Teaching Current Directions in Psychological Science

November 27, 2013

C. Nathan DeWall, University of Kentucky, and renowned textbook author and APS Fellow David G. Myers, Hope College, have teamed up to create a series of Observer columns aimed at integrating cutting-edge psychological science into the classroom. Each column will offer advice and how-to guidance about teaching a particular area of research or topic in psychological science that has been the focus of an article in the APS journal Current Directions in Psychological Science. Current Directions is a peer-reviewed bi-monthly journal featuring reviews by leading experts covering all of scientific psychology and its applications, and allowing readers to stay apprised of important developments across subfields beyond their areas of expertise. Its articles are written to be accessible to non-experts, making them ideally suited for use in the classroom.

Bringing Zero Acquaintance Research Into the Classroom

Thinking Smarter About Intelligence

The Stranger You Already Know: Bringing Zero Acquaintance Research Into the Classroom

By C. Nathan DeWall

Nestler, S., & Back, M. D. (2013). Applications and extensions of the lens model to understand interpersonal judgments at zero acquaintance. *Current Directions in Psychological Science*, 22, 374–379.

Pete arrives at the party five minutes late. He's with three friends. They're all dressed about the same; khakis and button-up shirts. As the foursome walk across the kitchen, something grabs your attention about Pete. You experience a slight, unconscious twinge. Then a thought floods your mind, "He is a narcissist." You and Pete have never met. You might never talk. But you're convinced you know a deeply ingrained part of his personality. Are you correct? And if, so, what does that say about how you judge others?

You can know a lot about someone without knowing them at all. So says research by psychologists Steffen Nestler and Mitja Back of the University of Muenster, Germany, (2013). According to their research, people can make accurate interpersonal judgments at *zero acquaintance* — having never met a person. For example, we judge a stranger's extraversion levels using both explicit signals (a person says, "I'm extraverted") and implicit signals (a loud, expressive voice). Our judgments also rely on our deliberate judgments (when we think hard) and intuitive judgments (when we think fast). By integrating perspectives from both the target and the perceiver, we can understand how we can know someone we've never met.

To bring this research into the classroom, have students complete the Reality TV Challenge. First, form student pairs. Identify students who watch a reality TV show and pair them with a student who doesn't watch that show. If this is not possible, try to have the pairs identify a recent movie or other television program only one member knows well. The point is to have each member approach a television program's characters as strangers. Reality television works best because the characters are not hired actors; they're showing their true personalities.

The second part is fun and easy. Between classes, have students watch five minutes of the program they do not watch. When they're finished, have them rate each character's levels of extraversion (a general sense of getting energy and reward from others and the environment) and narcissism (how much a person has a grandiose and unstable self-view). These are zero acquaintance judgments. Prior research has shown that extraversion and narcissism are two traits people can perceive accurately at zero acquaintance (Back, Schmukle, & Egloff, 2010; Hirschmüller, Egloff, Nestler, & Back, 2013).

In the third and final part, have students provide the same ratings for their own designated program. These are the expert judgments. Pairs can then discuss whether the zero acquaintance judgments differed from the expert judgments. If the two types of judgments were similar, what does that say about the people in the television programs? What traits may have proven more difficult to judge? What are the limits of zero acquaintance judgments?

When I [CND] teach a long class, students appreciate it when I break the session into smaller parts. Once or twice a semester, I organize a Field Day. It encourages students to take what we learn and apply it outside of the classroom within the context of friendly competition. Instructors can use 30 minutes of class time to complete this activity.

After teaching students about zero acquaintance research, inform them that it is now their job to correctly identify as many strangers' extraversion levels as possible. With a partner, students venture around campus or nearby locations, such as the student center or coffee shop. One group member will rate a stranger's extraversion levels (high, medium, or low). The other group member will ask the stranger if they would feel comfortable reporting their extraversion level (high, medium, or low). Groups will receive two points for each matching rating they obtain. They will be docked one point for each attempt they make, which will penalize groups from senseless guessing. The group that receives the most points wins.

Class discussion can center on why certain individuals obtained more points than others. How does a perceiver's extraversion influence how she judges a stranger's extraversion levels? How might a person's cultural and ethnic background influence how easily a stranger can judge her personality? Are some people born with a better ability to judge strangers' personalities? Or is it a skill that you can practice and improve?

To know someone takes time. Whereas many people think we need months or years, psychological science tells us otherwise. A few milliseconds is all that is needed to make a better-than-chance guess of a person's sexual orientation (Rule & Ambady, 2008), trustworthiness (Willis & Todorov, 2006), competence (Todorov, Mandisodza, Goren, & Hall, 2005), and many other traits. Zero acquaintance judgments are never perfect. We can goof and think a friendly person is aggressive, a guarded person is confident, and a bookish person is the life of the party. But zero acquaintance judgments give a glimpse

into the complex interplay between the target and the perceiver. By helping us know strangers, zero acquaintance judgments can guide us along a path that benefits not only us, but also those we encounter.

Thinking Smarter About Intelligence

By David G. Myers

Tucker-Drob, E. M., Briley, D. A., & Harden, K. P. (2013). Genetic and environmental influences on cognition across development and context. *Current Directions in Psychological Science*, 22, 349–355.

Elliot Tucker-Drob and colleagues at the University of Texas at Austin (2013) offer a compelling synopsis of how genes and environment conspire to influence intelligence. To set up students' reading or discussion of these principles — which educated people should understand — we suggest starting with a little multiple choice test:

- 1. Cognitive ability in the industrialized world "is approximately 50% to 70% heritable," reports the Tucker-Drob team. This means that
 - a. 50% to 70% of one's cognitive ability is attributable to one's genes.
 - b. 50% to 70% of the variation among individuals is attributable to their genes.
- 2. The genetic influence on intelligence scores (heritability) is greatest
 - a. early in life (for example, at age 3), before varied experiences diverge our life courses.
 - b. later in life (for example, at age 50 and beyond).
- 3. The genetic influence on intelligence scores is greatest among those
 - a. at lower socioeconomic levels.
 - b. at higher socioeconomic levels.
- 4. Increasing the quality and availability of educational opportunity serves to
 - a. decrease the genetic influence on intelligence scores.
 - b. Increase the genetic influence on intelligence scores.

Surprisingly — to most of your students? — the answer to each is "b."

To explain each item . . .

Heritability rivals negative reinforcement as a candidate for psychology's most frequently misunderstood concept. As we teach our students, if the heritability of height is 90%, this does *not* mean that a 60-inch-tall woman can credit her genes for 54 inches and her environment for the other 6 inches.

Early environments vary. And people vary — in abilities, interests, and motivation (all genetically influenced traits). With time and age, people with differing traits will select, and be selected into, different environments. High-aptitude people find their way into more educationally enriched environments, which strengthen their preexisting aptitudes. This gene-environment transaction helps explain why, across 11 longitudinal twin and adoption studies, genes accounted for 25% of the variation in infant cognitive ability and 70% of the variation in adolescent cognitive ability. (Puberty may also "trigger changes in gene expression," report Tucker-Drob et al.)

Enriched environments are less available to people at lower socioeconomic levels, providing less opportunity for traits to influence opportunities. In higher socioeconomic contexts, children have greater opportunities "to select and evoke positive learning experiences" based on their genetically influenced abilities and motivation.

Environmental quality, such as universal education, maximizes the genetic influence on human differences in cognitive ability. Tucker-Drob et al. offer an example: In 1960, the average Norwegian adult had a sixth-grade education. (Educational attainment was dependent on socioeconomic class.) By 2000, the average person had a high school degree. Over this period, the heritability of educational attainment nearly doubled — from 40% for twins born before 1940 to 70% for those born after 1940. Universal education increased the possibility of people selecting environments which maximized their potential.

Ergo, conclude the Tucker-Drob team: Forget the idea that if cognition is heritable, then environments don't matter. The truth is quite the opposite: *"Genetic influences on cognition are maximized by environmental opportunity."*

To generalize, forget genes *versus* environment. Think — and teach students to think — genes interact with environments.

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