

Teaching Current Directions in Psychological Science

January 30, 2015

Aimed at integrating cutting-edge psychological science into the classroom, Teaching Current Directions in Psychological Science offers 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 bimonthly 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 nonexperts, making them ideally suited for use in the classroom.

Visit David G. Myers and C. Nathan DeWall's new blog "[Talk Psych](#)." Similar to the APS *Observer* column, the mission of their blog is to provide weekly updates on psychological science.

[Shining the Light on Dark Personalities](#)

[Health Psychology Meets Neuroscience: Brain?Body](#)

Shining the Light on Dark Personalities

By C. Nathan DeWall

[Paulhus, D. \(2014\). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science*, 24, 421–426.](#)

Barry Minkow spent his youth bilking investors who believed in his nonexistent insurance restoration business. His failed Ponzi scheme led to 7 years in prison. After serving his sentence, he spent years reforming his image by founding a fraud investigation company and becoming a Christian minister. But old habits die hard. Convicted of insider trading and defrauding his church, he entered a new phase of his life. To my surprise, his new phase of life includes a zip code that matches mine.

How can Barry Minkow escape immediate attention as a career criminal and enjoy a level of success that few experience? According to APS Fellow Delroy Paulhus (2014), Minkow has a personality that resembles a sweet onion whose layers have a dark hue. His personality has several interrelated components — narcissism (grandiose and unstable high self-esteem), Machiavellianism (being a master of manipulation), psychopathy (low empathy and impulsive antisocial behavior), and sadism (getting pleasure out of making others suffer) — that all are socially harmful but not severe enough to trigger anyone's immediate attention. Everyone has varying levels of each component. There are even times when one part of a dark personality serves a specific need.

Studying dark personalities helps us better understand others. Minkow has an extensive history of fraud,

but he shows little sign of sadistic violence. He also committed crimes that required extensive planning instead of impulsive action, which reduces his chances of maxing out on the psychopathy scale. Most likely, he is someone who scores high on narcissism and Machiavellianism.

“The odd thing is that students already know about dark personalities — or think they know,” says Paulhus. “Therefore, teaching this topic at the introductory level is about undoing mistaken assumptions.”

To bring this cutting-edge science to the classroom, instructors can begin by listing the key features of each component of the dark personality (see Paulhus, 2014, Table 1, at tinyurl.com/paulhus-jpsp). Next, ask students to list four characters from movies, television shows, or books who may score high on some, but not all, components of the dark personality. Instructors can also allow students to nominate currently living or historical figures.

“There are usually plenty of famous candidates, especially if I allow for historical and fictitious examples,” Paulhus notes. “For example, Kanye West for narcissism; Bernie Madoff for Machiavellianism; Hannibal Lecter for psychopathy; Vlad the Impaler (or Christian Grey) for sadism. With famous examples, I can collect photos to display on PowerPoint.” Discussion can ensue on some of the following questions:

- What do the characters have in common?
- In what ways are they different?
- Which characters would make students fear for their lives?
- Which characters would make students fear for their emotional well-being, even if they were physically unharmed?

The second activity, titled “Finding Your Dark Niche,” encourages students to take the perspective of one or more of the characters they listed in the first activity. (If instructors choose not to do the first activity, ask students to list a movie, television, or book character who might score highly on some, but not all, of the features.) Instructors can then ask students to identify at least one professional and one relationship situation in which the character would flourish. When might it pay off for a company to have a Machiavellian chief executive officer? Would someone who scores highly on sadism function well in a job that requires causing others harm? How might the short-term benefits associated with each part of the dark personality produce later costs? For example, how does an understanding of dark personalities explain why narcissists do well on first dates but make awful long-term relationship partners (Campbell, Foster, & Finkel, 2002; Dufner, Rauthmann, Czarna, & Denissen, 2013; Paulhus, 1998)?

Some people have hidden lusts or greed, whereas others embezzle millions. Understanding the science of dark personality helps us avoid labeling people as simply good or bad. By shining a light on the ingredients of a dark personality, we can learn who we ought to fear and when to fear them.

The good news is that psychological science can also teach us when to relax. Barry Minkow lives in a federal prison near my house. If he escapes, I do not worry that he will physically harm my family. That is not his style. If I were to worry, it would be for the safety of my bank account.

Health Psychology Meets Neuroscience: Brain?Body

By David G. Myers

[Erickson, K. I., Creswell, J. D., Verstynen, T. D., & Gianaros, P. J. \(2014\). Health neuroscience: Defining a new field. *Current Directions in Psychological Science*, 24, 446–453.](#)

How does our brain influence our health? How does our health influence our brain? The new field of health neuroscience — the study of how the brain *affects* and *is affected by* physical health — seeks answers. In their 2014 article, Kirk I. Erickson, J. David Creswell, Timothy D. Verstynen, and Peter J. Gianaros defined “health” as the absence of illness and discomfort and of biopsychosocial risk factors for such.

To introduce health neuroscience, instructors might invite students to offer examples of its two core ideas:

- The brain influences the body, top-down, and
- the body influences the brain, bottom-up.

For example, concerning top-down brain–body interactions, students might note that

- embarrassed, we blush;
- irritated, our blood pressure rises;
- afraid, our stress hormones flow; and
- experiencing sustained stress or repeated anger, we become more vulnerable to heart disease or addiction.

Our brain and its mind play the strings of our bodily health. Concerning bottom-up brain–body interactions, students might note the following:

- Aerobic exercise reduces dementia risk.
- Smoking and other substance use change the brain.
- Nutrition affects cognition.
- Inflammation feeds depression.

But precisely how does the brain enable its top-down influence on health, and how does it receive the bottom-up influence? How does our brain’s activity get under our skin, and how do bodily events under our skin reach into our brain?

Health neuroscience explores how stress, anger, and depression affect health via neural circuits. Psychological experiences arise from the brain’s hardware. Thus, noted Erickson and his colleagues,

- the stress we feel when facing time pressures or social threats is mediated by the amygdala and medial prefrontal cortex;
- our cognitive regulation of negative emotions engages the anterior cingulate cortex, which in

- turn affects inflammation and hardening of the arteries; and
- smoking cessation is supported by neural activity in inhibitory brain regions.

Such research offers psychology teachers a chance to acknowledge and invite their students to engage in “neuroskeptic” doubts about how much neuroscience really contributes to human understanding and to health intervention. Playing devil’s advocate, neuroskeptics might note that one can skillfully drive a car with minimal awareness of the underlying mechanics. Is it, practically speaking, any more important for us to know about the limbic system and prefrontal cortex than for a driver to know about fuel injection, crankshafts, and drive trains? (Students could be invited to name various items they use daily without knowing how they work — from smartphones and laptops to medications and efficient lightbulbs.)

So, what do colorful brain-scan splotches tell us that we didn’t already know? Didn’t we already assume that brain activity underlies behavior and health — that everything psychological is also biological?

In response to such skepticism, students might respond, for example, that a neuroscientific explanation may be unnecessary for some purposes and vital for others. One can do psychology without biology, biology without chemistry, and chemistry without physics, because each discipline has its own principles. Yet each also builds upon the more basic underlying science.

Students could be invited to imagine themselves as foundation grant officers and to brainstorm what, given \$1 million to award, they might want health neuroscientists to explore.

And students could be reminded that one may not need to know the mechanics of combustion or electric engines to operate a car, but when a car breaks down, it helps to have those who understand and can intervene. Erickson and colleagues noted that health neuroscience likewise can point to effective interventions when health issues arise. We have learned, for example, that exercise strengthens not only the muscles, including the heart, but also the brain. And this knowledge is now being used in physical therapy interventions for the treatment of Alzheimer’s disease and memory loss.

Health neuroscientists also are exploring how hypertension leads to cognitive deficits in memory and executive function via specific brain structures and functions (Scullin et al., 2013). This neuroscientific evidence supports healthcare professionals’ awareness of cognitive risks among hypertensive patients and can point the way to preventive treatments.

Ergo, concluded Erickson and colleagues, “health neuroscience can have a significant impact on improving and transforming public health.”

References

- Campbell, W. K., Foster, C. A., & Finkel, E. J. (2002). Does self-love lead to love for others? A story of narcissistic game-playing. *Journal of Personality and Social Psychology*, 83, 340–354.
- Dufner, M., Rauthmann, J. F., Czarna, A. Z., & Denissen, J. J. (2013). Are narcissists sexy? Zeroing in on the effect of narcissism on short-term mate appeal. *Personality and Social Psychology Bulletin*, 39, 870–882.

Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197–1208.

Scullin, M. K., Gordon, B. A., Shelton, J. T., Lee, J. H., Head, D., & McDaniel, M. A. (2013). Evidence for a detrimental relationship between hypertension history, prospective memory, and prefrontal cortex white matter in cognitively normal older adults. *Cognitive, Affective & Behavioral Neuroscience*, 13, 405–416.