Teaching: Decision-Making Competence / Teaching Psychology in a Pandemic

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Even Dumbledore Made Bad Decisions: Decision-Making Competence Is More Than Intelligence

By Michael Scullin and Cindi May

Bruine de Bruin, W., Parker, A.M., & Fischhoff, B. (2020). Decision-making competence: More than intelligence? *Current Directions in Psychological Science*, 29, 186–192.

Perhaps no literary character more famously represents the "wise old man" archetype than Professor Albus Dumbledore. In the Harry Potter series, Dumbledore is depicted as the most intelligent wizard in the world. In most cases, he also appears patient, emotionally stable, and benevolent. Yet, Dumbledore's decisions were often dubious: He gave a pre-teen boy an invisibility cloak and then let him keep it after it was used repeatedly to break curfew. He almost always hired the wrong person to teach Defense Against the Dark Arts. And he failed to close Hogwarts when students were in mortal danger or even being abducted from campus. Dumbledore shows that smart people can make bad decisions, even in a land of magic. In the Muggle world, bad decisions are everywhere, typically when there is a lapse in one of six decision-making competencies:

- 1) Resistance to framing effects
- 2) Consistency in risk perception
- 3) Recognition of social norms
- 4) Calibration of one's confidence in one's knowledge
- 5) Applying predefined strategies/rules to choose among options
- 6) Resisting sunk costs.

The latter two competencies offer excellent teaching opportunities. For example, when purchasing a laptop, students may not systematically compare the features of all available laptops and end up buying one that doesn't meet their actual needs. Such students are failing to apply predefined decision rules. As another example, after performing poorly in an introduction-level course, some students still spend years limping toward a degree that is ill-suited to their preferences and skills (rather than switch majors). Such students are failing to resist sunk costs.

Do such bad decisions come from the same bad decision-makers?

Wändi Bruine de Bruin and her colleagues Andrew Parker and Baruch Fischhoff indeed find that someone who makes a bad decision in one context is more likely to make a bad decision in another context:

- Diverse measures of decision-making competence correlate positively (Bruine de Bruin et al., 2007; Parker & Fischhoff, 2005).
- Better decision-making scores at age 19 predict higher scores at age 30, even when controlling for executive functioning (Parker et al., 2018).
- Decision-making scores predict real-world consequences including interpersonal problems (Weller et al., 2015) and negative life events (Bruine de Bruin et al., 2007).

Have your students test two decision-making competencies using this 5-minute activity:

In Phase 1, students read a scenario in which they rate how likely they would be to abandon an irretrievable loss (sunk cost) for a newer, better option. In Phase 2, students examine expert ratings for five televisions and have to follow decision rules to choose correctly amongst the five options. After the activity, engage students in small-group discussions on why they believe they found it difficult to resist the sunk-cost option (Phase 1), what distracted or otherwise prevented them from applying decision rules correctly (Phase 2), and which characteristics they believe make a good decision maker.

According to Bruine de Bruin and colleagues, higher intelligence is typically associated with more competent decision making. But that's not to say that intelligence and decision-making competence are

the same thing (Stanovich, 2015). Even when controlling for intelligence (fluid or crystallized), decisionmaking scores at age 19 predict decision-making scores at age 30 (Parker et al., 2018) as well as negative life events (Bruine de Bruin et al., 2007). Moreover, intelligence measures only overlap strongly with some decision-making competencies. Intelligence is very strongly associated with the ability to apply decision rules (r=.66), but only weakly associated with the ability to resist sunk costs (r=.18; Bruine de Bruin, Parker, & Fischhoff, 2012). Thus, the brilliant Professor Dumbledore might have the wits to apply decision rules, but he could still fall susceptible to sunk-cost decision making.

The good news is there are strategies to help you resist continued investments in sunk costs. The answer may boil down to motivation, emotions, and experience. Motivation and emotional skills are required to fully engage the complexity of the problem, buffer against the negative affect tied to what's been lost, and choose the best path forward. Some of these decision-making skills can be learned in the classroom (Jacobson et al., 2012), whereas others may be learned from accumulated life experience. What's fascinating is that older adults have more difficulty applying decision rules, but they are much better at resisting sunk costs than young adults (Strough, Parker, & Bruin de Bruin, 2015).

A brief overview of the science of decision making doesn't perfectly explain why Dumbledore didn't better protect his students, couldn't hire a teacher who wasn't some kind of monster, and wouldn't set rules without implicitly encouraging students to break them. We're happy to share the longer, more complex story...over a butterbeer.

References

Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in adult decisionmaking competence. *Journal of Personality and Social Psychology*, 92(5), 938.

Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2012). Explaining adult age differences in decision?making competence. *Journal of Behavioral Decision Making*, *25*(4), 352-360.

Jacobson, D., Parker, A., Spetzler, C., De Bruin, W. B., Hollenbeck, K., Heckerman, D., & Fischhoff, B. (2012). Improved learning in US history and decision competence with decision-focused curriculum. *PLOS One*, *7*(9).

Parker, A. M., Bruine de Bruin, W., Fischhoff, B., & Weller, J. (2018). Robustness of decision?making competence: Evidence from two measures and an 11?year longitudinal study. *Journal of Behavioral Decision Making*, *31*(3), 380-391.

Parker, A., & Fischhoff, B. (2005). Decision-making competence: External validity through an individual-differences approach. *Journal of Behavioral Decision Making*, *18*, 1-27.

Stanovich, K. E. (2015). Rational and irrational thought: The thinking that IQ tests miss. *Scientific American*, 23, 12-17.

Strough, J., Parker, A.M., & Bruine de Bruin, W. (2015). Understanding life-span developmental changes in decision-making competence. In T. Hess, J. Strough, & C.Löckenhoff (Eds.) *Aging and*

decision making: Empirical and applied perspectives (pp. 235-257). London UK: Academic Press.

Weller, J. A., Moholy, M., Bossard, E., & Levin, I. P. (2015). Preadolescent decision?making competence predicts interpersonal strengths and difficulties: A 2?year prospective study. *Journal of Behavioral Decision Making*, 28(1), 76-88.

Teaching Social Psychology Under the Coronavirus

By David G. Myers

In response to the coronavirus crisis, psychology's teaching community has rallied to support one another. Facebook groups for teachers of AP Psychology and the Society for the Teaching of Psychology are sharing ideas for online teaching and for student engagement and assessment. The <u>Social Psychology Network</u>, the <u>British Psychological Society</u>, and APS all offer links to teaching-relevant coronavirus information.

For psychology teachers everywhere—many with students displaced to their homes—the COVID-19 pandemic's dark clouds offer a potential silver lining: some teachable moments. In so many ways, we are experiencing social psychology writ large, with so much to study.

Here's my initial list of opportunities for online and in-class discussion of social dynamics in action.

Concept: The need to belong. We humans are social animals. We live and find safety in groups. We flourish and find happiness when connected in close, supportive relationships. Separation (or, worse, ostracism) triggers pain.

Discussion questions:

- 1. Are there ways in which the pandemic thwarts our need to belong? *Possible answers:* Social distancing, cancelled communal gatherings (sports, parties, worship), the isolation of off-site learning and work, and diminished travel to be with loved ones or for shared experiences.
 - If so, might the isolation increase risk of physical or mental health problems? *Possible answers:* Isolation may exacerbate loneliness and depression, both of which can make people vulnerable to ill health and, ironically, compromised immune functioning. (My colleague Jean Twenge offers more on this on <u>theconversation.com</u>.)
 - 2. Are there ways we can nevertheless satisfy our need to belong? *Possible answers:* Online meetings through video conferencing; connecting through social media (Facebook's mission: "to give people the power to build community and bring the world closer together"); FaceTime conversations; acts of caring to those in need or at-risk; "love-bombing" friends and family with messages and emails.

Concept: The social responsibility norm. Norms are social expectations for desirable behavior. The social responsibility norm is the expectation that we help those in need.

Discussion question: Have you observed or read examples of the social responsibility norm in operation during the current crisis?

Possible answers: People doing grocery runs for neighbors at risk; friends reminding peers that "even if *you* aren't at risk for serious illness, you need to protect yourself so older and at-risk folks you meet aren't imperiled and hospitals overwhelmed."

Concept: The availability heuristic's influence on our fears. Heuristics are thinking shortcuts. The *availability heuristic* is our automatic tendency to estimate the likelihood of an event by how readily it comes to mind (how available it is in memory). Vivid media images of disasters can therefore lead us to fear things that kill people in bunches (such as plane crashes, when auto travel is vastly more dangerous).

Discussion question: Although it's too early to know the coronavirus's lethality (because we don't yet know how many people have undiagnosed infections), have you witnessed examples of some panicked people fearing it too much? And of others, by failing to appreciate its exponential future spread, fearing it too little?

Discussion question: Do you agree with statistician-writer Nate Silver's speculation that these two tendencies (fearing too much and fearing too little) might balance each other?

Concept: **Unrealistic optimism.** We are naturally positive thinkers. In study after study, students have believed themselves far more likely than their classmates to be destined for a good job and salary, and less likely to develop a drinking problem, get fired, or have a heart attack by age 40. Likewise, smokers think themselves less vulnerable to cancer or better able to quit. Newlyweds believe themselves invulnerable to divorce.

Discussion question: If cognitively available COVID-19 horror stories inflate too much fear in some, does unrealistic optimism create too little in others? If so, what are (or were) examples of such? (People, despite initial warnings, flocking to bars and beaches?)

Concept: **Selective exposure to information.** *Selective exposure* is the human tendency to prefer and seek information and news feeds that affirm rather than challenge our preexisting views.

Discussion question: A recent <u>survey</u> (replicated by <u>NPR/Marist</u>) found that 58 percent of Republicans and 29 percent of Democrats believed "the threat of coronavirus has been exaggerated." Might selective information exposure explain this difference? If so, how?

Discussion question: Are you selectively exposing yourself solely to news and social media sources that affirm rather than challenge your views?

Concept: **Group polarization**. In experiments, discussion among like-minded people tends to enhance their preexisting views.

Discussion question: In times of crisis, does the internet enable the segregation of like-minded people clustered in echo chambers, progressives with progressives, and conservatives with conservatives—each

group sharing links to sites that affirm their own views?

Discussion question: Does this polarization describe you and your friends?

Discussion question: Are there other ways in which you engage views other than your own?

Concept: Individualism vs. collectivism. Cultures vary in the extent to which they prioritize "me" or "we"—personal (my) goals and identity or group (our) goals and identity.

Discussion question: Have you observed examples of individualism or collectivism in response to health or government guidelines for controlling the spread of the virus?

Possible answers: Individualism ("I'm fine and at little risk, so why shouldn't I party with my friends?") Collectivism ("We're responsible for each other, which means not getting a virus we could pass on to someone who is older or immunocompromised.")

Discussion question: Does China's collectivism help explain its plummeting rate of new COVID-19 cases—from several thousand per day during February to less than 10 a day by March 17?

Possible answer: Students may note that China *is* more collectivist—more "we" focused—but also more autocratic (though collectivist but democratic South Korea also has controlled transmission).

Concept: The motivating power of social perceptions. Stock market drops and bank runs occur when people perceive that *others* will be selling their holdings or withdrawing their money, causing collapse. People who may not think conditions are terrible may create a downturn by fearing that others think so.

Discussion question: Has your community experienced a similar run on goods—by people who may not fear a lack of goods, but worry that others do, and will empty shelves?

Concept: **Attributional bias.** People may commit a fundamental attribution error, by attributing others' behavior to their disposition but their own behavior more to the situation.

Discussion question: Have you observed any such examples, such as explaining that others are rushing to buy and hoard toilet paper out of selfishness, while "I am loading up to respect the mandate to stay home and make few trips."

Concept: **Terror management**. Some 300 studies explore the effects of reminding people of their mortality. "Death anxiety" provokes varied defenses, which range from aggression toward rivals to shoring up self-esteem to prioritizing close relationships to embracing worldviews and faith that remind us of life's meaning.

Discussion question: Have you observed any examples of people's heightened death anxiety and their adaptive responses to such?

Concept: The unifying power of a common enemy and a superordinate goal. When diverse people experience a shared threat—a common enemy, a natural disaster, a mean boss—they often feel a kinship,

as many Americans did after 9/11. Moreover, working cooperatively toward a shared ("superordinate") goal can transform distant or conflicting people into friends.

Discussion question: Have you seen instances when the shared threat of a pandemic virus helped someone appreciate our common humanity?

Discussion question: Have you seen instances when the awareness of the virus made you or a loved one more suspicious of others—whose mere cough might make them seem like an external threat?

For psychological scientists, the world around us is a living laboratory in which we observe powerful social forces at work in others . . . and in ourselves.

This essay is adapted from David Myers' blog at <u>TalkPsych.com</u>.