ASD but do not meet diagnostic criteria, such as subtle difficulties with language and social skills.

Results showed siblings who expressed more characteristics of the BAP were at a higher risk of adjustment problems. In addition, the severity of symptoms of the child with ASD was related to adjustment problems in the typically-developing sibling. However, mothers’ depression fully mediated this relationship. In other words, more severe ASD symptoms in the child lead to greater symptoms of depression in the mothers, which in turn contributed to poorer sibling adjustment.

**Sibling-Implemented RIT**
Both parents and peers have been successful at implementing interventions targeting social interactions with children with ASD. Siblings may be particularly effective intervention providers because they are similar in age and spend a significant amount of time with their sibling in a variety of contexts.

This study examined sibling-implemented Reciprocal Imitation Training (RIT), a naturalistic imitation intervention for children with ASD. Three typical siblings were trained to use RIT with their sibling with ASD. All three were taught the intervention procedure. One child with ASD improved his spontaneous imitation and all three improved their prompted imitation. In addition, all children with ASD showed increases in at least one additional behavior, including supported joint attention and appropriate language use. Further, siblings reported enjoying learning about how to better engage the child with ASD.

Overall, these results suggest that sibling-implemented RIT may be a promising intervention for young children with autism and their siblings.

**A Personal Perspective**
Hello! My name is Sara Tischler and I’m a new member of the Autism Lab. I’m very passionate about this because my younger brother, Sean, is on the spectrum himself. He has really inspired me to want to help other children like him.
As a sibling, I have some advice for any parents struggling to raise multiple children, including a child with autism. When Sean was first diagnosed, I was in middle school. At the time, I was embarrassed by his behavior in public and didn’t want to tell anyone that he had autism. I began studying the autism spectrum on my own, and my parents taught me everything they could about it. With this new knowledge, I became more understanding of Sean, and I became his biggest advocate. If anyone made fun of him or asked questions about him, I would answer honestly and matter-of-factly.

From my experience, I think it’s best to educate all of your children about autism and the varying degrees of the spectrum. That way they are better able to combat bullies and can become an advocate for their sibling. Plus, it helps them understand exactly what their sibling is going through and more able to form a bond with them.

I’ve included a list of resources that have helped me and my family in the past. I hope they will help you as much as they helped us!

- Our local chapter of the Autism Society of America.
- Dr. Tony Attwood (tonyattwood.com.au).
- “Quirky Yes, Hopeless No” by Dr. Cynthia La Brie Norall.

Take-Home Message

The take-home message is that, while siblings of children with ASD experience unique stressors, most are well-adjusted. However, some siblings may have difficulty coping with these stressors and all siblings should be provided with opportunities to improve their relationship with their sibling and cope with their emotions. These may include:

- Helping the sibling understand ASD
- Helping the sibling discuss negative emotions
- Teaching the sibling appropriate ways to cope with embarrassment and frustration
- Providing the sibling with special time alone with caregivers
- Teaching the sibling strategies for engaging the child with ASD in play
- Enrolling the sibling in a support group with similar-aged peers
- Enrolling the sibling in individual counseling, if necessary
- Making sure that caregivers take care of themselves – Caregivers who are experiencing increased stress or depression should seek help for themselves

A big thank you to Sara, for sharing her personal perspective on being a sibling of a child with autism😊
Current Projects

**Reciprocal Imitation Training (RIT):** This project studies the effects of a developmentally-based intervention that teaches imitation within a social context. We are no longer recruiting for this study, but continue to follow-up with our past participants.

We are now working with the Center for Discovery in Harris, NY, as they train adolescents with autism using Reciprocal Imitation Training.

**Internet-Based Parent Training in (RIT):** This study examines the effectiveness of an internet-delivered, self-paced parent training program that introduce techniques involved in RIT.

If you have a child with ASD between the ages of 2-6 years that has difficulty with imitation, please contact Allison Wainer to learn more about the eligibility criteria for this study. 517-432-8031.

**Project ImPACT:** This project trains providers to teach parents of children with ASD evidence-based strategies for improving their child’s social communication skills during on-going family routines.

We are working with several programs to implement the Project ImPACT curriculum with their families, including Ottawa Area ISD, Livingston ESA, Clinton County RESA, Clinton-Eaton-Ingham CMH, Ingham ISD (Fall 2010), and San Diego County Bridge Collaborative.

In addition to implementation in the school environment, our lab is training several families using this program by individual format. We also have recently added a project which consists of direct implementation of the Project ImPACT interventions to children in our lab, using trained research assistants as the intervention providers.

**Language Intervention:** We are comparing the effect of three different naturalistic language interventions used with young children to determine their ability to target different language functions in children with ASD.

*If you are interested in learning more about any project listed, or want to be on our waiting list for our intervention studies, please call Nikki Bonter at 517-432-8031*

Family Tidbits

In this section of our newsletter, we would like to highlight little family stories, or exciting “tidbits” concerning your child with ASD. It can be anything that brings a smile to your face; an accomplishment; a new word; a happy day; a funny happening.

When you have something to share, please e-mail it to bonterni@msu.edu, and we will be sure to add it to one of our upcoming newsletters. Thank you!
**Autism Lab**

**Benjamin, 5y** Benjamin did a great job at the dentist! He had first time dental work without sedation. They sensory 'prepped' him with scotch tape mustaches and dental kit playdoh, a fake battery operated drill and filling material. They also showed him pictures of the papoose board and practiced putting the blanket on mommy. No outbursts and few tears. He did great! Way to go Benjamin!!!

**Dominic, 5y** Dominic’s latest thing is saying to his mom, “Mommy-Baby-bop, Mommy-iguana, Mommy-butterfly” and then looks to his mom for a reaction. His mom then says, “No, mommy is not baby-bop, an iguana or a butterfly.” He then looks at mom and starts laughing! Sounds like he is telling his own jokes ☺ Also, mom has been doing word games with Dominic and asking him what letter different words start with, and about 50% of the time, he answers correctly!! Way to go Dominic!!!

**Kael, 2 ½** Kael’s mom is learning the Project ImPACT Program and is pleased to report that Kael is imitating her sounds much more often, and sometimes even more☺ Way to go Kael!!!

**Jacob, 5y** Jacob is learning his numbers and letters and starting to read basic words! In addition, Jacob is ordering his own drinks when the family is out to dinner. When asked what he would like to drink he says, “I want chocolate milk please.” Way to go Jacob!!!

**Ryder, 5y** Ryder started kindergarten this year and is thriving! He approached mom recently and spontaneously said “I want to eat hot lunch at school.” Apparently he saw other kids eat macaroni and cheese and felt a little deprived! Mom also found him in the kitchen one day having made his whole lunch for school and said “I made lunch!” all proud of himself. Way to go Ryder!!!

*Thank you to all families who shared with us this month!

**Autism Lab Family Outing**

On February 4th, we had a lab family outing at Jumpin’ Jax in Lansing. A number of families from our past, current, and future studies attended. It was a fun way for us to keep in touch and for families to meet each other.

We schedule several lab outings throughout the year. If you would like to be informed of upcoming outings, please email Nikki Bonter at bonterni@msu.edu and ask to be put on our contact list.