Using Twins to Better Understand School Achievement - Two Examples

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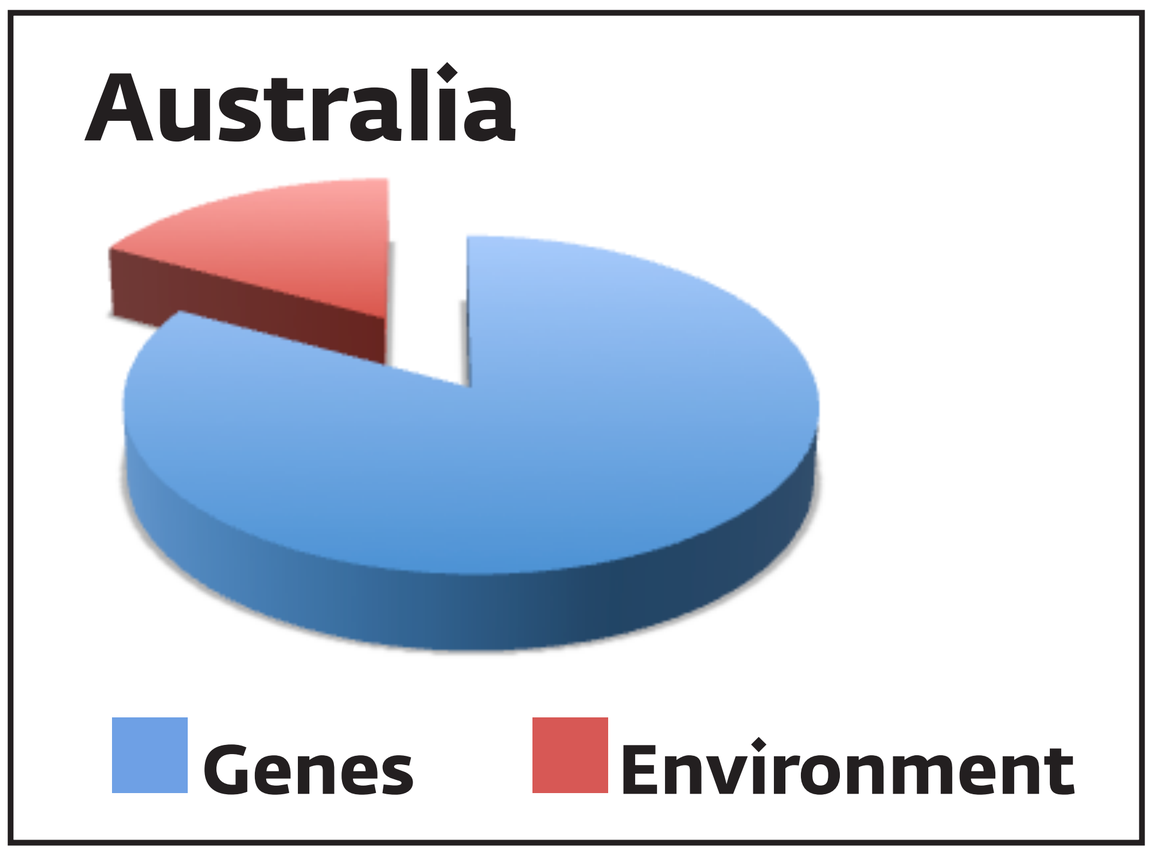
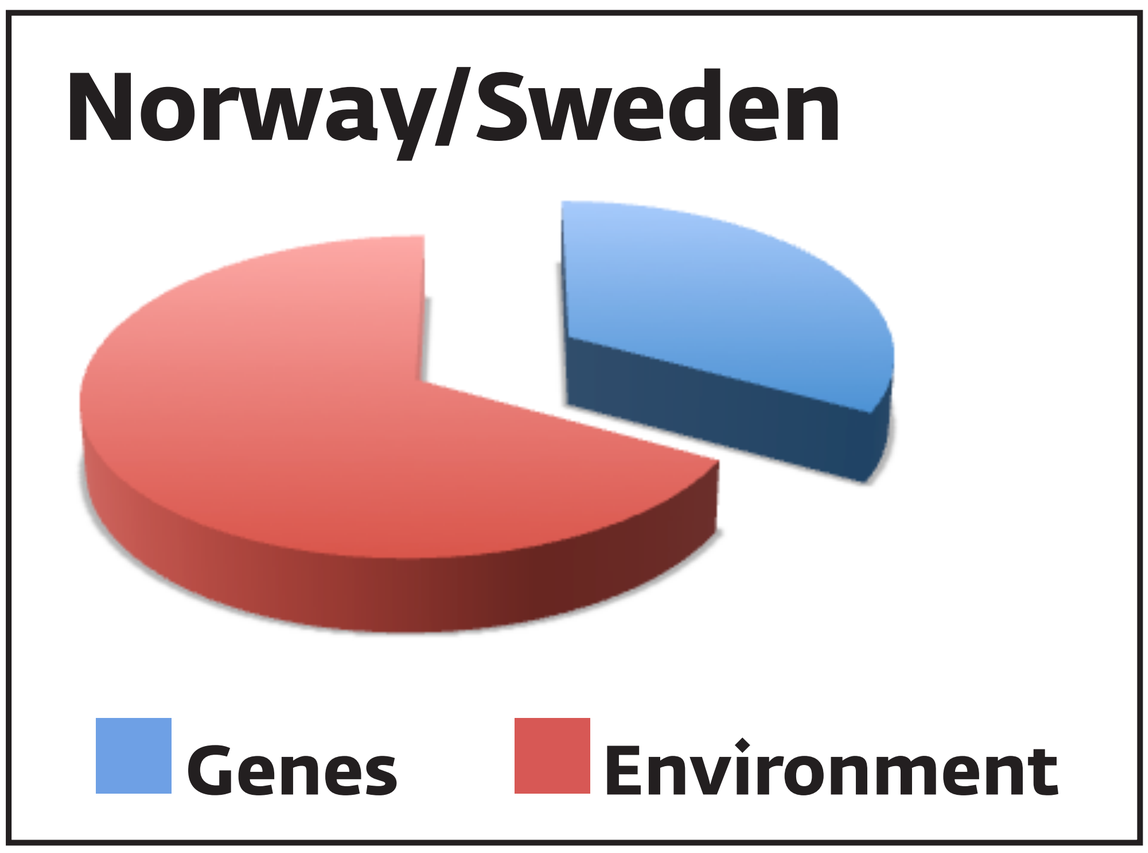
1. Comparing Countries

Even by the end of kindergarten in Australia, genetic endowment is the single biggest influence on reading ability...

...but not in Sweden and Norway, where formal reading lessons are delayed for a year and where some parents (and teachers) instruct their children and others don't.





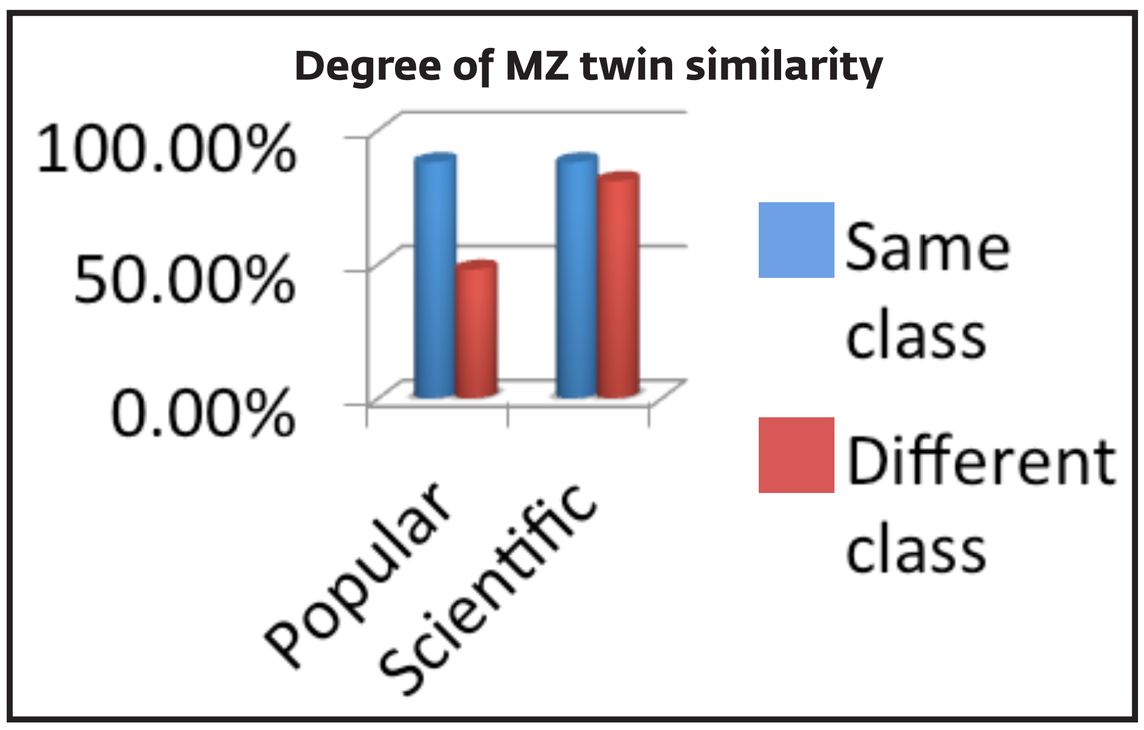
Lessons:

a. In educational systems when and where teaching is less intense, family influence matters more for a child's progress.

b. Claims about how heritable a disease or characteristic is need to be qualified by when and where the research was conducted—twin researchers need to educate consumers about their research, including other scientists.

2. Comparing Teachers

Twins can help us understand how much influence individual teachers have on children's academic achievement. This matters because the media often blames "bad" teachers for poor results in their students.



We compared the results of twins in the same class with twins in different classes.

Lesson:

Australian and US teachers do a much more equal job in teaching literacy than the media and politicians claim. Let's stop teacher-bashing.

So twins are a wonderful resource for information on the genetic and environmental factors that influence diseases and characteristics, and the data they provide is used in a surprisingly wide range of ways.