

Wisconsin Twin Research

University of Wisconsin - Madison

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

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Feature Articles:

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- ✦ Cultural Diversity
- ✦ Research on Autism
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Pregnancy, Child Birth, and Behavior of Twins

Anna Wagner and Nicole Schmidt, Wisconsin Twin Project

We recently examined the relationship between events during pregnancy, child birth, and child behavior during early school years. **The goal of the study was to learn more about how the first years of formal schooling are affected by pregnancy, birth, and the days immediately following birth.**

This study included a sample of 750 twins who participated in the Wisconsin Twin Project when they were 7-8 years old. The statewide sample allowed us to include a range of hospital birth practices in rural and urban areas throughout Wisconsin. All twins were born between 1989 and 1998. Parents rated their twins' behaviors and emotions in a variety of ways during a series of interviews and written questionnaires. Features of pregnancy and child birth were transcribed from medical records.

We considered multiple aspects of pregnancy such as prenatal maternal health, as well as aspects of labor and child birth, such as interventions and prematurity. Behaviors measured at age 7-8 included inattention, impulsivity, activity level, and oppositionality

During the course of the study, we found that boys and girls may be influenced differently. As a result, **another goal of this study was to clarify how gender interacts with events during pregnancy and birth.**

There were several notable results. We estimated that over half of twin pregnancies resulted in "very low" or "low" risk for maternal complications. Complications such as bedrest were noted in 19% of pregnancies. In addition, about half of the pregnancies resulted in "very low" or "low" risk for twin complications. The rate of post-birth complications for twins was much less still. The average gestational age for twins in this group was 36.2 weeks. Average birthweight for twins was 5.53 pounds. Additionally, roughly 97% of the twins in our study were in good general health and needed no special immediate care in the first five minutes of life.

Birthweight and gestational age were related to inattention in both genders. Twins with low birthweight and prematurity tended to have more inattentive-type behaviors. These complications were also associated with common conditions such as apnea and jaundice. However, longer term consequences are not known.

In general, findings were positive: by school age, behavioral problems related to inattention, activity level, and oppositional behavior are relatively unaffected by general adversity and hardship in the neonatal and perinatal periods. Babies show significant resilience when faced with adversity during the first few days of life.



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. 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 Patrick at pheath@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 140 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 aspects of the autism spectrum.



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

Fun Twin Facts*

What are the odds?: The odds of having more than one set of identical twins is estimated to be about 1 in 70,000.

Determining Zygosity: It was once thought that zygosity could be determined by the number of placentas, but both fraternal and identical twins can have one or two placentas. Fraternal twins' eggs may implant close together allowing the placentas to become fused and take on the appearance of one placenta. Identical twins can have two placentas if the egg splits before implantation, causing separate implantation and resulting in the formation of two separate placentas.

**Taken from The National Organization of Twins Clubs, www.nomotc.org*

Reading With Your Twins



Twins, like everyone else, want to read about people like themselves! They want to see themselves and their lives in the characters and storylines. Since the majority of children's books are written about singletons, this season we are including a few suggested readings that include twins as main characters and some of the special circumstances that twins may encounter.



Ages 4-8

About Twins by Shelley Rotner
I Am A Police Officer by Cynthia Benjamin

Just Like Me by Barbarya J. Neasi
Twin Stories: Kaos...Bad Dog
 and

Twin Stories: Shhh...It's Bertha
 by Lisa Van Sickle

Ages 9-12

All Rapped Up (Sister, Sister) by Janet Quin-Harkin

Double Act by Jacqueline Wilson
Mitch and Amy by Beverly Cleary

Young Adult

Jacob I Have Loved by Katherine Paterson

Other book series involving twins:

Sweet Valley High Series by Francine Pascal

The Bobsey Twins Series by Laura Lee Hope

Meet the New Staff at WTP



Lucas Moore (left) is a recent graduate of the University of Wisconsin where he earned a B.A. in Psychology. He is originally from Sparta, Wisconsin. He joined the Wisconsin Twin Project as an undergraduate in May 2007 as both an office research assistant and a member of a adolescent home visit teams. Lucas became a staff member shortly after his graduation in May 2008 and is responsible for supervising undergraduate research assistants, organizing the publication of the Wisconsin Twin Research Newsletters, managing the website, coordinating and administering telephone interviews, and going on home visits as an interviewer of both the primary caregiver and the twins. In his free time, Lucas enjoys traveling, spending time with family and friends, and both playing and coaching hockey. After continuing his work with WTP for two or more years, Lucas plans on attending graduate school.

Patrick Heath (right) is a recent graduate of the University of Wisconsin where he earned a B.S. in Psychology. Patrick is originally from St. Paul, Minnesota, where he enjoys the local music scene. Patrick joined the Wisconsin Twin Project as an undergraduate in January 2007 as a research assistant and as a member of the home visit teams. Patrick became a staff member shortly after his graduation in May 2008 and is responsible for supervising undergraduate research assistants, multi-cultural recruitment and scheduling, assuring all families' participation is completed, coding, and interviewing primary caregivers on the phone and during home visits. In his free time, Patrick is an avid cyclist and music enthusiast. He enjoys spending time with family and friends above all else. After continuing his work with WTP for two or more years, he plans to attend graduate school.





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. Thanks again ☺

Enjoy your twins, and have a wonderful summer!

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>

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