Graduate student Di Samek and her adviser Dr. Martha Rueter recently had a paper accepted into the Journal of Family Psychology that examined sibling influences on teen substance use, measured by usage of tobacco, alcohol, and marijuana. Using data from the Sibling Interaction and Behavior Study (SIBS), the researchers found that younger siblings were more likely to use substances by their second visit to the study if their older siblings were already using substances when they first visited. This relationship was no different across adopted or biological siblings, indicating important sibling socializing influences across a variety of sibling types.

The authors also examined how feeling close to an older sibling influences younger sibling substance use. They found that the closer the younger sibling felt to their older sibling, as reported at the time of their first visit to the study, the less likely they were to be using substances approximately 3 years later.

On the other hand, they found important influences of sibling gender in these relationships. For opposite-sex siblings, they found that behavioral closeness (hanging out and having fun together) was particularly important in its relationship to lower levels of younger sibling substance use. The researchers hypothesize that hanging out with an opposite-sex sibling could encourage better self-esteem when interacting with the opposite sex outside of the family. Although this theory was not tested, it could be the case since adolescence is a time when interacting with the opposite sex is new and highly influential on teen identity. Further research is necessary to see if the researchers’ hypothesis is supported.

Additionally, the research showed that for younger sisters (regardless of the sex of their older sibling), emotional closeness (feeling love, affect, and caring about their sibling) was particularly important in its relationship to lower levels of substance use. Again, they are unsure why this is the case only for younger sisters, but guess that close relationships may be more influential on young girls compared to young boys. There has been other research to back up this idea, showing that adolescent girls tend to have a higher level of emotional intelligence compared to adolescent boys.

Altogether, this research helps us better understand how siblings influence one another in adolescence. We are very grateful for participants in the SIBS Study who provided data so that we can continue to ask interesting questions, find out the answers, and potentially help young teens with substance use problems.
Meet the staff: Consensus

As a participant at the Minnesota Center for Twin and Family Research (MCTFR), you have interacted with many staff members over the years. There are several committees that work together to make the MCTFR run smoothly. One of those committees, Consensus, helps the study behind the scenes.

When you come in for a visit or talk to us on the phone, our interviewers ask you a variety of questions. However, what do we do with all of that information after you leave? That’s when the Consensus committee comes into play. Consensus is made up of a diverse group of staff members including co-investigators and interviewers. All of the team members have a Masters degree or are currently in graduate school. The Consensus committee acts as a team to look over the files and organize responses so it is easier for the researchers to analyze.

Tasha Walvig is one of the most experienced members of the Consensus team. She started working at the MCTFR in April 2002 as an interviewer and joined Consensus in September 2004. She has her Masters in Social Work from the University of Minnesota and is currently working on her PhD. Tasha is famous at the MCTFR for biking almost 20 miles to and from work every day! I almost do not see her without her bike. At the MCTFR, she really enjoys her job and working as a part of the MCTFR team.

She learns from her coworkers when she reads about interviews with participants she hasn’t interviewed. Tasha also really likes listening to people’s life experiences. It’s interesting that even though we ask the same questions of everyone, there is always a different response.

WHAT DO YOU FIND MOST CHALLENGING?
Some of the interviewing questions we ask participants are very detailed and personal. Tasha thinks the number of difficult questions we ask is very challenging. The MCTFR also has a smaller staff than in the past and it can be challenging to accommodate everyone’s schedule to have enough staff members available for visits. Tasha also misses interviewing younger twins. The 11 year old twins, our youngest group, often give the funniest responses.

WHAT PARTS OF THE INTERVIEW DO YOU LIKE THE MOST?
Since most of the interview is very structured, Tasha likes the open ended questions at the beginning and end of the interview the most. For example, sometimes we ask parents, “What is it like to be the parent of your twins?” Tasha likes these questions because they give people a chance to choose what they want to talk about. Another one of her favorite questions is, “What things in your life make you happy right now?” Overall, Tasha likes hearing about people’s life experiences because every person is so different.

Every staff member at the MCTFR works hard to contribute to the study. Staff members like Tasha are in a unique position to contribute their expertise and knowledge to multiple parts of the study by serving on more than one committee. Although we all work hard, this study would not be successful without the continued interest of our participants. We look forward to seeing you at your next visit!

Fun Facts about the MCTFR
23 years and counting

- 10,003: Number of MCTFR research participants.
- 27,082: Number of individual assessments completed.
- 6891: Number of participant pizzas served.
- 48: Number of US states represented by our Minnesota-born participants.
- 82: Number of brain wave caps purchased since the beginning of the study.
- 7: Number of countries represented.
- 1,315: Number of Saturday participant assessments completed.
- 67,687: Number of hours of participant interviews completed.
- 2011: Number of tubes of gel used in the psychophysiology lab.
- 247: Number of publications.
- 49,179: Number of participant checks written.

President Kaler Visits MCTFR
On September 21, the psychology department nominated the MCTFR to be a highlight of the new President of the University of Minnesota’s inauguration tour. Principal Investigators and Regents Professors, Drs. Matthew McCue and William Iacono, greeted President Kaler and led him on a tour of the study. He was able to meet staff members, tour the lab, and interact with a pair of twins who have participated in the study since age eleven. We were honored to have President Kaler tour the MCTFR.

University honors

“Twin Cities” Around the World

I dentical (monozygotic) twins make up about 0.2% of the world’s population—that’s a rate of about 2 per 1000 births, and that number appears to be constant in all regions worldwide. The percentage of fraternal ( dizygotic) twins, however, can vary greatly by country, region, culture, and city. In the United States, about 6-7% of the population is made up of fraternal twins, but there are several locations across the globe where twins are more common.

TWIN CITY #1: KODINHI, INDIA
In Kodinhi, India, about 30-35 per 1000 births are fraternal twins. This doesn’t seem like a lot—it’s about 7% (the same as the US national average). But when you take into account the fact that the rest of India has one of the lowest twin rates in the world (only 8 per 1000), this city is incredibly, one-of-a-kind. To date, there are no known studies investigating the unusual number of twins, and there doesn’t appear to be any significant differences that distinguish this town from those that surround it.

TWIN CITY #2: IGBO-ORA, NIGERIA
Igbo-Ora has been nicknamed the “Twin Capital of the World.” Out of every 1000 births, about 50 result in twins—that’s 10% overall. Igbo-Ora is the home of the Yoruba tribe, a distinguishing factor that may have something to do with the high number of twins. A study conducted at the University of Lagos (Lagos, Nigeria) suggests that the eating habits of the tribe may be a contributing factor, namely their heavy consumption of yams containing phytoestrogen. The researchers believe that phytoestrogen may increase the likelihood of Yoruba women releasing two eggs simultaneously, resulting in higher numbers of fraternal twins. However, until more research is conducted examining the link between phytoestrogen and fertility, this claim is hard to verify.

TWIN CITY #3: CANDIDO GODOI, BRAZIL
Candido Godoi has a twin rate about equal to that of Igbo-Ora; about 10% of children born are twins. The theories explaining this phenomenon range from the belief that a mysterious mineral adds a little kick to the town’s drinking water supply, to Nazi experimentation. However, some geneticists claim that the area’s vast isolation and high rate of inbreeding is the most likely cause. We encourage you to do a little research of your own to see which theory you find most plausible— or maybe come up with your own. Regardless, it’s a fun and interesting, “Google-worthy,” topic for both twins and non-twins alike.

University of Minnesota Twin Cities
Happy Holidays from the MCTFR!