



Busting Big Myths in Popular Psychology

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Pop psych lore is a bewildering mix of fact and fallacy. Here we shatter some widely held misconceptions about the mind and human behavior

Popular psychology has become a fixture in our society, and its aphorisms, truths and half-truths permeate our everyday existence. A casual stroll through our neighborhood bookstore reveals dozens of self-help, relationship, recovery and addiction books that serve up heaping portions of advice for steering us along life's rocky road. About 3,500 self-help books are published every year, and numerous new Internet sites on mental health sprout up every month.

Much of this information is accurate and useful. Yet scores of popular psychology books and articles are rife with what we term "psychomythology," the collective body of misinformation about human nature. Without a trustworthy field guide for sorting psychological fact from fiction, the public may find itself at the mercy of self-help gurus, television talk-show hosts and self-proclaimed mental health experts, many of whom dispense dubious psychological information and guidance.

In our new book, *50 Great Myths of Popular Psychology*:

Parts of this article are adapted from *50 Great Myths of Popular Psychology: Shattering Widespread Misconceptions about Human Behavior*, by Scott O. Lilienfeld, Steven Jay Lynn, John Ruscio and Barry L. Beyerstein. Copyright © Wiley-Blackwell, 2010.

Shattering Widespread Misconceptions about Human Nature (Wiley-Blackwell, 2010), we bust 50 widespread myths of popular psychology, along with about 250 “mini myths,” explore the ramifications of these fallacies in popular culture and everyday life, and trace their psychological and sociological origins.

For example, we demonstrate that the following widely held beliefs are largely or entirely false:

- Most people use only 10 percent of their brainpower.
- In romantic relationships, opposites tend to attract.
- Our memories are faithful recordings of events similar to those on a videotape or DVD.
- People with schizophrenia have multiple personalities.
- Only depressed people commit suicide.
- People tend to behave oddly during a full moon.
- All successful psychotherapy forces people to confront the “root causes” of their problems from childhood.

These notions have various origins. Some, such as the idea that we use only 10 percent of our brainpower, seem to

Some see anger as a monster we must tame by “letting off steam.” Yet expressing anger actually amplifies aggression.

arise in part from misinterpretations of psychological research that are trumpeted in pop psych books, articles and blogs—in this case, from a warped interpretation of decades-old and now discredited claims that scientists did not know what 90 percent of the brain did. Other mistaken beliefs probably result from selective attention and memory. For instance, all of us tend to notice and recall unusual occurrences. Thus, we are more likely to remember an attraction between two people who have markedly differ-

ent personalities than a bond between two people who are alike. Similarly, we notice and recall peculiar behavior during a full moon more

readily than we do ordinary actions.

Still other myths probably derive from the powerful allure of our everyday experience. For instance, our memories seem subjectively real to us, often leading us to accept their veracity without question. In fact, hundreds of studies show that our memories are subject to distortions over time [see also “Do the ‘Eyes’ Have It?” by Hal Arkowitz and Scott O. Lilienfeld; *SCIENTIFIC AMERICAN MIND*, January/February 2010].

In this article, we debunk



six popular psychology myths. We deflate some of the widely expressed enthusiasm for expressing anger, different learning styles and a positive attitude as a

treatment for cancer. We also discredit the belief that all alcoholics must aim for abstinence, that old age is usually characterized by sadness and mental deterioration, and that we all deal with death in an unvarying sequence of five stages.

Myth #1: Blowing Our Tops Defuses Anger

People often opine that releasing anger is healthier than bottling it up. In one survey, 66 percent of university undergraduates agreed that expressing pent-

FAST FACTS

Conventional Wisdom?

1» Scores of popular psychology books and articles are rife with what we term “psychomythology,” the collected body of misinformation about human nature.

2» The authors’ new book busts 50 widespread psychology myths, along with about 250 “mini myths,” including “Most people use only 10 percent of their brainpower” and “People tend to behave oddly during a full moon.”

3» In this article, the authors debunk six fallacies. They deflate enthusiasm for expressing anger, different learning styles and a positive attitude as a salve for cancer. They also discredit the belief that all alcoholics must aim for abstinence, that older people are unhappy and that grief emerges in five set stages.

up anger is a good way of tamping down aggression. This belief dates back at least to Aristotle, who observed that viewing tragic plays affords the opportunity for catharsis, a cleansing of anger and other negative emotions.

Popular media also assure us that anger is a monster we must tame by “letting off steam,” “blowing our top” and “getting things off our chest.” In the 2003 movie *Anger Management*, the meek hero (played by Adam Sandler) is falsely accused of “air rage” on a flight, causing a judge to order him to attend an anger management group run by psychiatrist Buddy Rydell (played by Jack Nicholson). At Rydell’s suggestion, Sandler’s character tosses dodgeballs at schoolchildren and throws golf clubs to purge his anger.

Rydell’s advice echoes the counsel of many self-help authors. One suggested that rather than “holding in poisonous anger,” it is better to “punch a pillow or a punching bag. And while you do it, yell and curse and moan and holler.” Some popular therapies encourage clients to scream, hit pillows or throw balls against walls when they get angry. Practitioners of Arthur Janov’s “primal therapy,” popularly called primal scream therapy, believe that psychologically disturbed adults must bellow at the top of their lungs or somehow otherwise release the emotional pain stemming either from the trauma of birth or from childhood neglect or suffering.

Yet more than 40 years of research reveals that expressing anger actually amplifies aggression. In one study, people who pounded nails after someone insulted them became more critical of that person than did their counterparts who did not pound nails. Other research shows that playing aggressive sports, such as football, actually boosts self-reported hostility. And a review of 35 studies by psychologist Craig Anderson of Iowa State University and psychologist Brad Bushman of the University of Michigan at Ann Arbor suggests that

playing violent video games such as *Manhunt*, in which participants rate assassinations on a five-point scale, heightens aggression in the laboratory and in everyday social situations.

Psychologist Jill Littrell of Georgia State University concludes from a published review of the literature that expressing anger is helpful only when accompanied by constructive problem solving or communication designed to reduce frustration or address the immediate source of the anger. So if we are upset with our partner for repeatedly ignoring our feelings, shouting at him or her is unlikely to make us feel better, let alone improve the situation. But calmly and assertively expressing our resentment (“I realize you probably aren’t being insensitive on purpose, but when you act that way, I don’t feel close to you”) can often take the sting out of anger.

Why is this myth so popular? People probably attribute the fact that they feel better after expressing anger to catharsis, rather than to the anger subsiding on its own, which it almost always does. Odds are, they would have felt better if they had merely waited out their anger.

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Myth #2: Different Strokes for Different Pupils

In the story “Parents of Nasal Learners Demand Odor-Based Curriculum,” writers at the satirical newspaper *The Onion* poked fun at the idea that a teaching style exists to unlock every underperforming student’s latent potential. An expert quoted in the story observed that “nasal learners often have difficulty concentrating and dislike doing homework.... If your child fits this description, I would strongly urge you to get him or her tested for a possible nasal orientation.”

Plug the words “learning styles” into an Internet search engine, and you’ll find scores of Web sites purporting to diagnose your preferred learning style in a matter of minutes. These sites are premised on a widely accepted claim: students learn best when teaching styles are matched to their learning styles. The popularity of this view is understandable. Rather than implying that some

students are better or worse learners overall, it suggests that all students can learn well, perhaps equally well, given just the right teaching style.

This idea has become a truism in much of recent educational theory and practice. It has been extolled in many popular books and in workshops that attract hundreds of teachers and principals. In some schools, teachers have even started giving children T-shirts emblazoned with one of the letters V, A and K, which stand for three widely accepted learning styles: visual, auditory and kinesthetic.

Yet studies show that students' learning styles are difficult to reliably identify, largely because they often differ greatly across situations. A child might display one style in art class, say, and a different one when trying to learn math.

Moreover, from the 1970s onward, most investigations have failed to show that matching teaching styles to learning styles works: for example, it does not improve students' grades in most cases. Instead certain general teaching approaches—such as setting high expectations for students and providing them with the motivation and skills to attain them—usually yield better results than other strategies, regardless of students' learning styles.

To the extent that the “matching” approach encourages educators to teach to students' intellectual strengths rather than their weaknesses, it may actually backfire. In the long run, students need to learn to compensate for their shortcomings, not avoid them. [For more on better learning techniques, see the Special Report beginning on page 32.]

Myth #3: Positive Thinking Cures Cancer

In the book *9 Steps for Reversing or Preventing Cancer and Other Diseases* (Career Press, 2004), Shivani Goodman

argues that her cancer was the product of negative thought patterns—in this case, her subconscious rejection of being a woman. Once she identified her toxic attitudes, Goodman claims, she changed them into healing approaches that created “radiant health.” Numerous self-help books similarly imply that a positive attitude can stop cancer in its tracks or at least slow its progression.

Most women who have survived cancer seem to agree. According to surveys, 40 to 65 percent of survivors believe their cancers were caused by stress, and between 60 and 94 percent think they became cancer-free because of their positive attitude.

The weight of the evidence, however, fails to support the notion that optimism is a salve for cancer. Most studies find no connection between cancer risk and either stress or emotions. In fact, in several

investigations, researchers observed a *lower* risk of breast cancer among women who experienced relatively *high* stress in their jobs, compared with women who experienced relatively low job stress. Scientists have also consistently failed to turn up an association between positive attitude and cancer survival.

For such reasons, journalist and social critic Barbara Ehrenreich adopts a decidedly skeptical stance on the power of mind-set over healing in her book *Bright-Sided: How the Relentless Promotion of Positive Thinking Has Undermined America* (Metropolitan Books, 2009). Further, Ehrenreich rails against the “cancer culture” that pressures people with cancer to believe that being upbeat and cheerful will heal them or at least ennoble them as human beings. Instead Ehrenreich urges people with breast cancer to adopt an attitude of

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AGE FOTOSTOCK

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“vigilant realism” and not to bury themselves under a cosmetic veil of cheer.

The impotence of a positive outlook in the face of physical ailments calls into question the medical value of support groups and the emotional assistance they provide. Early preliminary studies seemed to suggest that participating in such groups helps to prolong life. But more recent and scientifically solid research, reviewed by University of Pennsylvania psychologist James Coyne and his colleagues, showed that psychological interventions (including support groups) do not extend the lives of cancer patients, although they can enhance their quality of life.

People with cancer can relieve their physical and emotional burdens by seeking quality medical and psychological care, connecting with friends and family, and finding meaning and purpose in every moment. They can also take comfort in the now well-established finding that their attitudes, emotions and stressful experiences are not to blame for their illness.

Myth #4: One Drink, One Drunk

Can ex-alcoholics eventually drink in moderation without succumbing to their old addiction? One survey of more than 3,000 people reveals that only 29 percent of Americans think they can. This perception dovetails with the Alcoholics Anonymous (AA) slogan, “One drink, one drunk.” AA’s familiar 12-step program encourages members to admit that they are powerless over alcohol. Treatment programs premised on the 12 steps boast recovery rates as high as 85 percent. But here’s the rub: as many as two thirds of drinkers drop out within three months of joining AA, and AA helps only about a fifth of people

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abstain completely from alcohol.

Claims that some people with a history of alcoholism can safely engage in “controlled drinking” have generated a firestorm of controversy. Yet a 2001–2002 National Institute on Alcohol Abuse and Alcoholism survey of more than 40,000 adults revealed that 18 percent of one-time alcoholics could drink in moderation without abusing alcohol,

grams also teach coping skills that help participants “wait out” the urge to drink and to avoid situations that tempt them to drink.

Such tactics do not work for everyone. Studies suggest that if individuals are severely dependent on alcohol, have a long history of unhealthy drinking, and experience physical and psychological problems from drinking, they are probably best off seeking treatment programs that advocate abstinence. Never-

challenging the popular assumption that abstinence is a necessary goal for all alcoholics. Further, researchers have found that behavioral self-control training programs, in which moderate drinking is the goal, are at least as effective as those that use the 12-step method. In these restraint-centered programs, therapists train people to monitor their drinking, set limits for their alcohol consumption, control their rate of drinking and reward their progress. These pro-

theless, controlled drinking is probably a feasible goal for some ex-alcoholics. Indeed, problem drinkers may seek help earlier if they know that complete abstinence from alcohol is *not* the only alternative. Indeed, controlled drinking may be especially worth considering for patients for whom abstinence-oriented programs have repeatedly failed to work.

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