Spring, 2007 Newsletter #3

NEWSLETTER

MICHIGAN STATE UNIVERSITY TWIN REGISTRY (MSUTR)

What Are the Odds?

- 1. The rate of twin births has gone up 65% since 1980.
- 2. Today, approximately one in thirty-two births are twin births.
- The likelihood of having identical twins is about 1 in 250.
- 4. The more pregnancies a woman has had, the greater her likelihood of having twins.
- 5. The older a woman is, the greater her chance of having twins.
- 6.12% of all twins born in the U.S. are identical.
- 7. 20-25% of women who take fertility drugs or undergo in vitro fertilization will have a multiple pregnancy (twins triplets, etc.).

Introduction

Hello again, from the Michigan State University Twin Registry (MSUTR)! First and foremost, we would like to thank you again for your participation in our twin research, as it will contribute to our understanding of genetic and environmental influences on a range of behaviors.

This third edition of the Newsletter has many new and exciting features. Our first article describes the second set of results from our twin studies. In addition, we provide intriguing information about the odds of having a twin birth. Finally, we take you on a "festival

of twins" tour around the globe and end by describing our current studies.

As always, please feel free to contact us about anything in this Newsletter, or about our studies in general. We are always eager to hear from past participants and welcome any suggestions for improving the Newsletter.

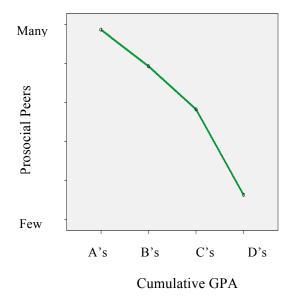
Sincerely,
Drs. Alex Burt and Kelly Klump
(Directors of the MSUTR)

Research Findings from Our Studies!

Drs. Burt and Klump are currently examining data from the child twin participants (aged 6-10) to determine the role of prosocial (i.e., smart, popular, liked by teachers, wellrespected) peers in children's academic success (defined as cumulative GPA, as reported by the twins' teachers). Using twins from our study, we are also able to examine the extent to which prosocial peer groups and good grades are related because a common set of genes or environmental factors contribute to both. For example, it could be that children who get good grades in school want to be friends with children who are similar to themselves, an association that would be genetic in origin. By contrast, it may be that having prosocial peers somehow enables children to get better grades (i.e., via good study partners, encouragement to get good grades, etc.), a process that would be environmental in origin.

Findings indicated that twins with more prosocial peers did indeed get better grades in school (see Figure 1). Importantly, analyses revealed that this association was solely environmental in origin. We know this because, as shown in Figure 2 (see page 2), identical twins (monozygotic: MZ) were not more similar than the fraternal twins (dizygotic: DZ). As MZ twins share 100% of their genes,

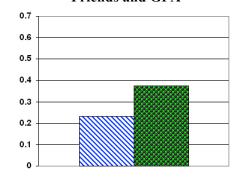
Figure 1. Association
between Children's Prosocial
Peers and GPA



while DZ twins share only 50% (on average), genetic influences should make MZ twins more similar to each other than DZ twins. Environmental influences, by contrast, are implied when MZ and DZ twins are equally similar (as they are here). We thus conclude that the association between prosocial peer affiliation and academic success is environmental in origin, and that having prosocial peers may actually increase success in school.

Drs. Kelly L. Klump and S. Alexandra Burt Michigan State University 107B Psychology Building East Lansing, MI 48824-1116

Figure 2. Association between Prosocial Friends and GPA





ADDRESS CORRECTION REQUESTED

Twins Day Festivals around the Globe

Did you know that there are special days set aside for twins all around the world? Different organizations dedicate a day to a week just for twins, offering food, entertainment and fun for twins and their families.

The closest of these festivals is in Twinsburg, Ohio. This tradition began in 1976 when 37 sets of twins attended the festival. Word has spread, however, and the number of people attending the event has grown to over 3,000 sets of twins from all over the world.

Our Current Twin Studies

Same-sex adolescent male and female twins ages 10-15 years old. This study aims to examine relationships between hormones, mood, eating attitudes and behaviors, family relationships, and personality characteristics. If you are interested in the adolescent twin study, or know someone who is, please contact us at:

burtlab@yahoo.com or call: (517) 355-6878

Other twin festivals span the globe. Starting to the north-Montreal, Canada; to the south – Texas and Puerto Rico; to the west - Italy and Poland; and finally, all the way on the other side of the world - Australia. In Australia, the twins festival is held every two years in a different city. In 2006, the gathering had approximately 1,500 people in attendance. They expect an even larger number in the years to come.

If you are interested in any of these events, see our website at www.msutwinstudies.com or simply Google "twins days" on your computer and check out all the fun dedicated to simply being a twin!

<u>Male adolescent twins ages 10 and 14.</u> This study examines the relationship between mood, eating attitudes, attentional abilities, and personality characteristics related to hormone levels during puberty.

If you are interested in the adult study, or know someone who is, please contact us at:

msutr@msu.edu or call: (517) 432-3665

***Other studies are assessing **opposite-sex twins ages 18-30** and **same-sex twins ages 6-10**. For more details and information on how to participate in these studies please visit our website below and click on *How to participate*.