

How Do Social Psychologists Think?

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1.1 TO WEAR OR NOT TO WEAR AN INEFFECTIVE MASK: THAT WAS THE QUESTION DURING THE CORONAVIRUS PANDEMIC

The Social Situation

It will happen again.

Social psychologists can help to prepare the public for the next pandemic. Steven Taylor's (2019) book, *The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease*, provides specific guidance. Taylor's book was published just prior to the coronavirus disease of 2019 (COVID-19) pandemic. But you can practice your social psychological skills now by searching for the dangerous, one-word assumption in the next sentence about recommended behavior from the World Health Organization (WHO, 2019, p. 1):

This document summarizes WHO's recommendations for the rational use of personal protective equipment (PPE) in healthcare and community settings.

The early WHO advice was offered on February 17, 2020, right as COVID-19 was ramping up in the United States. Their still useful advice described specific ways to avoid becoming infected with the virus:

- washing hands frequently with soap and water for at least 20 seconds, or using an alcohol-based hand rub if soap and water are not available;
- avoiding touching your eyes, nose, and mouth;
- practicing respiratory hygiene by coughing or sneezing into a bent elbow or tissue and then immediately disposing of the tissue;
- wearing a face covering if you have respiratory symptoms and performing hand hygiene after disposing of the covering; and
- maintaining social distance (a minimum of 2 meters or 6 feet) from individuals with respiratory symptoms.

This life-saving advice changed only slightly as the situation changed and scientific understanding grew. However, that lifesaving, medical advice was sure to be sabotaged because the communicators at the WHO were not thinking like social psychologists. The most dangerous assumption about human behavior is hidden from the reader's attention in the middle of the first sentence: rational.

We can't assume that humans will behave rationally. Figure 1.1 describes how COVID-19 (and similar infections) found its way to your doorstep, and possibly into your body. The rational way to stop the spread of influenza (and many other infectious diseases) is to block the transmission at any point in the process. But which behavior has a greater chance of success: Asking people to wash their hands more, or asking them to touch their faces less?

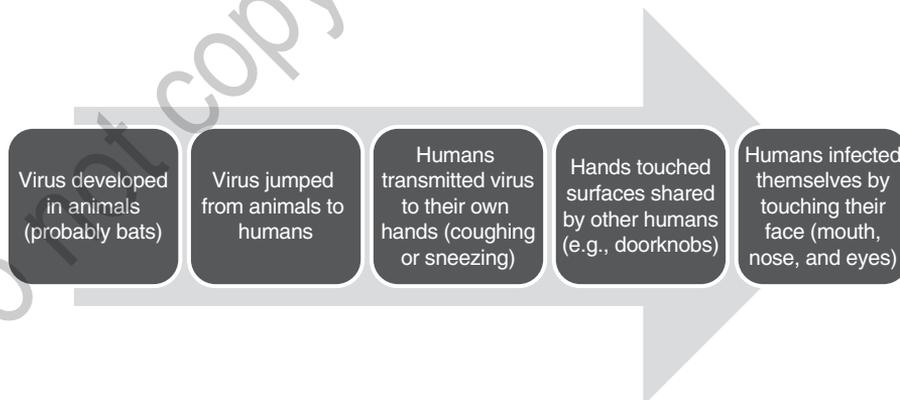
The rational way to stop the spread of influenza (and many other infectious diseases) is to block the transmission at any point in the process. If only we humans were rational. But we're not. Which do you think is easier: Asking people to wash their hands more, or asking them to touch their face less?

Theory and Method

This case study relies on **naturalistic observation** of medical students in a classroom.

Many of our baseline behaviors tend to be founded on emotions and **intuition** rather than reason and **logic**. We are emotional and reactive when we experience unexpected, health-threatening events, such as the COVID-19 virus (see Chen et al. 2019; De Las Cuevas & de Leon, 2019; Whitehead & Russell, 2004). It's also hard for us to use logic

FIGURE 1.1
Spread of Coronavirus Disease



Source: World Health Organization.

to break automatic, routine, habitual behaviors. The second piece of advice on the WHO list is *avoiding touching your eyes, nose, and mouth*. Social psychologists understand why this advice is doomed to failure. You can tell humans not to touch their faces. But that isn't going to stop them because face-touching is an automatic behavior.

An Australian research team told a group of 26 medical students that they were going to be part of an observational study (see Kwok et al., 2015). They knew they were being videotaped, but they did not know why. The class was videotaped so that the research team could count the frequency of hand-to-face contacts and where they occurred on the face: either with mucosal or non-mucosal areas. You might want to make your own prediction about the average number of facial touches per hour—and their location—after the research team counted how often these 26 medical students touched their own faces.

Results and Discussion

The numbers were probably higher than you anticipated.

There were a total of 2,346 facial touches in this class of 26 students. On average, each student touched their face 23 times per hour. Almost half (44%) touched an area with a mucous membrane. This provides a convenient pathway for viruses such as influenza or COVID-19, or the new viruses that emerge every year. The mucous membrane touches were almost evenly divided between the mouth (372 touches; 36%), the nose (318 touches; 31%), and the eyes (273 touches; 27%). There were combinations of touches to multiple mucosal areas (61 touches; 6%). The remainder (1,322; 56%) were contacts with non-mucosal areas.

As an intervention, it appears to be easier to increase hand washing rather than to reduce face touching. This hypothesis found support in a review of 100 relevant studies (Lunn et al., 2020). Why? Because face touching is an automatic behavior and therefore resistant to change. More hand washing can be encouraged by reminding people that it helps both them and their loved ones by slowing spread of the disease. Behavior, as the social psychologist understands it, is a function of a person interacting within an environment.

In addition to more hand washing and less face touching, the debate about how best to reduce the COVID-19 transmission included whether non-infected persons should cover their face. It could be a scarf, shop mask, or anything other than the carefully designed medical mask. At first, the WHO insisted that non-medical masks were irrelevant because they don't screen out the virus.

They emphasized that our first commitment regarding masks must be to the health care workers who routinely intubate or work with patients who are coughing, sneezing, or gagging on them. We need healthy health care workers for selfish reasons, if nothing else. We want them to be able to (a) treat us when our turn comes, and (b) not infect the rest of the population.

However, the debate grows more complicated when we consider using ineffective masks that do not actually screen out the virus. At first, public health workers were

concerned that encouraging the public to make and wear their own masks would lead to a false sense of security. People wearing masks might feel like it was safe to ignore social distancing or go to public events just for something to do. Either would increase rates of disease transmission. On the other hand, any mask or scarf would limit the distance that contaminated droplets would be distributed from people sneezing, singing, shouting, or coughing.

Another view is that encouraging people to wear even an unsafe mask would limit their access to their own face and break the chain of contamination. In other words, they might not touch their nose and mouth as frequently, especially when out in public. Therefore, even a homemade mask could limit or reduce those habitual 23 touches per hour. Wearing the mask might also remind people of the possible danger of approaching other people too closely.

Finally, homemade masks might not be useful at all from a medical point of view—unless you also factor in the psychology of how they affect behaviors based on both intuition and logic.

DISCUSSION QUESTIONS

1. During the COVID-19 pandemic, there were lots of reminders not to touch your face. Some people complained about this, noting that each reminder just made them want to touch their face! Why do you think this seemingly ironic experience occurred?
2. Some people took COVID-19 very seriously, while others seemed to think it was no big deal. At the same time, some people watched the news obsessively, while others tried to ignore it. What variables (personality traits, previous experiences, professions, family situations, etc.) might differentiate one type of person from another? How could you test your hypothesis?
3. Now that the world has experienced COVID-19, do you think people will act any differently if another pandemic arises? Why, or why not?

KEY TERMS

- **Naturalistic observation:** Watching and recording people's behaviors where they would have happened anyway, but for research purposes
 - **Intuition:** The ability to know something quickly and automatically; "gut feelings"
 - **Logic:** The ability to use reason, think systematically, and carefully consider evidence when making a decision
- that take little mental effort and can occur habitually.

1.2 AN EXERCISE ABOUT SEX AND SOCIAL INTERACTIONISM

The Social Situation

Consider this thought experiment.

A young heterosexual couple find themselves in an unplanned romantic situation. No condoms are available. Both are familiar with the need for birth control and the dangers from sexually transmitted infections. As they become aroused, the power of the immediate situation exerts increasing pressure.

What happens next?

People sometimes make solemn promises to themselves about sex, such as “no unprotected sex.” To say that this is a matter of life and death is more than playing with words. Sex without protection could produce a new life or transmit a deadly disease.

Social psychology influences this decision through the interaction between the individual (personality, attitudes, values, hopes, knowledge) and their environment (presence of others, circumstances, social norms, physical cues). There probably isn't anyone else nearby as the couple makes this decision. However, several social psychological variables are present and influencing what happens next.

Theory and Method

This theoretical case study is a mental exercise in thinking like a social psychologist.

The fairly common sexual situation described here is teeming with social psychology. Here are five social psychological influences likely to affect the couple's decision on what to do next:

- **Social norms** are unwritten rules of expected behavior of people within your group. Social norms about sexuality may differ if the couple is on a religious retreat compared to a spring break in Florida.
- **Individual differences** indicate how you usually differ from others in your group. It's factors such as your personality and values. Individual differences influence behavior if you, for example, are a free-spirited rebel or a self-disciplined student.
- **Socialization** is how your behavior is shaped by others' expectations, including your culture. The couple may have internalized strict religious teachings intended to control sexual behavior. But they also may have rejected those teachings, thinking them old-fashioned. In addition, men and women feel different pressures and are subject to different stereotypes about their expected sexual behaviors.
- **Attributions** are explanations of your own and others' behavior—often biased in self-serving ways. If one person wants to go ahead and the other does not,

TABLE 1.1

Examples of Social Influences on Social Situations

Social Influence	Social Situation
Social norms	A low-achieving high school student earns straight As in college.
Individual differences	A politically active first-year student joins a religious cult.
Socialization	A third-grade “troublemaker” is later sent to prison at 19.
Attribution	Large groups gather in crowds during a virus contagion.

then they may each interpret the other person’s motives in ways that make them feel good about themselves.

- **Interactionism** identifies how these individual influences combine to shape behavior. Interactionism, for example, recognizes that romance is less appealing for most people in an environment of a filthy apartment compared to a beautiful bedroom with a fireplace, but that some personalities will feel the opposite, or that other factors may become more important than the environment.

A thought experiment relies on your imagination. Play a Mix-and-Match game by using Table 1.1 to demonstrate how any social influences (on the left) can explain any of the social observations (on the right). Remember, if you can apply more than one idea from the left column to the situations in the right column, you’re seeing interactionism at work.

Results and Discussion

Social psychology’s founder, **Kurt Lewin**, was a foot soldier in the trenches of World War I.

On a very cold night, he observed soldiers burning fine furniture taken from a house. He wondered why they would behave in such an uncivilized way. Lewin recognized that their decision to behave was the product of two factors: (1) their immediate experience (they were cold) and (2) how people construed, or understood, the immediate situation (a cold night could be life-threatening). The situation led them to do things they normally wouldn’t have done. Lewin famously observed that behavior is the result of the interaction between the situation and the person. His point was that we’re all capable of behaviors that might surprise us, if the situational factors are strong enough.

Consider an interactionist perspective as you imagine how each social psychological factor might specifically apply to the romantic couple and their immediate situation:

- Social norms
- Individual differences
- Socialization
- Attributions

For each of these four concepts, what would likely lead to the couple moving forward with a sexual encounter anyway (despite protection)? What would likely lead them to decide to stop or wait?

DISCUSSION QUESTIONS

1. Lewin's famous prediction (i.e., behavior is a function of both the individual person and the social environment or situation) is a well-known foundational idea in social psychology. Does this question—"personality versus the situation"—seem as important or interesting as another classic question, "nature versus nurture"? What are the similarities and differences between the two questions?
2. When you consider your own decision making, identify two specific instances when your personality or self-concept mattered more than situational pressures (you went against what most other people seemed to be doing) and two specific instances when you went along with the crowd, despite doubt on some level that it was the "right" decision. Can you identify what differentiates when you follow your personality versus when you follow demands of the situation?
3. People sometimes conform to a situation despite their inner nature (e.g., engaging in a riot). In other cases, sometimes people conform to a situation by *not* engaging in a behavior (such as not sticking up for a bully victim because no one else is doing so). Which type of situation—action versus inaction—leads to more regret, and why?

KEY TERMS

- **Social norms:** Unwritten rules of expected behavior of people within your group
- **Individual differences:** How you usually differ from others in your group, such as your personality and values
- **Socialization:** How your behavior is shaped by others' expectations, including your culture
- **Attributions:** Explanations of your own and others' behavior (they can often be biased)
- **Interactionism:** How individual influences, such as personality, culture, and the immediate environment, combine to shape behavior
- **Kurt Lewin:** The founder of social psychology, who believed that all behavior is a function of both the individual person and their environment

1.3 THE NEIGHS HAVE IT: TESTING THEORIES WITH EXPERIMENTS

The Social Situation

Clever Hans was always hungry.

Horses are food motivated. Clever Hans knew it was feeding time whenever his owner, Mr. Wilhelm von Osten, appeared in his wide-brimmed hat. The retired school teacher was coming with food and a plan to teach his horse the fundamentals of mathematics. First it was addition, then subtraction, followed by multiplication and division.

Mr. Wilhelm von Osten was thrilled whenever Clever Hans tapped his right hoof to communicate correct numerical answers. “Clever Hans, what’s one plus two?” Three hoof taps. Amazing! And the questions could be even more complicated. “Clever Hans, if the fourth day of the month is a Saturday, what is the date of the following Wednesday?” Eight hoof taps!

The international excitement over Clever Hans began in Germany around the year 1900. The local children thought the old man was ridiculous, but they stopped their taunting when the famous General Zobel entered their modest courtyard. He was followed by an actual Duke, and then Germany’s most famous scientist, the zoology Professor C. G. Schillings. The children were also questioned by reporters. The man they had mocked made them mini-celebrities.

Schillings tested Clever Hans in private and then sent an enthusiastic, affirmative report to an international congress of scientists. This horse could do math! It was gaining credibility from experts. The crowds grew larger, and von Osten toured the country with Clever Hans, never charging for people to see this amazing animal. Clever Hans usually got the answers to questions right, even when strangers asked them.

Believers, doubters, philosophers, theologians, the curious, and the hustlers—they were all interested in Clever Hans. At last, a commission was formed, made up of several learned men who were trying to figure out how von Osten was tricking his audiences. They each were assigned to carefully observe different parts of Mr. von Osten’s body during a performance. The commission included a circus animal trainer, someone who knew how to get animals to do tricks. Like the others, he could not find any cues. The word went out: Clever Hans really could think like a human.

Clever Hans became an international sensation, and the story was picked up by the *London Standard* and the *New York Times*. One headline read: *CLEVER HANS AGAIN. Expert Commission Decides That the Horse Actually Reasons*. There were poems about Clever Hans, and his name was sung on the vaudeville stage. The image of Clever Hans appeared on post cards, liquor labels, and children’s toys.

Clever Hans was certainly learning—but it wasn’t the lesson Mr. von Osten thought he was teaching.

Theory and Method

This case study demonstrates how experiments peek below the surface of behavior.

The theoretical stakes in the Clever Hans affair were higher than Mr. von Osten imagined. Charles Darwin's book *On the Origin of Species* had just been translated into German (originally published in 1859). The clergy were trying to make sense of what those disturbing ideas meant for their theology. What were humans supposed to believe about themselves if they shared common ancestors with apes, and horses were as smart as many humans? A smart horse seemed to knock humans off their self-appointed perch of specialness.

But teaching math to a horse was not easy. The lessons had started simply. "Two," the old man would say as he leaned forward to help Clever Hans paw the ground twice. "Plus three" was followed by three more assisted taps. "Equals five" he told the horse as he looked up and finally gave Clever Hans something to eat. Clever Hans seemed to understand that von Osten wanted him to tap his hoof. But did he understand much more than that?

Competing Hypotheses

Wilhelm von Osten believed many different hypotheses about what was happening.

For example, he had saved the skull of a previous horse. He believed that analyzing the horse's head bumps, **phrenology**, would reveal its particular kind of intelligence. Phrenology was a popular idea at the time to explain human intelligence, personality, and mental illness. It was believed that certain bumps on your head reflected parts of your brain that were bulging out, causing various problems. If it worked for humans, why not horses? Animal intelligence seemed to be Mr. von Osten's favorite **hypothesis**: Clever Hans was simply clever!

The existence of Clever Hans also seemed to support Darwin's theory of evolution by means of natural selection. The problem with this hypothesis was that the existence of a horse as smart as Clever Hans seemed more like a giant leap within a species, as opposed to the very gradual evolution that Darwin had proposed.

A third hypothesis came from the famous Austrian psychologist Sigmund Freud. Even though Freud never saw Clever Hans himself, he had heard about him and favored the idea of **thought transference**—a fancy way of saying that von Osten and Clever Hans actually had some kind of telepathic connection (see Fernald, 1984). Freud's idea probably seems the most outlandish to you, and plenty of people had their doubts. One of those skeptics was Oskar Pfungst.

Testing Hypotheses

Oskar Pfungst had a strategy when he started testing Clever Hans.

He wanted to test Clever Hans under various conditions to see if his rate of correct responses would change. Pfungst called his strategy the **process of elimination**. Namely, he systematically ruled out various competing explanations for what was happening until there was only one remaining hypothesis. He also wanted to eliminate **experimenter bias**, or subtle ways in which the researchers might be influencing the results to support their own ideas.

For example, Pfungst personally supported the telepathy explanation. He discovered that when he concentrated very hard on the numerical answer to a mathematical

question, Clever Hans would tap out the correct number. That seemed to support the idea that Clever Hans could read his mind. But Pfungst wasn't convinced, as this kind of test wasn't scientifically valid.

A **spurious correlation** occurs when two things happen at the same time. We are tempted to interpret one as causing the other, when really there's something else going on. Fortunately, unbiased, scientific testing revealed a spurious correlation between intense concentration in a questioner and Clever Hans tapping out a correct answer.

Results and Discussion

Experiments can help us see past our own biases.

Pfungst noticed that questioners always leaned forward to watch Clever Hans' hoof after asking him a question. They also raised their heads when Clever Hans had tapped out the correct response. Leaning forward was something people seem to do naturally whenever they are concentrating.

Leaning forward in his broad-brimmed hat was how the old math teacher had trained his horse. Then he would look up to give him a bit of food when Clever Hans had tapped out the correct number. Looking up was the signal that Clever Hans could stop tapping and expect some food.

So Clever Hans wasn't really doing math at all. He was just stomping his hoof until someone raised their head, because he knew a treat was coming—and remember Clever Hans was always hungry. The apparent mathematical magic of Clever Hans wasn't due to his cleverness; it was due to food conditioning.

With that new hypothesis, Pfungst set up some experiments. First, he asked the horse a series of questions with a specific answer (let's say it was five hoof taps). But this time, as Clever Hans approached five, Pfungst kept leaning forward, looking down. Clever Hans kept tapping. As soon as Pfungst lifted his head, the tapping stopped.

To gather more scientific evidence for the idea that Hans was simply looking for cues, Pfungst added blinders to the horse's head. For the first time, Clever Hans started twisting about when questioned. He was apparently trying to see the questioner. When he settled down but was still unable to see his questioner, Clever Hans' remarkable mathematical abilities disappeared.

Another experiment tested whether Clever Hans was telepathic. This time, Pfungst arranged for people to hold up a card with a number and ask Clever Hans to tap out the number on the card. Clever Hans could do it, but only when the person holding the card had looked at the number first. If they didn't know the number, Hans just kept tapping.

The questioners were surprised at these results. They too had come to expect and believe in the mathematical abilities of Clever Hans. Pfungst concluded that the questioners did not realize that they had been sending subtle nonverbal signals to the always-hungry horse.

A book titled *The Horse That Won't Go Away* (Heinzen et al., 2015) describes the many ways that the Clever Hans effect has infiltrated our lives with false beliefs. This effect occurs when an animal or another person senses what we want, even when we

don't realize we're sending out signals. Applied to animals, the list includes dogs, artistic elephants, and several horses that have been credited with almost magical powers.

In addition to Clever Hans, a horse named Beautiful Jim Key was a main attraction at the 1904 World's Fair in St. Louis. Lady Wonder was a crime-solving horse, consulted sometimes by the police in the 1920s. More recently, a horse named "Velvet" has told her owner about her many previous lives. But Velvet is only one of many horse psychics on YouTube. They usually are sites hosted by people happily deceiving themselves for attention or hoping to deceive you for money.

Clever Hans passed away many years ago. However, the Clever Hans effect continues to demonstrate why experiments are so important to social psychologists. We need experimental truth-tellers such as Oskar Pfungst, who use science to demonstrate when the emperor is naked and when our hypotheses are simply wrong. Physicist Richard Feynman warned us that the first principle of science is that you must not fool yourself—and you are the easiest person to fool.

DISCUSSION QUESTIONS

1. Many people claim to have psychic powers of one type or another (e.g., communicating with the dead, the ability to sense the location of lost objects, or mind reading). Identify one specific form of "psychic" powers and explain how you might use the process of elimination to test these powers.
2. People around the world were extremely excited to see Clever Hans and believe he was capable of doing math. Why are humans motivated to believe in magic, superpowers, alien visits, or other such fantastical phenomena? What is it about our psychology that causes us to be excited about this kind of idea?
3. If you have a pet, do you think it is capable of some form of Clever Hans effect? Does your pet exhibit signs of trying to read your body or voice signals and then do what it thinks you want? Provide some specific examples.

KEY TERMS

- **Hypothesis:** A specific statement made by a researcher about the expected outcome of a study
- **Phrenology:** Non-scientific theory that the bumps on your head reveal your intelligence, personality, and mental illness
- **Thought transference:** Telepathy or mind reading
- **Process of elimination:** Systematically ruling out various explanations until there is only one left
- **Experimenter bias:** Subtle ways a researcher influences the outcome of a study or interprets the results
- **Spurious correlation:** When two things occur at the same time, but neither causes the other (e.g., a third thing might influence both)
- **Clever Hans effect:** When an animal or person senses what we want without us realizing we're sending signals

1.4 A PAINFUL INTUITION: BLOODLETTING

The Social Situation

The pain woke him up on the day he died.

The previous night's morphine mixture (laudanum) had helped him sleep. But now Dr. Benjamin Rush's pain was so intense that he demanded another bleeding (Fried, 2018). Two physicians recommended against it, but they would not overrule their friend and mentor. The compromise was to drip only four ounces of blood from Rush's side, where the pain was most acute.

There is a lot to admire about Benjamin Rush. He was a signer of the U.S. Declaration of Independence and is considered the father of modern psychiatry. In addition, Rush "served tirelessly as an advocate for many social reforms including temperance, women's rights, and humane treatment of the mentally ill . . . women's education and the abolition of slavery" (Toledo, 2004, pp. 61–62). He was a product of the Enlightenment and a believer in social activism (see Shryock, 1971).

However, he also believed in bloodletting.

Theory and Method

This case study demonstrates why social psychologists emphasize **critical thinking**, objective analysis, and application of ideas.

Benjamin Rush believed in a hypothesis. He believed so strongly in his medical hypothesis that he had never bothered to test it (see Shryock, 1971; Toledo, 2004). Why no experiments? Because his idea was intuitively obvious.

Why bother with critical thinking about something that is so obviously true? If something inside your body is causing you illness, then the best chance for a cure is to get that something outside of your body. Disease is caused by an imbalance of substances in the body, he reasoned, so the cure was to rebalance the body through **bloodletting**. Get that blood out, and you'll feel better.

Leeches were a common method. But cutting was also popular, or "cupping," which was creating suction through well-placed glass cups on the skin. Toledo (2004) described Rush's usual approach: "Typically, Rush would 'relieve' his patients of eight pints of blood over two or three days." And if that did not work, Rush would administer "another round of bleeding and purging." Purging involved inducing vomiting and elimination. It's easy to understand why Rush thought this would work; many of us have vomited and immediately realized we actually feel better. If there's poison in the system, it seems obvious that the poison should come out.

Results and Discussion

To Benjamin Rush, the evidence for success seemed obvious: Many patients did not die.

Their survival was proof (from his perspective) that his hypothesis was sound, and his intuitive application of bloodletting was effective. His biggest test was when he

administrated his methods to the sick people struggling through Philadelphia's contagious yellow fever epidemic in 1793. Many of his patients lived, so Rush experienced a **confirmation bias** that his ideas were valid. He interpreted what he saw around him as evidence that his hypothesis was a good one.

However, an intuitively appealing hypothesis combined with this kind of evidence still did not make bloodletting effective. He certainly didn't have a **control group** of people with yellow fever, who were randomly assigned *not* to receive bloodletting so he could compare outcomes. This lack of experimental evidence in favor of confirmation bias almost certainly caused more harm than good. "Without doubt," Toledo (2004) concluded, the "brand of heroic medicine initiated and propagated by Rush cost thousands of Americans' lives including his own." Benjamin Rush was *the* medical expert of his day, but his intuition about bloodletting was dead wrong. Modern medical science has shown that bloodletting simply doesn't work and usually makes things worse.

Intuition and logical reasoning anchor opposite ends on the spectrum of how humans think. Your intuition, knowing without knowing how you know, is wonderful, even thrilling when it works. But Benjamin Rush's story demonstrates why trusting our intuition can be so hazardous when it fails. Benjamin Rush's hunch about medicine had life-and-death consequences. Our intuition also has major life consequences as we make big decisions about our careers, marriage, children, buying a house, and much more.

We can't avoid using our intuition. However, we need to practice **healthy skepticism**, especially when it comes to psychology. Bogus interventions, even if they are innocent, might cost individuals and taxpayers millions of dollars and sometimes harm participants.

For example, the Scared Straight program sounds like it should work. Having anti-social teenagers visit hardened prisoners should help keep them away from criminal activity, but it sometimes has the opposite effect (see Lilienfeld, 2007). A meta-analysis of the Drug Abuse Resistance Education (DARE) program came to a similar

TABLE 1.2

Warning Signs That Psychological Therapies May Not Be Valid

Substantial exaggeration of claims regarding treatment effectiveness
Excessive appeal to authorities labeled as "gurus" or "experts"
Uses of a slick sales pitch and extensive promotional "deals"
Tendency of advocates to be defensive and dismissive of critics
Extensive reliance on anecdotal evidence to claim validity
Tendency of treatment followers to insulate themselves from criticism
Extensive use of made-up but scientific-sounding terms or "psychobabble"

conclusion (Pan & Bai, 2009). There are other popular therapies that don't help and sometimes harm people. The list includes Critical Incident Stress Debriefing (CISD), Eye Movement Desensitization Reprocessing (EMDR), Facilitated Communication (FC), and Recovered Memories of Sexual Abuse (see Barlow, 2010; Lilienfeld, 2007; Otgaar et al., 2019).

Above is a partial list of “tells” or features that will help you spot social psychological therapies that sound too good to be true and may be harmful (see Meichenbaum & Lilienfeld, 2018).

DISCUSSION QUESTIONS

1. Bloodletting was a popular trend to make people feel better for years. Identify other trends you think might be occurring in your society or culture right now, which you suspect might not be scientifically valid. Why are these trendy ideas so appealing to so many people?
2. Find an advertisement for a product that claims to have medical or physical results (e.g., diet pills, exercise equipment, hair loss treatments, toothpaste). Design an experimental study that makes use of (1) a control group and (2) random assignment to test the product's claims.
3. Bloodletting was popular for hundreds of years. Several famous people may have died because of bloodletting, or more quickly because of it, including Lord Byron and George Washington. Investigate at least one historical example of someone who was treated through bloodletting and describe the circumstances. What is the evidence that bloodletting either helped or hurt their condition?

KEY TERMS

- **Critical thinking:** Objective analysis and application of ideas
- **Bloodletting:** A formerly popular medical technique in which blood was removed from the body, often through cuts or leeches
- **Confirmation bias:** Selectively paying attention to or remembering information that supports what you already believe to be true, while ignoring or explaining away contradictory information
- **Control group:** A comparison group in a scientific study that provides a way to know whether an intervention causes changes in a given outcome
- **Healthy skepticism:** Constructive doubts about claims if they are presented without scientific evidence to support them