#### **UNIVERSITY OF COLORADO**

#### **INSTITUTE FOR BEHAVIORAL GENETICS**

LONGITUDINAL TWIN STUDY

### Volume 14

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## THE GENETICS OF SHYNESS

For all personality and behavioral characteristics, there is a large range in which people fit. With shyness, this range extends from extremely shy and bashful to extremely talkative and outgoing. Most people fit somewhere in between these two extremes. Different levels of shyness begin to show themselves at a very young age. In this study, researchers looked at twin shyness at 2 different ages (14 months and 20 months) and in two different settings (in the lab and at home) to see if levels of shyness remained stable through time and across different situations.

Shyness is not easily measured, especially at 14 and 20 months of age. During home and lab visits testers videotaped their interactions with the twins. Certain behaviors were later rated as to levels of observed shyness. Some of these were:

- Whether or not the child played with tester supplied toys.
- Whether the child stayed near to his or her mother.
- Whether the child vocalized.
- Whether the child cried.

Researchers found that levels of shyness were more similar in monozygotic (identical) twins than in dizygotic (fraternal) twins at both ages and in both situations. This suggests that individuals are born with a genetic tendency towards a certain level of shyness. However, levels of shyness did change for some children from 14 to 20 months. These differences were thought to be the result of environmental influences. As children grow up they look to the rules and standards in their environments to help direct their behavior. Similarly, fraternal twins became more similar in how they reacted to testers who visited their homes at 20 months. This was most likely due to parents teaching their children how to greet visitors to their home. In this study, environment had an influence on the changes observed in the children's behavior, whereas genetics influenced the ways in which levels of shyness remained the same.

The Development of Observed Shyness from 14 to 20 months. Shyness in Context. Cherny, S., Saudino, K., Fulker, D., Plomin, R., Corley, R., De-Fries, J. <u>Infacy to Early Childhood</u>, 2001, pp. 269-282.

#### TESTING SCHEDULE

AGE	TIME	TYPE
11	45 min	Telephone
12	5 hours	In-person
13-15	1.5 hours	Telephone
16	4 hours	In-person
17	6 hours	In-person

#### HIGHLIGHTS 2001–02

- The book 'Infancy to Early Childhood Genetic and Environmental Influences on Development Change' published in 2001
- 724 individuals tested from 347 families located in 32 states & 3 countries.
- 27 articles and abstracts published or in press.

### NEW LTS WEBSITE UP AND RUNNING

Lose your directions to our lab? Want to look through summaries of our published articles or find links to other twin related web sites? All of this information and more can be found at our new website. The address is:

#### http://ibgwww.colorado. edu/lts

In addition to directions and articles you will also find recent news, statistics, past pictures and newsletters, and contact information for the project. If you have any questions or suggestions about information you would like to see on our website, you can email us directly from the site or at wrightc@colorado.edu. Thanks!



# MEET OUR 12 YEAR TESTERS

The 12 year visit is an extensive day of testing, and most 12-year-olds leave our offices very happy to have received their checks and very tired from all of those questions, questionnaires, and tasks they completed throughout the day. Imagine having to go through that battery of tests every weekend! In a sense that's what our 12 year testers do. Of course they ask the questions instead of answering them, but nevertheless they spend most weekends in the lab throughout the summer. We have a rather large staff here at IBG, and all of them are specialists at administering certain types of tests. Since many of you will spend or have spent a good deal of time with our 12 year testers, we thought we would let you know a little more about them.



Billy Keith has been with IBG for 4 years. He conducts in-person and telephone testing with our Colorado Adoption Project as well as lab visits with 12-, 16- and 17-year-old twins for the LTS. This is Billy's fourth year of testing 12-year-old twins. He has a bachelor's degree in psychology and physical education from Cornell College in Iowa and is currently taking master level classes in school psychology at the University of Colorado.

**Billy Keith** 

This is Amy Rudolph's second year as an IBG research assistant. She conducts phone interviews and tests with LTS twins as well as in-person testing with 12-year-olds. She is a 1999 graduate of the University of Oregon with a BS in anthropology. In the fall Amy will be enrolled in the masters program of anthropology at C.U. She will continue her work at IBG as a part time employee.



**Amy Rudolph** 



Caren Lowe is a second year tester with IBG. She currently does inperson testing with 12-year-olds as well as 16- and 17-year-old twins. Caren graduated from the University of Minnesota (the twin cities!) in 1997 with a bachelors degree in child psychology. While in college she researched memory development in young children and continues to pursue this area of interest.

**Caren Lowe** 

Scott Sabella has been with IBG for just over a year. In addition to 12 year testing he is also the lead tester for our new 'Executive Function' measure that is administered to 17-year-olds. Scott earned his bachelor's degree in psychology and math from St. Lawrence University in New York and a masters degree in nueropsychology from the University of Northern Colorado. Scott is currently applying for doctorate programs in the area of brain injury rehabilitation.



Scott Sabella

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