Newsletter #9
Summer 2014

Michigan State University Twin Registry (MSUTR)



www.msutwinstudies.com

Twin Facts

- Massachusetts has the most twin births of any state (4.5 for every 100 births).¹
- 40% of twins invent their own languages (known as autonomous languages, or idioglossia).1
- ♦ Identical twins share the same DNA but do not have the same fingerprints.²
- Women who consume dairy are more likely to have twins.¹
- China has the lowest rate for multiple births, averaging 1 in 300.²
- ▼ Twins begin bonding in the womb. By examining 3D ultrasound images, one study found that fetuses start deliberately interacting at 14 weeks.^{2,3}

Introduction

Welcome to the 9th edition of the Michigan State University Twin Registry (MSUTR) Newsletter! This edition includes research findings from our studies, articles on twins in music and literature, and information about participating in our current twin studies.

This research would not be possible without the generosity of the twin participants and the 100+ volunteer research assistants who have dedicated over 50,000 hours of their time to the projects! Thank you for making our research possible and for making a difference in our quest to understand the origins of major medical, psychological, and social difficulties!

As always, feel free to contact us about anything in this newsletter or about any of our studies.

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

Research Findings from Our Studies!

The MSUTR researchers have continued to explore how similar identical and fraternal twins are in personality traits. For example, prior research from the MSUTR has shown that identical twins may be more similar than fraternal twins in their levels of impulsivity. The current study examined 364 female identical twins and 272 female fraternal twins with regard to their drive for achievement. The questionnaire used to examine achievement specifically assessed how hard and long the twins would be willing to work in order to accomplish a task. Figure 1 shows the similarity between identical twins and the similarity between fraternal twins in their drive for achievement. Our results suggested that identical twins were more similar in their drive for achievement compared to fraternal twins, who tended to differ more in their drive for achievement. Importantly, while this study indicates

that identical twins may be more similar to each other in their drive for achievement, it does not suggest that identical twins have higher drive for achievement than fraternal twins. Since identical twins share significantly more genes than fraternal twins, the results of this study suggest genes may play a role in drive for achievement. We hope to be able to continue to investigate achievement and other personality traits using current and future data from studies within the MSUTR. To read more about our research, visit us at

www.msutwinstudies.com.

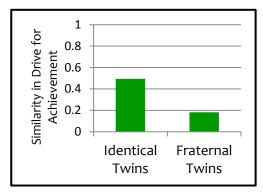


Figure 1. Twin Similarity in Drive for Achievement

"Twin Facts" Sources

- 1: http://www.huffingtonpost.com/2014/03/24/twin-facts n 4959012.html
- 2: http://www.modernmom.com/db59d6d2-3b3d-11e3-be8a-bc764e04a41e.html
- 3: http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0013199

Twins in Contemporary Music

After being nominated for "Best Alternative Album" at the 2014 Grammys, indie rock band The National has received plenty of attention for their unique blend of minimalism, folk, and pop-rock. What many people don't realize is that the band is actually spearheaded by two twin brothers, Aaron and Bryce Dessner. While Aaron primarily plays guitar, Bryce can be found on the keyboard or guitar depending on the song. Both brothers sing back-up vocals, and many fans appreciate the close tonal blend the twins provide to the group's sound.

When asked about the twins' relationship, Bryce explains that the two brothers have been playing music together since they were very young. While Bryce studied



Picture courtesy of www.uncut.co.uk

classical guitar in school, Aaron is almost entirely self-taught; he learned to play through persistent effort, observation, and imitation. The brothers believe that this difference in formal education has created a strong contrast in the way they express themselves through their instruments. Aaron and Bryce continue to write most of the music performed by The National today, backed by Bryan and Scott Devendorf (brothers, not twins) on drums and bass, and lead singer Matt Berninger.



Have you always wanted to meet other sets of twins?

The Michigan Twins
Association is looking for new members and they want you! Their annual convention is June 26-28, 2015. Contact them at 248-919-8275 or email michigantwins@danooke.com for more information.

Twins in Literature



The Lord of the Flies:

The Lord of the Flies by William Golding features twins Sam and Eric. In the novel, a group of school boys survive a plane crash and live together on a deserted island. As the novel progresses, Sam and Eric are referred to as a single entity -- Samneric.

The Twelfth Night:

This Shakespearean tale features fraternal twins Viola and Sebastian. In the play, Viola disguises herself as a man which makes her look like her twin brother. This causes a dramatic and confusing love triangle.

The Horse and His Boy:

In the fifth installment of *The Chronicles of Narnia*, written by C. S. Lewis, the protagonist Shasta is recognized as Cor, the long lost identical twin of Prince Corin. Upon discovering his true identity, Shasta is honored as the King of Archenland.

Our Current Studies

Study 1: Michigan Twins Project & Children of Twins Project:

These related studies are aimed at developing a registry of twins ages 3-25 and 30-50 born in Michigan. To participate, adult twins and families with twin children complete a brief questionnaire that assesses family composition and health status. The questionnaire may be completed using our online system or via a mail-in questionnaire.

Study 2: Twin Study of Behavioral and Emotional Development – Child: This study examines relationships among genes, mood, peers, family relationships and acting out behaviors in same-sex and opposite-sex twins ages 6-10 years old.

Study 3: Twin Study of Mood, Behavior, and Hormones during Puberty: This project investigates the influence of hormones, behavior, and environmental factors on a range of psychological characteristics during puberty in female twins between the ages of 8-15 years.

If you are interested in Study 1 or know someone who is, please contact us at: msutr@msu.edu or call (517) 432-5604

If you are interested in Study 2 or know someone who is, please contact us at: <u>burtlab@msu.edu</u> or call: (517) 355-6878

If you are interested in Study 3 or know someone who is, please contact us at: msutr@msu.edu or call (517) 432-3665