

Wisconsin Twin Research

University of Wisconsin - Madison

Waisman Center • 1500 Highland Avenue • Madison, WI 53705 • www.waisman.wisc.edu/twinresearch

Director:

H. Hill Goldsmith, Ph.D.

Collaborators:

UW Dept. of Psychology

UW Dept. of Psychiatry

Waisman Center

Arizona State University

Medical College of Wisconsin

Feature Articles:

- ✦ Development of Empathic Responding
- ✦ Cultural Diversity
- ✦ Research on Autism
- ✦ New web site!
- ✦ Meet Dr. Jeff Gagne
- ✦ Kids in Danger: A Child Product Advocacy Group

Funding for research is provided by grant awards from the National Institute of Health, National Alliance for Autism Research, Waisman Center & private foundations.



Waisman
Center



Early Development of Empathy

Michele Volbrecht, Genetics of Emotional Ontogeny (GEO) Laboratory

We recently investigated early development of empathy. Empathy consists of cognitive, emotional, and behavioral components.

Cognitive empathy is the ability to understand a distressing situation, recognize another's emotional state, and assume that person's perspective. For example, if a parent stubbed his or her toe on a stool and cried out in pain, a child showing cognitive empathy might examine the stool closely to understand how it hurt the toe.

Emotional empathy is the ability to experience feelings that have been expressed by another person.

Behavioral empathy is the attempt to help another in distress.

There were four main findings. We learned that empathy can be seen as early as the second year; girls and boys display empathy differently; empathy at age two can be somewhat predicted by smiling and laughing at age one; and the environment is important in shaping empathy. We included 584 twins between ages 12 and 25 months. Families visited our laboratory at various ages and stages of development. The twins' primary caregiver was instructed to pretend to pinch his or her finger in a clipboard and simulate pain for 30 seconds. We concluded that while two-year-olds do not respond with sophisticated forms of empathy, they display a range of empathic responses such as showing facial expressions of concern, kissing their caregivers' finger, and/or seeking help.

Current psychological literature suggests that the development of empathy is related to *positive affect*, such as laughing, smiling, and clapping. This held true in our investigations. A child's ability to respond empathically at age two could be partially predicted by observations of his or her positive affect at twelve months. The nature of this prediction differed by gender. Girls displayed more concern and helping behavior than boys. However, boys engaged in slightly more cognitive empathy than girls. These findings suggest that although girls exhibited greater emotional empathy and helping behavior than boys, boys are as capable of showing cognitive empathy as girls. There were no significant differences between boys and girls their positive affect.

Studying twins allowed us to consider genetic and environmental influences on positive affect and empathic responding. We found that the environment affected positive affect and empathy-related concern and helping. Genetics seemed to influence cognitive empathy. An optimistic take-home message from this research is that a warm, nurturing family environment could foster both positive affect and empathy in young children. In the future, we hope to further explore the specific family processes which promote empathy development in children.



Exploring Culture in Our Twin Studies

Twin studies present a unique opportunity to learn how culture and family background influence child behavior and emotion. We are committed to upholding a national standard of culturally sensitive research, so **we need your help!** We want to enroll more families of ethnic-minority descent including African American, American Indian, Asian, Hispanic and other families of twins with diverse backgrounds. Families are paid for participation. Spanish speaking staff is available as needed. If you or a family you know may be interested in learning more about this research opportunity, please call us toll-free at (866) 230-2560 or email Kristine at kpmarceau@wisc.edu.

Twins and Research on Autism

We estimate that there are as many as 130 pairs of twins in Wisconsin under the age of 18 in which one or both twins has autism or some other form of pervasive developmental disorder (PDD-NOS or Asperger Syndrome). We have great personal and scientific interest in these disorders, and Dr. Goldsmith and Dr. Gernsbacher have received a large grant from the National Institute of Health to fund a twin research study to help understand the complexities of autism.

In the first phase of our study on autism spectrum disorders, parents are interviewed via telephone about

their child(ren)'s developmental and medical history. The interview generally takes 45-60 minutes and can be scheduled whenever is convenient to the family. Families are paid \$25 for participating in this interview. In the next phase, we re-contact some families and ask them to participate in a follow up interview, which is also compensated.

In order to accurately assess the prevalence of autism in twin pairs, **we would like to know** if your family or someone you know has a family where **one or both twins have some form of autism**, even if they choose not to participate.

Thus far, we have located about 100 twin pairs in which one or both has autism or a related challenge.

We would appreciate a phone call or email from parents of twins with autism living in Wisconsin. It is not important if the twins are identical or fraternal, boys or girls, or even if the co-twin has any behavioral issues or not; we are interested in all concerns of the autism spectrum.

Please contact Shaun Schweigert for more information:
tap@waisman.wisc.edu
(866) 230-2560 [toll-free]
(608) 262-5574 [local]



Check out our new web site! www.waisman.wisc.edu/twinresearch



We have a new web site! Wisconsin Twin Research consists of three collaborative labs: Wisconsin Twin Project, Twin Autism Project and Genetics of Emotional Ontogeny. The three labs recently created a cohesive web site for Wisconsin Twin Research. There are over 100 pages and links with content for parents of twins.

New features for parents and families include expanded resources, additional FAQ, and staff profiles.

Feedback is welcome. Comments on the new site should be sent to Sarah at grider@wisc.edu.

Introducing Dr. Jeff Gagne, Postdoctoral Trainee

Jeff is a postdoctoral trainee in the NIMH-funded Training Program in Emotion Research in the Psychology Department and has been working at the UW Twin Center since February of 2007. His interests are in child development, behavioral genetics, temperament, and psychopathology. Currently, he is studying genetic and environmental influences on temperament in the GEO sample (3-36 month-old twins), and plans to collaborate with researchers interested in the overlap between temperament and important developmental outcomes while training at UW-Madison.

Jeff's degrees include a B.A. in Psychology from Boston College, an Ed.M. in Counseling, an M.A. in

Psychology, and a Ph.D. in Developmental Psychology from Boston University. We wrote his thesis on the etiology of inhibitory control in early childhood. He has published several papers and presented at many conferences, and was the recipient of several honors while a graduate student (including awards from the American Psychological Association and the National Institute of Mental Health).

Jeff is originally from Boston, and really enjoys the quality of life in Madison. He spends most of his down time with his wife Jen, a clinician at a local mental health center. They enjoy dining out, reading, seeing films, live music and sporting events, poker, and traveling.



Kids in Danger: Child Product Advocacy Group Celebrates Ten Years

Kids In Danger (KID) is a nonprofit organization dedicated to protecting children by improving children's product safety. KID was founded in 1998 by the parents of sixteen-month-old Danny Keysar who died in his Chicago child care home when a portable crib collapsed around his neck. Although the portable crib had been recalled five years earlier, word of its danger had not reached Danny's parents, child care provider, or the state inspector who visited the child care home just eight days before Danny's death. To date, 16 children have died in cribs of similar faulty design. And portable cribs are just one of the myriad children's products that may prove to be dangerous.

-Quoted from
www.kidsindanger.org

The KID web site is a good place to start your personal research about the safety of children's products you currently own or are considering purchasing. The site includes lists of recalled products, links to consumer reports, summaries of news reports and investigations, and much more.

In addition, KID has worked hard from its beginnings to convince political leaders to focus on policy and legislation to protect children from dangerous products.

KID has declared 2007 "The Year of the Recall," with nearly record-breaking levels of injuries and the largest crib recall in history, with over one million **Simplicity and Graco cribs** being recalled. As of February 14, 2008, over 44 items

have already been recalled in 2008, including 49,000 **Trek MT220 Girls Bicycles** made in Wisconsin. The bicycle's frame can break during use, causing the rider to lose control and suffer injuries.

Stay informed:

- Register new items with the manufacturer; this will ensure that recall notices are sent directly to your home.
- Search for specific products by manufacturer and model number on the U.S. Consumer Product Safety Commission (CPSC) web site, www.cpsc.gov.
- Check consumer reports www.consumerreports.org



Thank you for participating in our telephone interviews, questionnaires, and home visits! Your perspective is invaluable to our work and we have enjoyed meeting so many wonderful families. Your participation contributes to advances in child development research and improves our understanding of individual differences and the complexities of personality and behavior.

Enjoy your twins and have a wonderful spring season!

Moving? Want to know more about how to get involved? Contact us now!

 Toll free phone: (866) 230-2560

 Email: wisconsintwins@waisman.wisc.edu
<http://waisman.wisc.edu/twinresearch>

 Write Us:
Wisconsin Twin Project
1500 Highland Ave
Madison, WI 53705