

Teaching: Falling for Scams / When Fiction Feels Real

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Teaching *Current Directions in Psychological Science* offers advice and guidance about teaching a particular area of research or topic covered in this peer-reviewed APS bimonthly journal, which features reviews covering all of scientific psychology and its applications.

Edited by C. Nathan DeWall

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The Art of the Steal

By David G. Myers, Hope College

[Hanoch, Y., & Wood, S. \(2021\). The scams among us: Who falls prey and why. *Current Directions*](#)

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Who among us has not, at some point, succumbed to a con? Perhaps we believed a too-good-to-be-true advertisement or an investment come-on. Or forwarded a fake social media post. Or believed an election-fraud claim. Or shunned a health-protecting vaccine. Or gave money to someone posing as a homeless veteran.

Scamming is big business, with an annual worldwide financial cost that has been estimated to exceed the U.S. government budget, report Yaniv Hanoach and Stacey Wood. Scammers likewise exact a huge emotional cost. A 2020 European Commission survey found that 79 percent of victims experience emotional suffering.

Student Activity: Sorting Scams

To introduce Hanoach and Wood’s review of the psychology of scamming (and to prepare students to think critically when approached by scammers), first ask: Do you know someone who has been scammed? Have you ever been scammed?

Next, ask students to describe the scam in a couple of sentences (without disclosing the victim’s identity). As they do this—for instance, “My aunt was told she won a sweepstakes and then gave her bank account information to get the supposed prize”—list the scams on a display board (e.g., a fake girlfriend, charity, or prize). Then ask students if they could identify categories of scams into which the examples fall—for example, romance scams, merchandise scams, rescue scams, easy-money scams, and identity-theft scams.

Finally, ask: Does your experience—or do these examples—offer clues to who is most vulnerable to scams? How many of you think that scam victims tend to be older? Lower income? Less educated? Female?

If your students presume that older people are the main targets of scammers, Hanoach and Wood have a surprise: “A growing body of evidence suggests that middle-aged adults [have] the highest rate of victimization.” Young adults are most susceptible to work-from-home and business-opportunity scams. People in their 30s have been most likely to file COVID-related fraud complaints. People ages 35 to 44 have most often fallen victim to mass-marketing solicitations. And middle-aged women have been most vulnerable to romance scams. Two caveats: Older adults do experience a high rate of online scams, and they tend to lose more money per incident—perhaps because, as Nadia Brashier and Daniel Schacter (2020) have noted, late adulthood entails “greater trust [and] difficulty detecting lies.”

In fact, despite stereotypes, no demographic characteristics are reliably associated with susceptibility to scams. For example, women are commonly believed to be more vulnerable to scams, but although they’re more likely to fall prey to sweepstakes scams, men are more vulnerable to foreign-lottery scams. Hanoach and Wood further note a greater victimization rate among people with higher incomes, which brings to mind American bank robber Willie Sutton’s apocryphal answer to the question of why he robbed banks: “Because that’s where the money is.” Individual differences in impulsivity and self-

control also affect susceptibility.

Why are people scammed?

Ask your students a final question: *Which persuasion or influence tactics do scammers exploit?* Did your students anticipate some of the psychological principles that scammers hijacked?

- *Truth bias.* Scammers exploit our default human reaction to believe what we hear, especially when it's repeated. As social creatures, we are disposed to learn from one another. Usually, trust pays off.
- *Authority.* Scammers may intimidate by claiming to be from a government agency (e.g., the IRS) or the police.
- *Scarcity.* By posing a limited number of prizes or amount of time, scammers pressure people to respond *now*. When people feel rushed, they don't take time to research before they act.
- *The foot in the door.* By inducing people to make small commitments at first—agreeing with a premise, disclosing information—scammers build momentum.
- *Sunk costs.* After victims transmit a small sum of money, scammers explain that more money is needed to complete the payoff, lest the victims lose their initial investment.
- *Shame.* Scammers are often hard to prosecute because chagrined victims resist admitting their naiveté.

We have only begun to study the scamming phenomenon, conclude Hanoch and Wood. With internet-enabled misinformation poisoning public politics as well as personal finances and emotions, more research is needed. “Gaining a deeper understanding of these issues is the key to being able to develop preventive programs and reduce the prevalence of victimization,” the authors write. Perhaps your students can brainstorm antidotes to scamming—such as training people to ask why an offer would be scarce and time-limited, test whether a caller represents a claimed authority, or recognize foot-in-the-door and sunk-costs tactics in real time.

References

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When Fiction Becomes Reality

By Cindi May (College of Charleston) and Michael Scullin (Baylor University)

Benedetti, F. (2021). Placebos and movies: What do they have in common? *Current Directions in*

They say you never forget your first time. Given the strong physiological responses of racing heart, sweaty palms, and heightened senses many people experience when...watching their first horror movie, vivid memories are not surprising. My [CM's] first scary movie was Steven Spielberg's classic *Jaws*, and for years afterwards I was reluctant to go in the ocean. To this day, John Williams' haunting theme music sends chills up my spine.

From one perspective, this is remarkable. I knew I was sitting in a theater and watching a made-up story on a screen, but my body reacted like I was on the boat with Chief Brody. Why? The fear elicited by movies like *Jaws*, *Psycho*, *The Purge*, and *Halloween* captures how fictitious realities can induce genuine physiological and psychological responses. People react to movies in powerful, measurable ways (Matsukawa et al., 2017; Tan, 2018; Yoshihara et al., 2016). And movies can elicit a wide range of emotional and behavioral responses, from heartache and weeping during films like *The Notebook* to joyous triumph and cheering during films like *Star Wars: A New Hope*. From a psychological perspective, one fascinating truth is that the tears, fears, joy, and laughter we experience when watching a movie are very real, even though we know full well that the movies that spark these responses are not.

Student Activity: The Lemon Squeeze

Put students in pairs for this activity. Have one student in each pair watch 15 seconds of a video featuring a man biting into a lemon (tinyurl.com/sourmouth; start at 1:33 and end at 1:48). The other student should watch their partner, ideally videotaping their response to the video. Many students watching the video will make a face of disgust, will salivate, or will even experience pain or discomfort in their mouths.

Student Activity: Movie Trailer

As an additional activity, have students first determine their resting pulse rate and then complete the following scales:

On a scale from 1 (not at all) to 5 (very), I feel:

__anxious

__nervous

__frightened

__excited

Then have students watch the following movie trailer: tinyurl.com/reallyscared.

As soon as the trailer is complete, have students measure their pulse rate and complete the scales again. Then have them discuss changes in their physiological and emotional states from pre- to post-movie trailer. Ask if they think they would experience fear, tension, anxiety, or excitement if they watched the

full film and have them reflect on emotions they've experienced while watching other movies.

Noting that film clips and movies are fictional, ask students to discuss the psychological factors (e.g., expectancy, classical conditioning, reinforcement, social learning, cultural experience) that might mediate the responses to both film clips. If students were to design a film that elicited fear (or joy, sadness, heartache, etc.), how would they harness those psychological factors to create the biggest response? It may be helpful to remind them to connect their design suggestions directly to these psychological mechanisms, rather than relying on conventional film tropes.

Next, make the connection with placebos, describing both deceptive placebos and open-label placebos. Thinking about the same psychological mechanisms that drive our responses to movies, what aspects of a medical or clinical setting might contribute to placebo effects? Here, students might suggest factors like white coats, syringes, pills, mention of HIPAA rights, scrubs, and even the smells associated with hospitals and medical clinics. Have students design a protocol in which they think a placebo is most likely to be effective, explaining the science behind their design.

Finally, it may be worthwhile to discuss the potential downsides of the placebo effect. If a simulation or belief is sufficient to induce a measurable psychophysiological reaction, we may be more vulnerable to charlatans, scammers, or snake oil treatments (Benedetti, 2019). Although placebos may improve quality of life by reducing pain or alleviating discomfort, they do not cure disease or kill infection, and thus reliance on placebos rather than proven treatments could delay or prevent recovery from certain ailments. Understanding how and why placebos work, as well as their limitations, will help students consider how placebos can be used most effectively and ethically.

Fabrizio Benedetti posits that our reactions to fictional movies offer a model for understanding placebo effects. Placebos are simulated interventions that can induce real therapeutic benefits for a variety of conditions, including pain, depression, itching, and irritable bowel syndrome (Colloca & Howick, 2018; Kaptchuk, 2018). Placebos have puzzled scientists and clinicians alike, but the efficacy of placebos is unsurprising when you consider that they are delivered through social and therapeutic rituals that create a psychosocial context—not unlike the fictitious reality of a movie.

Placebos can be delivered in one of two ways: through deception or open-label administration. In deceptive placebo treatments, recipients believe they are receiving a real treatment (e.g., pain relief, therapeutic intervention) when in fact the treatment is inert. Here, expectations may play an important role in the relief that recipients experience. New studies have demonstrated, however, that deception and expectation are not necessary to elicit the perks of placebos (Kaptchuk, 2018; Kaptchuk & Miller, 2018). With an open-label placebo, recipients knowingly receive a fake treatment. Here too, they can experience genuine physiological and psychological improvement, just as people experience strong emotions and behavioral changes when they watch a fictional film. Unconscious or automatic mechanisms like conditioning may drive this benefit, given that prior experience with the treatment ritual (e.g., taking a pill to relieve pain) seems to be an important precursor to success with a placebo (Benedetti, 2020).

Instructors can use film-related activities to help students recognize that genuine emotional and

behavioral responses can be elicited from fictional contexts and consider the various mechanisms that might underlie placebo effects.

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