Teaching Current Directions in Psychological Science

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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.

Mindful Students: The Pain and Pleasure of Awareness and Acceptance

Selfish Genes or Native Prosociality

Mindful Students: The Pain and Pleasure of Awareness and Acceptance

by C. Nathan DeWall

Teper, R., Segal, Z. V., & Inzlicht, M. (2013). Inside the mindful mind: How mindfulness enhances emotion regulation through improvements in executive control. *Current Directions in Psychological Science*, 22, 449–454.

Why do people meditate? Some believe that meditation creates euphoria, similar to a "runner's high." Others think that meditation creates oblivion, a waking blackout that allows people to escape their daily worries.

Psychological scientists have explored a meditative state that collides with these common conceptions: mindfulness. Mindfulness is a state of mind linked to greater awareness and nonjudgmental acceptance of one's inner states (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). Mindfulness helps people regulate their emotions, but until recently it has been unclear why.

Rimma Teper, Zindel Segal, and APS Fellow Michael Inzlicht (2013) have solved this part of the mindfulness riddle. They argue that mindfulness improves emotion regulation for two reasons. First, mindfulness *increases awareness of one's internal states*. If an angry driver cuts them off on the way to work, mindful people will recognize their feelings faster than their less mindful counterparts.

Second, because mindful people have greater emotional awareness, they have a head start on *the ability* to cheer themselves up. Their minds get a signal that they need to regulate an emotion, which puts their

minds and bodies to work. Getting cut off in traffic can still make mindful people's blood boil. But their mindfulness cools their hot tempers.

To bring this research into the classroom, instructors will need some raisins. Take a large bag of raisins and sprinkle a few in front of each student. In large classes, pass out bags of raisins and ask students to take a few and pass the bag down the aisle. The next part will raise some students' mindfulness. Ask half of your class to look at their feet and remain quiet for 4 minutes. This is the control group. The rest of the class is in the mindfulness group. Show them each of the following phrases on a PowerPoint slide for 30 seconds each (constructed by the Extension Service at West Virginia University, hfhc.ext.wvu.edu/r/download/114469; adapted from Williams, Teasdale, Segal, & Kabat-Zinn, 2007):

- **Holding**: First, take one raisin and hold it in the palm of your hand or between your finger and thumb. Focusing on it, imagine that you've just dropped in from Mars and have never seen an object like this before in your life.
- **Seeing**: Take time to really see it; gaze at the raisin with care and full attention. Let your eyes explore every part of it, examining the highlights where the light shines, the darker hollows, the folds and ridges, and any asymmetries or unique features.
- **Touching**: Turn the raisin over between your fingers, exploring its texture, maybe with your eyes closed if that enhances your sense of touch.
- **Smelling**: Hold the raisin beneath your nose, and with each inhalation, drink in any smell, aroma, or fragrance that may arise, noticing anything interesting that may be happening in your mouth or stomach.
- **Placing**: Now slowly bring the raisin up to your lips, noticing how your hand and arm know exactly how and where to position it. Gently place the raisin in the mouth, without chewing, noticing how it gets into the mouth in the first place. Spend a few moments exploring the sensations of having it in your mouth, exploring it with your tongue.
- **Tasting**: When you are ready, prepare to chew the raisin, noticing how and where it needs to be for chewing. Then, very consciously, take one or two bites into it and notice what happens in the aftermath, experiencing any waves of taste that emanate from it as you continue chewing. Without swallowing yet, notice the bare sensations of taste and texture in the mouth and how these may change over time, moment by moment, as well as any changes in the raisin itself.
- **Swallowing**: When you feel ready to swallow the raisin, see if you can first detect the intention to swallow as it comes up, so that even this is experienced consciously before you actually swallow it.
- **Following**: Finally, see if you can feel what is left of the raisin moving down into your stomach, and sense how the body as a whole is feeling after completing this exercise in mindful eating.

The next part of the exercise will show what Teper and colleagues (2013) describe as the increased emotional awareness that accompanies mindfulness. Have all students write a paragraph about their

biggest life stressors (for example, an upcoming exam, feeling homesick). Then ask students to use as many or as few words as possible that describe the emotions they know that the stressors cause. The mindfulness students should list more emotion words than the control group because they are more aware of their internal states.

Finally, have all the students answer the following question, "How upset are you right now, that is, AT THE PRESENT MOMENT, about the stressful things you listed?" (use the scale l=not at all upset to 10=extremely upset). The mindful students should feel less upset compared with the control students because they are better able to regulate their emotions. Discussion can center on why increasing mindfulness unrelated to life stress can improve regulation of that stress. What other life problems might mindfulness help people overcome? When might mindfulness not help people cope with stress?

Mindfulness increases emotional sensitivity, but that isn't a bad thing. Being attuned to our emotions helps us get a grip on them instead of acting impulsively. This activity can show students how a spoonful of raisins, with a dash of mindfulness, can make their stress go down. α

Selfish Genes or Native Prosociality

by David G. Myers

Zaki, J., & Mitchell, J. P. (2013). Intuitive prosociality. *Current Directions in Psychological Science*, 22, 466–470.

Okay, class, question of the day: "Deep down, in our hearts, is human nature more *good* or *evil*? Pick a side, and then list psychological theory and evidence that seems to support your answer." (Alternatively, randomly assign students to make a case for human nature as inherently good or evil.)

Ask this question of your class, perhaps followed by small group discussion, and chances are you will get takers on both sides, each for seemingly good reasons.

The Selfish Heart

Psychology students will likely offer some familiar examples of humanity's disposition to evil. Several streams of psychological science point to the human capacity for greed, bigotry, and violence.

- 1. *Evil situations*. Experiments (think Sherif, Milgram, and Zimbardo) have put nice people in evil situations to see whether good or evil prevails. Often, evil pressures overwhelm good intentions, inducing people to conform to falsehoods or capitulate to cruelty. Nice guys often don't finish nice.
- 2. Selfish genes. Evil situations may corrupt individuals, but, as Donald Campbell (1975a, 1975b) argued in his original sin-affirming APA presidential address, "Genes predisposing a self-saving selfishness" will win the evolutionary competition a point famously emphasized by Richard Dawkins's 1976 book, *The Selfish Gene*. Even seeming altruism may arise from gene-promoting reciprocity or kin selection
- 3. Selfish behavior in social dilemmas. As the tragedy of the commons and various laboratory

games have illustrated, and as B. F. Skinner emphasized, self-interest motivates much behavior, even when it undermines our collective well-being. When allowed to distribute a windfall between themselves and a stranger — uncashed casino chips, in one Las Vegas street experiment — the self-serving behavior of study participants would not have surprised Donald Campbell (Winking & Mizer, 2013)

4. *Self-serving bias*. People perceive and present themselves in self-inflating ways. Moreover, ingroup biases and group polarization can magnify individual egoism. The result may be what theologian Reinhold Niebuhr (1932, p. xii) viewed as a "collective egoism, compounded of the egoistic impulses of individuals."

The Prosocial Heart

Students will surely also identify indicators of human virtue. Holocaust survivor and APS Fellow Ervin Staub has devoted his career to studying *The Psychology of Good and Evil* (the title of his 2003 book). Human nature has given us both appalling genocide *and* astonishing generosity.

Psychologists have long emphasized our capacity for good.

- 1. *Humanistic psychology*. Carl Rogers and Abraham Maslow argued that people are basically good and endowed with actualizing tendencies. Each of us is like an acorn, primed for growth and fulfillment unless thwarted by an environment that inhibits growth. "I do not find that this evil is inherent in human nature," said Rogers (1981). Given growth-promoting conditions, "I have never known an individual to choose the cruel or destructive path."
- 2. *Group selection?* In competition, contends one group of evolutionary psychologists, groups composed of mutually supportive altruists will survive and spread their group-serving genes (Wilson & Wilson, 2008).
- 3. *Self-giving compassion*. Asking nothing in return, people will offer directions, donate money, give blood, volunteer time helping behaviors that altruism researchers seek to explain.
- 4. *Empathy-induced altruism*. When observing another's suffering, we often empathize, and then we help even when our helping is anonymous. Genuine "empathy-induced altruism is part of human nature," concluded Daniel Batson after 25 experiments (1999, 2011). We are social as well as selfish animals.

The Prosocial Brain

Jamil Zaki and APS Fellow Jason P. Mitchell (2013) weigh into this ancient debate about our essential human nature with their beautiful (and easily accessible) essay on our deeply prosocial nature. They suggest asking students: Is our inclination toward selfishness as natural as eating chocolate, while prosociality is like eating brussels sprouts — something people may force themselves to do?

They argue that prosociality comes as naturally as eating chocolate. Prosociality is intuitive. Consider: Intuitive behaviors:

- 1. occur quickly, even in the face of distraction;
- 2. are enabled by brain systems that operate automatically; and

3. develop earlier in childhood than does conscious control.

Prosocial behaviors meet these three criteria.

- 1. In both experiments and real life, *prosocial decisions are made more quickly than selfish decisions*. Recipients of the Carnegie Hero awards typically have reacted to crises in an instant, without counting the cost. And time pressures and distractions that minimize reflective thinking actually *increase* prosocial behavior.
- 2. Neuroimaging studies show that *prosociality engages brain systems associated with intuitive reward-seeking* more than brain areas associated with self-control. Moreover, as Paul Zak argues in *The Moral Molecule* (2012), oxytocin enhances costly caring and helping.
- 3. Spontaneous prosocial behaviors appear naturally and early by 18 months of age while conscious control functions kick in between 22 and 48 months.

Conclusion

Human nature may be corruptible by transcendent evil situations, driven by selfish genes, and vulnerable to pride. These things being so, we need to strengthen restraints on our native selfishness, argued Campbell. "Let us try to *teach* generosity and altruism," agreed Dawkins (1976, p. 3), "because we are born selfish." Assuming selfishness, governments tax our incomes rather than trusting our voluntary generosity. And parents and character educators socialize children to delay gratification, to develop their self-control of selfish impulses, and to replenish the energy needed for self-regulation. To restrain self-gratification, we teach children social norms such as reciprocity and social responsibility. We admonish them to do what may not come naturally: "Love your neighbor as yourself."

But such "original sin" is only part of the story. For in other ways we are "little less than the angels." Sometimes, note Zaki and Mitchell, we are advised to restrain our reflexive prosociality: "In the event of a sudden change in cabin pressure, please put on your own mask before assisting others." We are, from the time of our earliest social behaviors, automatically disposed to empathize with, and to help, one another. We are intuitively prosocial.

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