JUNE 2025

Monitor on Psychology



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Monitor on Psychology

A publication of the American Psychological Association

VOLUME 56 | NUMBER 4

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The Hot List

Resources, opportunities, and news for psychologists from APA



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DIGITAL MEDIA

Healthy Video Viewing Guide

Today's teens consume video content across various platforms, often for several hours daily. This guide helps parents navigate the complex world of teen video viewing. It translates hundreds of rigorous studies on teen development, mental health, and well-being into practical strategies for parents to promote healthy viewing habits, balanced screen time, media literacy skills, and more. Learn how to empower your patients to help teens navigate the digital media landscape in a healthy way.

healthyviewing.apa.org

ADVOCACY

How APA Is Standing With Science

Current policy changes are creating challenges for psychologists across research, education, and practice. APA's recent efforts to support the field and the broad impact of psychology include joining nearly 50 other scientific organizations in a letter of support for U.S. researchers, educators, and academics and taking nearly 200 psychologists to Capitol Hill to engage directly with decision-makers. Read about APA's efforts and get involved at our Response Center.

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TECHNOLOGY

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at.apa.org/55abd3

PODCAST

How to Say No: The Power of Defiance

Ever feel pressured to say yes when you really want to say no or go along just to get along? In this *Speaking of Psychology* episode, organizational psychologist Sunita Sah, PhD, author of *Defy: The Power of No in a World That Demands Yes*, delves into the difficulty of speaking up. Sah offers tips on how to strengthen your resolve and ability to say no when the situation calls for it.

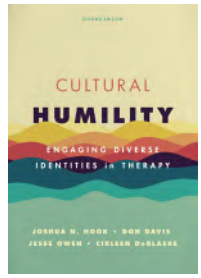
www.apa.org/news/podcasts/speaking-of-psychology/power-defiance.html



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PRACTICE

New Guidance on Cultural Humility



The APA book *Cultural Humility* guides therapists in engaging with patients' cultural identities. It provides strategies to improve cultural humility and comfort in working with diverse patients. This updated edition, to be published on June 17, includes new theories, research, and recommendations for therapists from marginalized groups to navigate cultural issues in the treatment space. It also offers insights on developing strong alliances with patients, navigating value differences, and repairing the relationship after cultural ruptures.

www.apa.org/pubs/books/cultural-humility-second-edition

CARING FOR STUDENTS

Helping Students Who Have Experienced a Crisis

Teachers play an important role in facilitating student learning, well-being, and growth. Help them support students through crises with this essential mental health primer. This resource helps teachers identify crisis-related behaviors in the classroom and lists practical dos and don'ts for how to effectively respond. Share this primer with the educators you know.

www.apa.org/ed/schools/primer/crisis

CHILDREN'S MENTAL HEALTH

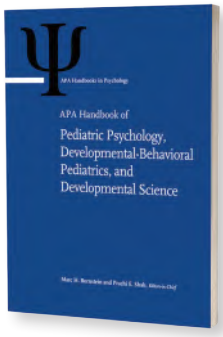
Mindful Nature—Connecting With Our Great Green World

This engaging resource, designed for young readers ages 4 to 8, combines beautiful and calming thought prompts with captivating nature photography. Published in partnership with the National Wildlife Federation, this book features images of various wildlife, from charming critters to majestic animals, that encourage kids to develop a deep connection with nature. *Mindful Nature* aims to support children's emotional well-being and promote a peaceful, contented state of mind.

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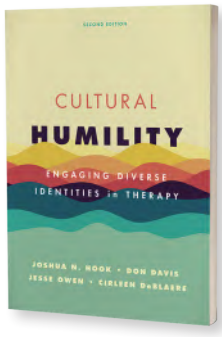
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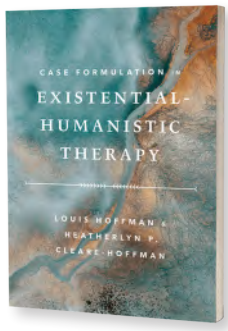


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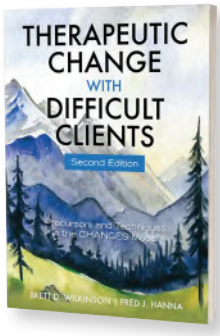
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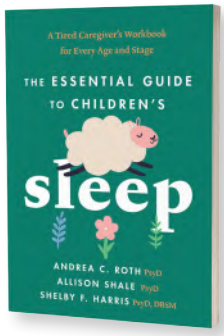


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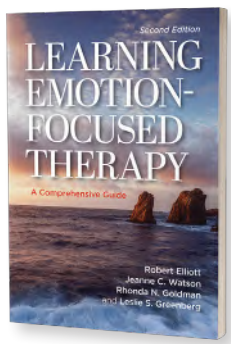


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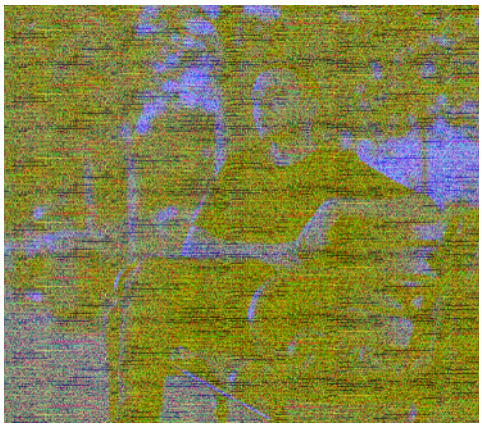
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June 2025



54 Rebuilding a Full Life After Religion

Some psychological research has associated organized religion with positive mental health outcomes, but for those who have experienced abuse or mistreatment in their religion, it can have the opposite effect. Psychologists who specialize in spiritual reconstruction help people build meaningful lives after leaving organized faith communities.



62 The Psychological Toll of Sickle Cell Disease

Psychologists are helping sickle cell patients manage both the physical pain and emotional uncertainty of living with sickle cell disease.



46 Helping Youth Move From Climate Anxiety to Climate Action *(cover)*

The ongoing reality of climate change and its consequences has significant psychological implications for young people, research is finding. Psychologists are exploring how strategies such as meaning-focused coping—which transforms anxiety and distress into a sense of purpose—can enhance mental well-being.

ON THE COVER: SEBASTIEN SALOM-GOMIS/GETTY IMAGES

CONTENTS



CONTINUING EDUCATION

Chronic musculoskeletal pain is a broad umbrella, covering any pain related to the muscles, joints, and bones, whether linked to a known injury or not. A new APA clinical practice guideline highlights the best current evidence for psychological and behavioral treatments for this type of pain. *See page 40.*

@APA

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Cultivating Hope in Uncertain Times

Use practical strategies to build resilience and find strength



Dr. Kawahara is the 2025 APA president and associate dean for academic affairs and distinguished professor at the California School of Professional Psychology, Alliant International University.

BY DEBRA KAWAHARA, PhD

IN THESE UNCERTAIN times, the concept of hope becomes more crucial than ever. Viktor Frankl, in his seminal work *Man's Search for Meaning*, provides profound insights into the nature of hope. Frankl posits that hope is a choice, a powerful force that sustains life even in the direst circumstances. He reminds us that while the outcomes we hope for are not guaranteed, the act of hoping itself is a testament to our resilience and strength.

Frankl's assertion that "everything can be taken from a man but one thing: the last of the human freedoms—to choose one's attitude in any given set of circumstances, to choose one's way" underscores the internal nature of hope. It is not contingent on external events but rather on our internal resolve and perspective. Hope requires a desire for a specific outcome, a rejection of any other possibility, and a belief in the eventual realization of that hope.

So, how do we hold onto hope in these uncertain times? Here are some strategies:

Prioritize connection and community: In moments of uncertainty, connecting with others can provide a sense of belonging and support. Building and maintaining strong relationships within our communities can foster a collective sense of hope and resilience.

Focus on small, meaningful actions: Sometimes, the enormity of our challenges can feel overwhelming. By focusing on small, meaningful actions, we can create a sense of progress and purpose. These actions, no matter how minor they may seem, contribute to a larger sense of hope and forward momentum.

Observe, notice, and name: Paying attention to our own and others' thoughts, feelings, and behaviors and then naming them can help us process our experiences and can be powerful in maintaining a hopeful outlook. This mindfulness practice allows us to acknowledge our struggles while also recognizing our capacity for hope.

Include self-care: Taking care of our physical, emotional, and mental well-being is essential. Engaging in activities that bring joy, relaxation, and fulfillment can replenish our hope and resilience.

Remember the resilience and strength of those who came before us: Reflecting on the lived experiences and stories of those who have endured challenging times and uncertainty can inspire us. Their resilience and strength serve as a reminder that we are here today because of them and we, too, can navigate and overcome our current challenges.

Hope is a powerful, internal process that sustains us through uncertainty. By prioritizing connection, focusing on small actions, practicing mindfulness, engaging in self-care, and drawing inspiration from the past, we can cultivate and maintain hope. Let us choose hope, for it is through hope that we find the strength to persevere and thrive. ■



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AMERICAN PSYCHOLOGICAL ASSOCIATION

APA and Psychology's Role in Navigating Challenging Times

APA is working to pave a positive path for all

BY ARTHUR C. EVANS JR., PhD



Arthur C. Evans Jr., PhD, is the chief executive officer of APA. You can follow him on LinkedIn.

THE NATION'S RAPIDLY changing policy landscape has created a steady drumbeat of disruption that is affecting nearly everyone. From widespread cuts to research funding, to massive federal workforce reductions, to concerns about changes to telehealth coverage, the field of psychology is feeling the impact. Broader policy shifts targeting certain terms, topics, and groups are psychologically taxing on us as individuals, family members, and communities.

In times like these, organizations can become distracted and paralyzed by uncertainty. But APA recognizes three crucial roles that we must play as an association.

■ **Protecting psychologists.** Representing more than 173,000 members, APA supports the diverse needs of clinicians, researchers, educators, consultants, and students in psychology. For example, APA mobilized members to send more than 18,000 messages to Congress, fueling a larger groundswell that resulted in a federal judge blocking proposed cuts to the NIH. Also, when the Bureau of Prisons (BOP) was forced to withdraw from the national internship match, APA partnered with Div. 18 (Psychologists in Public Service) to call for psychology trainees to be exempted from the hiring freeze, resulting in accredited programs at the BOP being able to participate. As issues emerge, APA seeks ways to ensure that psychologists are supported and continue to thrive in their work.

■ **Protecting our mission.** As a nonpartisan organization committed to the application of psychological science for the betterment of society, APA contributes relevant science-informed policies to national conversations. We ground our work in psychological knowledge, adhere to our values, and work collaboratively. For years, this approach has garnered the respect and consideration of policymakers across the political spectrum, allowing us to have greater impact on societal issues. It is essential that we continue to abide by these principles, so our work maximally benefits society.

■ **Protecting society.** APA brings a scientific understanding of human behavior to a wide range of societal issues. In February, our Council of Representatives reaffirmed APA's commitment to justice, human rights, fairness, and dignity, recognizing the centrality of these values to the organization and broader field. Every day, APA engages in work that improves the human condition, and unequivocal support across the association and field means continuing to make this a core part of our work.

Guided by these ideals, APA is ensuring that psychology both navigates today's challenges and helps pave a positive path forward for all. ■

APA members advocate at the U.S. Capitol.



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In Brief

COMPILED BY CHRIS PALMER, PhD



Exercise is correlated with an immediate improvement in cognitive functioning, even in the case of one-off workouts.

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The cognitive boost of exercise

For most people, any kind of exercise has immediate benefits for cognitive functioning, suggests a large meta-analysis in *Psychological Bulletin.* Researchers identified 30 systematic reviews of previous meta-analyses (covering 383 unique studies with 18,347 participants). Their investigation revealed that even one-time workouts improved cognitive function to a moderate degree. The cognitive processes that benefited from one-off exercise sessions were attention, executive function, memory, and information processing. The timing of cognitive assessment mattered; the largest benefits were observed immediately after exercise. The age and cognitive status of the participants, as well as the type, intensity, and duration of exercise had no significant impact.

DOI: 10.1037/bul0000460

Active learning better for some

Students can learn faster about a topic when tasked with actively solving practice problems supplemented by feedback than when taught exclusively with classroom lectures, according to research in the *Journal of Applied Research in Memory and Cognition*. But they may lose motivation to deepen that knowledge. Across three experiments, researchers determined that 870 online participants in the United States learned 15% faster when engaging in practice sessions and receiving feedback than when instructed exclusively with lectures. However, they also found that this teaching method diminished interest in course content for students who are less confident and may struggle when challenged to solve problems and learn from their mistakes without detailed prior instruction.

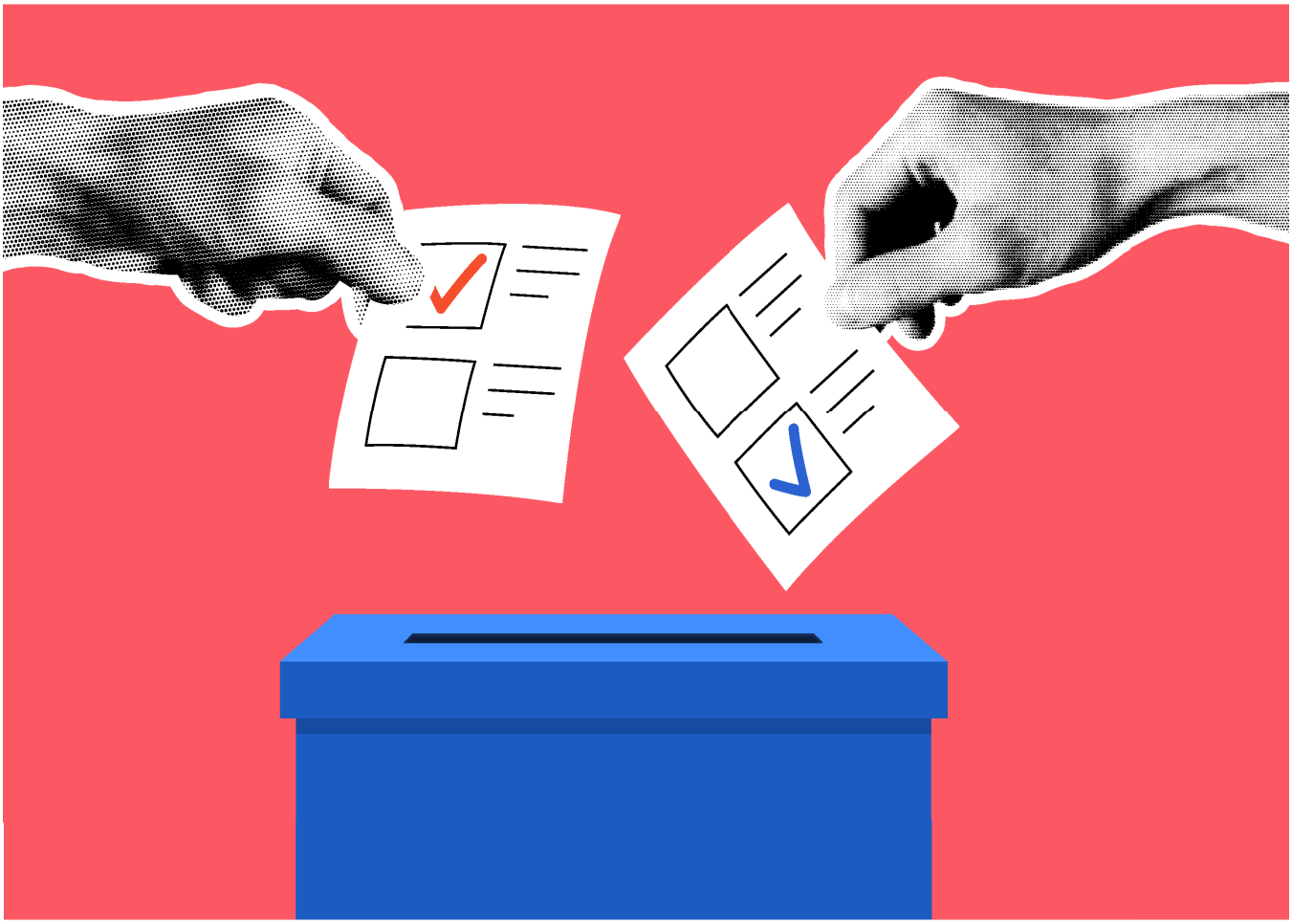
DOI: 10.1037/mac0000205

Who is the ideal candidate?

The 2020 U.S. presidential election saw people shift their definition of what an ideal leader is, according to a study in *American Psychologist*. Researchers surveyed 200 Republicans, 200 Democrats, and 200 independents eight times between October 2020 and January 2021 about their perceptions of an ideal leader. While preference for most characteristics—including charisma, sensitivity, dedication, intelligence, and dynamism—remained stable across time, participants who accepted the 2020 election results became less likely to perceive tyranny and masculinity as desired traits compared with those who did not accept those results as valid. The researchers concluded that elected leaders not only mirror public perceptions of ideal leadership but also can shape those perceptions.

DOI: 10.1037/amp0001413

Elected leaders mirror and can even shape public perceptions of ideal leadership traits, according to surveys related to the 2020 U.S. presidential election.



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Negotiation gender gap

Despite equally valuing the concept of negotiation, boys ask for bigger rewards than girls do for completing the same work, indicates research in *Developmental Psychology*. Across two experiments, 257 boys and girls ages 6 to 9 indicated they would negotiate to a similar extent in hypothetical scenarios involving negotiating with a teacher for completing classroom work. In a third experiment, 204 children between the ages of 7 and 12 engaged in a task identifying images on a computer screen. No matter how well they performed, they were offered a bonus—viewing images of animals—and asked how many pictures they should get to view based on their achievement. Despite performing at roughly the same level as the girls, on average, the boys asked for 65% more pictures than the girls did. Additionally, boys—but not girls—made higher negotiation requests when they thought doing so was permissible and effective. In contrast, girls' requests were predicted by how competent they thought they were. Notably, boys overestimated their performance, partially explaining why they believed they deserved bigger rewards.

DOI: 10.1037/dev0001898



Compassionate love—giving of oneself for the good of another—is associated with beneficence in relationships between parents and children.

Motivated emotion regulation by country

People from cultures that are less motivated to reduce unpleasant emotions are less likely to use emotion regulation strategies, suggests a study in *Emotion*. Across two studies in 2020 and 2021, researchers assessed use of this motivation strategy among 2,608 individuals from 17 countries: Israel, Turkey, the United States, the United Kingdom, Ghana, Brazil, Peru, China, South Korea, Japan, India, Nepal, Germany, Italy, Poland, Russia, and Bangladesh. In both studies, the motivation to decrease unpleasant emotions was lowest among individuals from Japan and highest among individuals from Germany (the United States was relatively high).

DOI: 10.1037/emo0001403

Compassionate love begins at home

According to research in the *Journal of Personality and Social Psychology*, the more people feel compassionate love—that is, giving of oneself for the good of another (family members)—the more likely they are to take the other's perspective, make sacrifices for them, and support them. Across seven studies with 1,916 participants in Canada, a researcher assessed levels of compassionate love and beneficence in two types of relationships: parents and children and parents and adult children. In both types of relationships, compassionate love was found to be associated with beneficence, such as willingness to sacrifice, responsive caregiving, and lending support. However, the analysis ruled out links between compassionate love and unhealthy forms of caregiving (e.g., caregiving motivated by obligation or needy caregiving) and exploitable dependency. A similar pattern has previously been observed in romantic relationships. Overall, the highest levels of compassionate love were found for parents' love of their young children and lowest for adult children's love of their fathers.

DOI: 10.1037/pspi0000479

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Hiring ads that communicate specific, measurable diversity goals may attract more applications from women and racial minorities than those communicating only vague commitments.

Specific diversity goals boost applicant numbers

Communicating specific, measurable diversity goals in job advertisements can increase application rates from women and non-White individuals relative to communicating only vague commitments to diversity, according to research in the *Journal of Experimental Psychology: General*. In the first of two studies, researchers presented 5,557 participants in the United States with job advertisements containing specific diversity goals (e.g., "We plan to hire at least one woman or racial minority for every White man we hire") or general endorsements of diversity (e.g., "We care about diversity"). The specific, goal-focused advertisement drew 6.5% more applicants from women and non-White individuals than the vague advertisement. This effect was especially pronounced in White women. Follow-up studies with 893 women and 865 non-White individuals suggest that although measurable goals signal a more transactional approach to diversity, they also help to persuade applicants of the organization's genuine commitment. This translated to more applications from both groups.

DOI: 10.1037/xge0001699

To register or not to register?

Registered research reports are characterized by less bias and better methodology than non-registered reports, though the latter garner more attention, according to a study in *American Psychologist*. Researchers analyzed 119 pairs of original research articles (registered and non-registered reports) from 33 psychology journals, paired by journal, time of publication, and research topic. They found that registered reports were less biased against null results and included higher levels of method and data transparency. However, these reports were cited less often than non-registered reports, even after controlling for these factors along with the number of studies per article, length of the methods and results sections, open access, and authorship metrics. Overall public impact, as measured by Altmetric attention scores and the number of social media posts on X, was not different between report types. However, articles published in journals with a lower impact score generated more posts on X. This could be due to readers wanting to share registered reports

from lower impact journals to ensure the articles' methodological rigor, which they may assume is assured for higher impact journals.

DOI: 10.1037/amp0001503

Flexibility in race, gender judgments

People are influenced by binary labels (e.g., Black, White, man, woman) as well as personal experience when sorting faces that vary by gender and race, suggests research in the *Journal of Experimental Psychology: General*. Across six studies with 1,292 participants in the United States, researchers investigated how face perception varied along these dimensions. They found that when asked to sort faces of varying shades of skin tone along a continuum from Black to White, participants had a distinct lack of consensus regarding faces of intermediate race. Similar results were obtained when cisgender participants were asked to place faces along the male-to-female continuum. Transgender/nonbinary participants, on the other hand, demonstrated much higher levels of consensus in sorting intermediary faces than cisgender participants. Including a third category for sorting faces resulted in greater consensus among cisgender participants. The results suggest personal experience can shape how people think about gender/sex, as can how people categorize others.

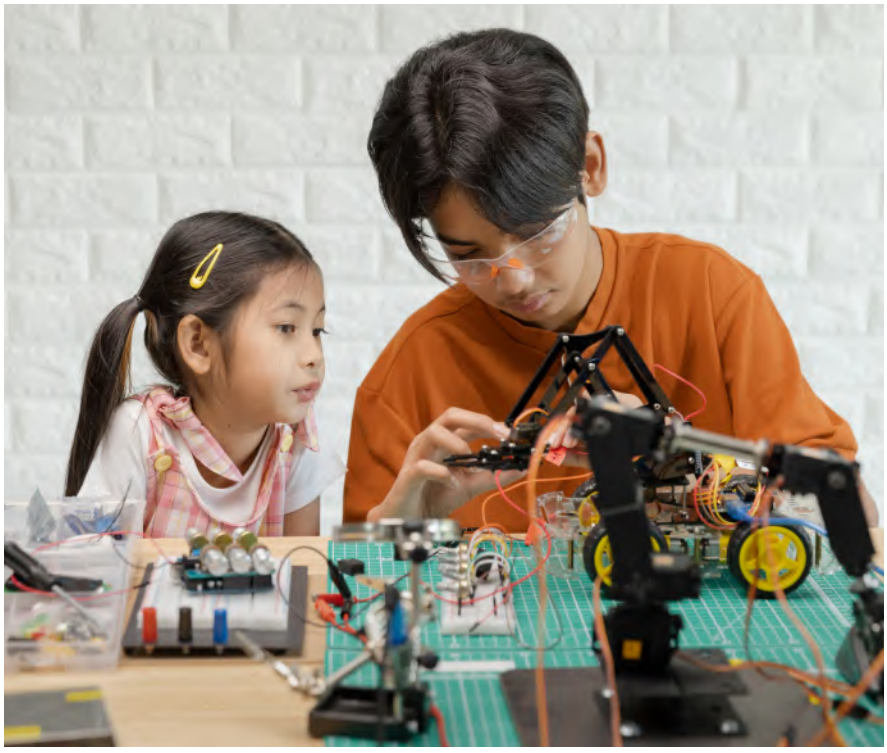
DOI: 10.1037/xge0001512

STEM stereotypes

By age 6, children think boys are better than girls at computer science, engineering, and physics but not math, according to a meta-analysis in *Psychological Bulletin*. Researchers examined findings from 98 studies that measured children's gender stereotypes about STEM and verbal abilities. The data comprised 145,204 children (ages 4 to 17) from 33 countries across more than 40 years (1977 to 2020). Stereotypes indicating that males are significantly better at computer science, engineering, and physics emerged by age 6, while math stereotypes were minimal at all ages. Girls increasingly held STEM stereotypes about males as they grew older. By age 8, participants thought that girls are much better in verbal domains like reading and writing, a stereotype that grew stronger with age. Additionally, Black participants, especially girls, held weaker pro-male STEM stereotypes than did White participants. Unexpectedly, the stereotypes boys held about whether boys or girls are better at STEM subjects declined from age 6 until age 13 (meaning they see girls as equally good at STEM subjects) but increased thereafter.

DOI: 10.1037/bul0000456

By age 6, children tend to think boys are better than girls at computer science, engineering, and physics—but not math.



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Self-control both signals and affords power

Individuals who demonstrate self-control are perceived as more powerful and thus hold more influence over others, suggests research in the *Journal of Personality and Social Psychology*. Across seven experiments, roughly 3,500 students and employed adults read about or interacted with individuals displaying varying levels of self-control, defined as how often an individual's behavior aligns with goals in various domains, including saving money, being healthy, and reading books. Across all experiments, individuals with high self-control were seen as more assertive and competent and better suited for powerful roles than individuals with low self-control. In one

study, people were perceived as more powerful when they exceeded a modest goal than when they failed to meet an ambitious goal, even though performance was the same in both cases.

DOI: 10.1037/pspi0000457

Your brain on surveillance

Knowingly being watched impacts people's ability to detect faces, according to a study in *Neuroscience of Consciousness*. Researchers asked 54 undergraduate students in Australia to complete a visual task. Half were conspicuously monitored by multiple surveillance cameras, and the other half were not. The visual task itself involved continuous flash suppression, which temporarily prevents images of either colorful patterns or faces shown to one eye from reaching conscious awareness (though the brain still processes them unconsciously). Surveilled participants became aware of face stimuli almost 1 second faster than the control group. This held true whether the faces appeared to be looking directly at participants or away, though both groups detected direct-gazing faces more quickly overall. When the task involved geometric patterns instead of faces, there were no differences between the watched and unwatched groups. This suggests that surveillance taps into fundamental neural circuits evolved for processing



Knowingly being watched may tap into fundamental neural circuits evolved for processing social information.

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Fluctuations in men's daily testosterone levels do not appear to impact their degree of sexual desire. Testosterone levels may be higher in single men, however.

social information. Hypersensitivity to eye gaze is also seen in mental health conditions like psychosis and social anxiety disorder, leading the researchers to suspect that surveillance might interact with these conditions in ways that remain to be investigated.

DOI: 10.1093/nc/niae039

Desire not tied to testosterone

Men's sexual desire is not tied to fluctuations in their daily testosterone levels, according to a study in *Proceedings of the Royal Society B: Biological Sciences*. Researchers collected daily saliva samples from 41 adult male participants in the United States ages 18 to 26 for 1 month. Participants also reported their level of sexual desire as well as thoughts about courtship, dating, and relationships. Researchers found no association between testosterone levels in participants' saliva and their degree of sexual desire on a given day. They did, however, find higher testosterone levels in single men than those who were in sexual relationships. In addition, single men reported putting more effort into courtship on days when their testosterone levels were high.

DOI: 10.1098/rspb.2024.1508

Quality of late work judged harshly

Submitting work late reduces the receiver's perception of its quality compared with the same work submitted on time or early, according to research in *Organizational Behavior and Human Decision Processes*. Researchers asked more than 6,000 people in the United States and the United Kingdom, including managers, executives, and human resources personnel, to rate business proposals, product pitches, photography, and news articles. But first, the researchers noted whether the product was submitted early, on time, or late. Late work was consistently rated worse than early or on-time work, even when the employee gave advance notice about missing the deadline. Evaluations of late work were less harsh, however, when the reason for missed deadline

MOMCILOG/GETTY IMAGES

was deemed beyond the worker's control. Additionally, late submissions were rated about the same as work with objective flaws, such as typos and failure to meet a word count. Furthermore, work submitted even a day after the deadline caused both the employee and the work to be judged just as harshly as work that was a week late.

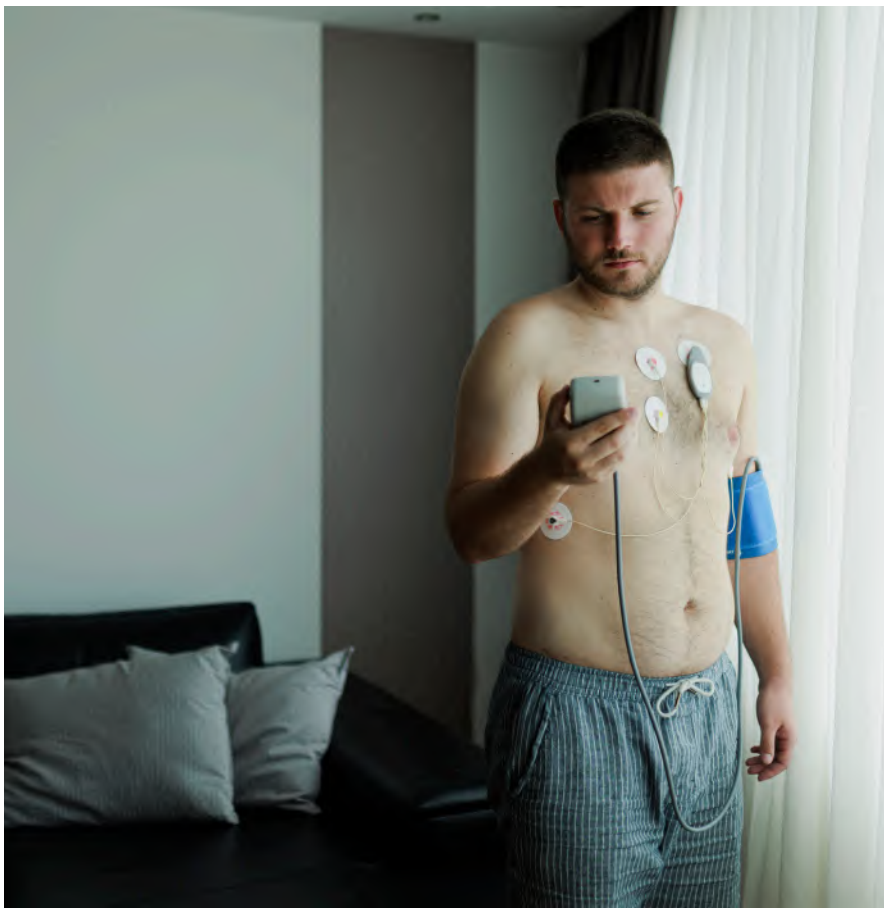
DOI: 10.1016/j.obhdp.2024.104365

Heart disease in the lonely

Specific protein signatures in the blood influence the strength of the association between loneliness and cardiovascular diseases, stroke, and mortality, indicates a study in *Nature Human Behaviour*. Researchers examined the proteomes, or collection of proteins, in blood samples donated by 42,062 adults ages 40 to 69 who participated in the U.K. Biobank study between 2006 and 2010. About 9% of participants reported being socially isolated, while about 6% reported loneliness. The researchers found 175 proteins (of 2,920 screened for) were associated with social isolation and 26 proteins were associated with loneliness. Many of these proteins are produced in response to inflammation and viral infection, and many have previously been linked to cardiovascular disease, Type 2 diabetes, stroke, and early death. A statistical technique revealed five proteins whose abundance was caused by loneliness. These proteins were also linked to the volumes of brain regions involved in emotional and social processing. Over a median follow-up of 13.7 years, the researchers found the proteins also modulated the link between loneliness and cardiovascular diseases, stroke, and mortality.

DOI: 10.1038/s41562-024-02078-1

Specific protein signatures in the blood, many of them produced in response to inflammation and viral infection, are associated with social isolation and loneliness.



ELEGANZA/GETTY IMAGES



A study of elite soccer players from top Brazilian and Swedish leagues found exceptional cognitive abilities compared with a control group, along with key differences in "Big Five" personality traits.



PHOTO AND CO/GETTY IMAGES

Profiles of elite soccer players

Elite soccer players are quick-witted but not necessarily agreeable, indicates a study in the *Proceedings of the National Academy of Sciences*. Researchers assessed the cognitive abilities and "Big Five" personality traits (agreeableness, conscientiousness, extraversion, neuroticism, and openness) of 204 elite soccer players from top Brazilian and Swedish leagues and compared them with 124 control participants (amateur players). The elite players had exceptional cognitive abilities, including improved planning, memory, and decision-making skills, compared with the control participants. They were also significantly more extroverted, open to new experiences, and more conscientious than the controls, who, in turn, were significantly more neurotic and agreeable than the players.

DOI: 10.1073/pnas.2415126122

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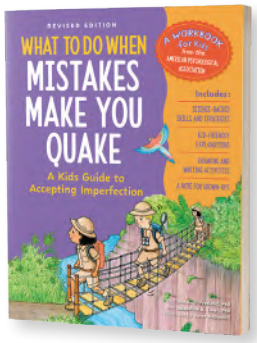
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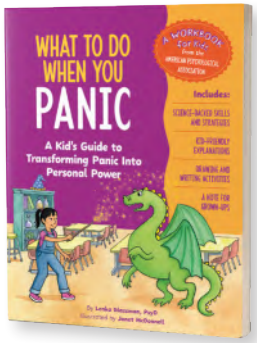
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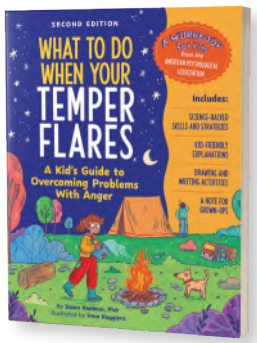
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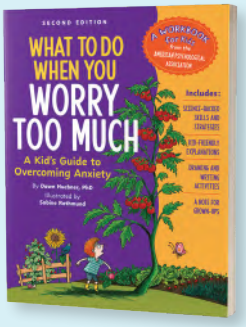
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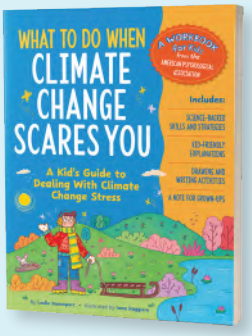
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Datapoint

News on psychologists' education and employment from APA's Center for Workforce Studies

Graduate Psychology Programs Continue to Rely Less on Standardized Tests

Many master's and doctoral psychology programs are dropping GRE requirements

MERON ASSEFA, MS, TISHAWN POLK, MS, CORY PAGE, MPH, MPP, KAREN STAMM, PhD, AND WENDY R. WILLIAMS, PhD

THE PERCENTAGE OF psychology graduate programs requiring GRE scores for admission has sharply decreased since the 2020–21 academic year with more gradual drops year to year.

When comparing the 2022–23 and 2023–24 academic years, the largest drop between the 2022–23 and 2023–24 academic years was the requirement for GRE verbal scores. These declined from 15% to 5% for applicants to master's programs and from 14% to 7% for applicants to doctoral programs. Moreover, the percentage of programs requiring GRE quantitative scores decreased from 14% to 8% for doctoral programs and from 14% to 5% for master's programs. In 2023–24, only 3% of master's and 6% of doctoral programs required GRE writing scores compared with 9% and 13%, respectively, in 2022–23.

Some programs at both degree levels recommended but did not require GRE scores in 2023–24. For master's degree programs, 11% recommended GRE verbal scores, 11% recommended GRE quantitative scores, and 9% recommended GRE writing scores. For doctoral programs, 13% recommended GRE verbal scores, 12% recommended GRE quantitative scores, and 11% recommended GRE writing scores.

Figure 1. GRE Requirements for Psychology Master's Degree Programs

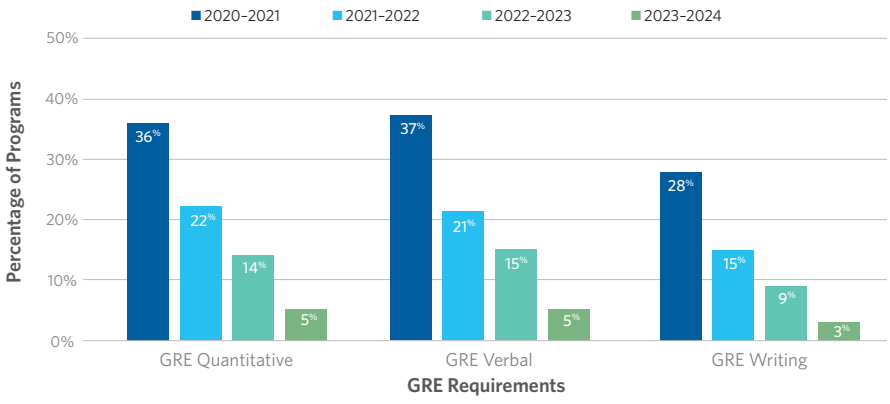
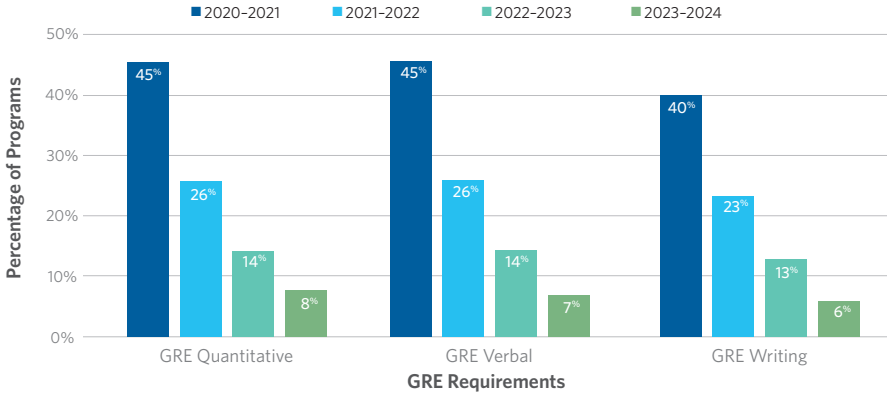


Figure 2. GRE Requirements for Psychology Doctoral Degree Programs



SOURCES

Data are from Graduate Study in Psychology, an annual survey conducted by APA's Office of Graduate and Postgraduate Education and Training. For the 2020–21 cycle, 296 departments and schools in the United States and Canada responded about 912 graduate programs in psychology. For the 2021–22 cycle, 297 departments and schools in the United States and Canada responded about 962 graduate programs in psychology. For the 2022–23 cycle, 332 departments and schools in the United States and Canada responded about 893 graduate programs in psychology. For the 2023–24 cycle, 339 departments and schools in the United States and Canada responded about 866 graduate programs in psychology.

Want more information? See CWS's interactive data tools at https://www.apa.org/workforce/data-tools or contact cws@apa.org.

Federal Workers Are Dealing With Chaotic Work Environments. Here's How to Manage the Uncertainty.

Psychologists support federal workers as they manage burnout, poor morale, and job insecurity during a time of upheaval

BY EFUA ANDOH

GOVERNMENT WORKERS ARE experiencing unprecedented change as the current administration fulfills its promise to drastically shrink the federal workforce. Mass layoffs with no contingency plans, sudden and conflicting management directives, and funding cuts are causing federal workers to experience significant stress and other struggles. For those currently employed in these agencies or at government contractor firms, or anyone wanting to support the federal workforce, here are some strategies for navigating a chaotic work environment.

Bethany Brand, PhD, a clinician who treats federal workers, said that day-to-day uncertainty along with negative characterizations of government work contribute to burnout. Job insecurity is causing some of her clients to curtail spending or even discontinue psychotherapy. Brand encourages maintenance of healthy sleep, nutrition, physical activity, and deep breathing exercises to relieve stress and regulate the nervous system.

Randi Torstenson, PsyD, a clinical psychologist in New York who is currently providing counseling to federal employees, recommends making space for them to express competing emotions such as fear, rage, overwhelm, and grief, particularly for those who are concerned about the trajectory of their careers. Some federal workers who were suddenly let go may be asked to return to work since judges ruled their firings were illegal. Others are struggling to find new employment in an already competitive job market. Torstenson encourages the use of coping measures such as good sleep hygiene, exercise, rest, and meditation; increasing pleasurable activities or hobbies; and leaning on family and friends for support.

Some psychologists provide services to federal employees by integrating the cognitive, interpersonal, and behavioral impacts of recent events into their existing treatment plans. But they may also address workspace concerns. For example, they helped federal employees adapt to the return-to-office mandate by planning for successful work in shared or less-than-ideal workspaces. They recommended reframing employees' reluctance to return to office by focusing on coping strategies for the workplace environment. Solutions included using noise-canceling headphones, taking breaks, engaging in physical movement when possible, planning ahead by packing lunches and water the night before, or using self-soothing techniques like breathing exercises and listening to pleasant music.

Psychologists can also help workers navigate the process of requesting reasonable workplace accommodations, such as quiet, less distracting work environments for employees with attention-deficit/hyperactivity disorder (ADHD) instead of a cubicle in a high-traffic area. Psychologists have helped those who have voluntarily resigned or been laid off from the federal government to build skills to cope with the aftermath and to plot a way forward.

Since there are not enough clinicians for everyone to have this one-on-one expertise, Torstenson advises federal employees to reach out to their coworkers to form informal support networks (see sidebar).

AT A GLANCE

- Federal workers are facing significant stress due to mass layoffs, conflicting directives, and funding cuts.
- Layoffs not only impact those who lose their jobs but also lower morale and trust among remaining employees, increasing stress and affecting overall well-being.
- Employees can persevere by maintaining healthy habits, building support networks, and using self-soothing techniques.

The impact of layoffs

For those already dealing with life difficulties, upheaval at work is



Federal workers gather to discuss recent layoffs with U.S. senators in Washington, D.C., on March 4, 2025. The workers sought support to ensure their concerns were heard by the authorities.

ANADOLU/GETTY IMAGES

particularly challenging. Brand, who specializes in working with trauma survivors, noted that layoffs can be traumatic when employees lose work relationships—some that are often decades long—and stable professional structures and processes. "Trauma survivors absolutely need to have a sense of control, predictability, and safety, none of which currently do exist for federal workers," she added.

According to Leslie Hammer, PhD, a professor at Oregon Health and Science University who studies the effects of workplace conditions on mental health and well-being, layoffs not only harm those who lose their jobs and income, but they have rippling effects for the entire organization, which affects culture, performance, and engagement of remaining employees.

A 2025 survey by Nectar, an employee recognition and rewards platform focused on improving company culture, found that layoffs led to lower morale, survivor guilt, and anxiety about job security. In workplaces that experienced layoffs compared with those that did not, employees were 2.7 times more likely to be concerned about job security (65% versus 24%) and 1.9 times more likely to report burnout (60% versus 32%).

Layoffs also significantly reduce trust in employers. People are more motivated and committed when they feel their efforts are rewarded with pay, benefits, and job security. When this psychological contract is broken, it increases stress and impedes performance (Brockner, J., & Greenberg, J., in Carroll, J. S. [Ed.], *Applied Social Psychology and Organizational Settings*, Psychology Press, 1990). A similar study found that following mass layoffs, remaining employees struggled with feelings of job insecurity and broken promises. They were also less willing to go above and beyond in performing their work (López Bohle, S., et al., *The International Journal of Human Resource Management*, Vol. 28, No. 20, 2017).

The cost of chronic workplace stress

In psychologically safe work environments, team members feel empowered to express themselves, ask for help, and admit mistakes without fear of retaliation or punishment. Psychological safety at work fosters creativity, innovation, and effective teamwork. According to APA's 2024 Work in America survey, workers who experience lower psychological safety were 2.3 times more likely to feel tense or stressed out during their workday compared with those who experience higher psychological safety (61% versus 27%). Moreover, workers who experience lower psychological safety were 10 times more likely to describe their workplace as toxic than those who experience higher psychological safety (30% versus 3%).

"Toxic workplaces drain all the energy and excitement out of employees and replace it with fear," said Mindy Shoss, PhD, a professor and industrial-organizational psychologist at the University of Central Florida.

When layoff decisions are made with clear communication, fairness,

and coordinated efforts, employees feel more understood and less worried about their job security. Without these approaches, remaining employees feel stressed and angry about how decisions were made, leading to lower engagement and productivity (Manson, B. J., *Downsizing Issues: The Impact on Employee Morale and Productivity*, Routledge, 2014).

For many employees, chronic stress in the workplace causes harm to both physical and mental health. According to the U.S. surgeon general's report *Workplace Mental Health & Well-Being*, chronic stress may increase the risk of heart disease, obesity, cancer, and other illnesses and can contribute to mental health challenges such as depression, anxiety, and substance abuse.

A toxic corporate culture is the strongest predictor of employees leaving their organization, according to a 2022 study in *MIT Sloan Management Review* (Sull, D., et al., Jan. 11, 2022)—well above job insecurity or lack of recognition for performance. In this analysis, toxic corporate culture was 10 times more important than compensation in predicting employee turnover. In addition, a company's past layoffs increased the burden on remaining employees, which, in turn, raised the odds of their leaving the organization.



Psychologists may assist workers in requesting reasonable accommodations, such as quieter workspaces for those with ADHD. They can also help laid-off employees build resilience and plan for the future.

How to improve the workplace

"Leaders can offer remaining employees support," said Hammer. "However, this may be difficult in places such as the federal government where leaders are also experiencing high levels of job insecurity." Instead, recognizing that workers at all levels—even at the very top of an agency—may be dealing with intense stress, it is important to take some practical steps.

Hammer advocates for leadership training to help build healthier workplaces. She has designed and evaluated multiple 1-hour computer-based interactive training courses for supervisors. Through the training, supervisors learn how to recognize and support employees at risk of decreased health, safety, and well-being.

The training has boosted employee job satisfaction, reduced the number of people planning to quit, and lifted personal well-being, according to a 2021 article in the *Journal of Occupational Health Psychology* (Vol. 26, No. 6). In addition, the trainings have led to fewer reports of problematic anger and loneliness—two risk factors of poor mental health (*Military Medicine*, Vol. 189, No. 3 [Suppl.], 2024; *Journal of Occupational Health Psychology*, Vol. 29, No. 5, 2024).

Shoss added that organizations and leaders should work to build cultures of respect and safety and create environments where people and teams have the opportunities to do rewarding work and receive appreciation for jobs well done. With funding cuts and ongoing layoffs that have irreparably disrupted job functions, it is even more crucial for remaining employees to feel supported so they can focus on their job duties and overall mission.

"Research finds that threats of layoffs are not effective tools for motivating performance," Shoss said. "People, of course, are motivated to secure their jobs. However, stress and uncertainty harms performance, and threats of layoffs more often lead to turf guarding and impression management behaviors rather than genuine work productivity." ■

EKATERINA GONCHAROVA/GETTY IMAGES

PRACTICAL SKILLS

COPING IN A CHAOTIC WORKPLACE

With massive cuts to federal agencies, many workers, contractors, and others are experiencing uncertainty, anger, fear, anxiety, exhaustion, loss, and sadness. Psychologists recommend these tips for dealing with toxic or chaotic workplaces:

- Take time to have meaningful experiences with friends and family, experience nature, and focus on or develop aspects of your identity outside of work.
- Identify the small things that you *can* control both inside and outside of your job and practice letting go of the things that are no longer in your control.
- Create a detailed list of your skills and accomplishments as a reminder of your achievements and the good work you have accomplished with valued colleagues. You can add a concise version of this list to your résumé.
- Take a break from distressing news. Knowing when to tap out is unique to each person, so pay attention to your body's reactions (e.g., feelings of fear or jitteriness). Being responsive and taking measured action as required, rather than reacting impulsively, can make you feel more empowered.
- Pace yourself. These changes will continue to have a cascading effect, so it will be important to focus on the big picture, the long game. What large or small achievements can you be proud of when you look back on this moment?
- Keep connected to—or build closer bonds with—colleagues. Some federal workers have reported that their workplace relationships have deepened as a result of the current chaos. Many have created private group texts, emails, listservs, and so on, to share news, tips, and humor to sustain each other.
- Take care of your mind and body. Try to get enough sleep, healthy foods, and exercise. You can also incorporate mindfulness techniques like breathing, visualization, meditation, and yoga. If you struggle with addiction, look for programs that will help you maintain your recovery.
- Make return-to-office a little easier. Use noise-canceling headphones to play pleasant or relaxing music, take breaks, and engage in physical movement, if possible. You may also make your workday less stressful by packing lunches and a water bottle ahead of time or using self-soothing techniques like breathing exercises. If permitted, bring personal items to remind yourself of your identity, your community, and your strength. This could include family photos, plants, or even a picture of the outdoors.
- Federal workers can also take advantage of local resources. Some states and counties have created online clearinghouses and in-person events to connect them with employment and career support.
- Current and former federal employees can search for low-cost behavioral health services through their state's health centers at findahealthcenter.hrsa.gov or mental health and substance abuse agencies at findtreatment.gov. They may also search for pro bono mental health counseling that is available in several states.
- For those who need immediate mental health support, the 988 Lifeline provides 24-hour access to confidential counseling via call, text, or chat.

FURTHER READING

The business of consulting psychology: Lessons from the field
Norton, L. W.
Consulting Psychology Journal: Practice and Research, 2020

An introduction to consulting psychology: Working with individuals, groups, and organizations
Lowman, R. L.
APA, 2016

Leading inclusion: Drive change your employees can see and feel
Cox, G.
Page Two, 2022

On becoming a consultant: The transition for a clinical psychologist
Liebowitz, B., & Blattner, J.
Consulting Psychology Journal: Practice and Research, 2015

What to know about the changing marijuana landscape

A dramatic shift in potency of products on the market has led to a large gap in understanding of risk

BY LUCY TU

TODAY'S CANNABIS INDUSTRY is almost unrecognizable in comparison with the counterculture symbol of the 1960s and '70s. At that time, marijuana was widely considered an "all-natural" substance, and its psychoactive potency reflected that perception: The average level of tetrahydrocannabinol (THC), the compound responsible for cannabis's euphoric high, hovered around just 1%. Now, vapes and joints routinely push 30% THC, while dispensary shelves are stocked with concentrates—some boasting 90% to 95% THC—in the form of waxes, edibles, and more (Prince, M. A., & Conner, B. T., *Behaviour Research and Therapy*, Vol. 115, 2019). Once niche, these ultrapotent products have gone mainstream.

In 2024, the U.S. cannabis market was valued at $38.50 billion, and it is projected to nearly double in the next 5 years. "It's a huge public health gamble," said Aaron Weiner, PhD, an addiction psychologist and executive consultant at the Prevention Research Institute. "Right now, we don't have definitive research on the long-term effects of these market shifts, but on the ground, we're seeing a clear relationship between rising potency and negative health outcomes."

Nearly 18 million Americans now report using marijuana daily or near daily, outpacing the number who drink alcohol that often. Many do so without issue, and some find cannabis a boon for their social and mental well-being. But as the market expands, cannabis users have access to an unprecedented variety of purported antidotes for conditions ranging from insomnia to anxiety to post-traumatic stress disorder. While scientific studies back some medical uses for cannabis, many of these claims have yet to be validated by rigorous studies.

In other words, today's high-octane cannabis exists in uncharted scientific territory. As consumption increases and dependence becomes more common, psychologists are encountering more patients who use cannabis, sometimes in ways that negatively affect their health. These shifts raise urgent questions: Where are the gaps in research on today's products? How can psychologists help their patients navigate cannabis use safely? And what do they need to know to separate fact from fiction in this rapidly evolving landscape?

AT A GLANCE

- Today's high potency cannabis exists in unchartered scientific territory, as most studies were done with lower potency products.
- Misconceptions about marijuana, such as a lack of addictive potential, are common despite the changing products.
- Dangers of higher potency include withdrawal, cannabinoid hyperemesis syndrome, and cannabis-induced psychosis.

Outdated research

Cannabis research is lagging behind the drug's rapid commercialization. For one, products of vastly different THC concentrations are all categorized under the generic term "cannabis," which Weiner said muddles both market regulation and scientific research. "It's similar to how the term 'psychedelics' covers a wide range of substances, each with distinct effects. The same applies to cannabis, where different derivatives carry tremendously different risk profiles and potential benefits."

Additionally, several of the seminal studies suggesting that chronic cannabis use has no lasting neurological or psychological effects were conducted on significantly lower potency products than those on the market today (Grant, I., et al., *Journal of the International Neuropsychological Society*, Vol. 9, No. 5, 2003; Pope Jr., H. G., et al., *JAMA Psychiatry*, Vol. 58, No. 10, 2001). Strict federal regulations on marijuana, which remains classified among the most dangerous and least valuable drugs, have stifled research that could compensate for this void of information.

The limited available evidence supports some medical uses for cannabis. Studies show that certain



Products sold at dispensaries today offer vapes and joints pushing 30% THC, and concentrates containing 90% to 95% THC. Compare that with marijuana of the 60s and '70s, which hovered around 1%.

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cannabinoids can ease chronic pain and help manage chemotherapy-induced nausea and vomiting (Whiting, P. F., et al., *JAMA*, Vol. 313, No. 24, 2015; *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research,* National Academies Press, 2017). Some studies also suggest that cannabis use may improve cognitive function in middle-age and older adults, but the mechanisms behind these effects remain unclear (Sagar, K. A., et al., *Journal of the International Neuropsychological Society*, Vol. 27, No. 6, 2021; Watson, K. K., et al., *Frontiers of Aging Neuroscience*, Vol. 14, 2022).

Partly because of its therapeutic potential, last year the U.S. Drug Enforcement Administration recommended reclassifying cannabis from a Schedule I substance, which includes heroin and ecstasy, to a Schedule III substance, placing it alongside prescription medications like testosterone, ketamine, and anabolic steroids (Stringer, H., APA, June 11, 2024). However, there are no high-quality, peer-reviewed studies supporting the therapeutic use of high-THC concentrates specifically (Bidwell, L. C., et al., *Drug and Alcohol Review*, Vol. 40, No. 6, 2021). While many people use these products recreationally without obvious harm, emerging studies on animal and organoid models suggest that prolonged exposure to high THC doses might leave lasting imprints on the brain circuits regulating sleep, memory, mood, and motivation (Stringer, H., *Monitor on Psychology*, Vol. 54, No. 4, 2023). For at least some human users, these changes manifest as long-term conditions, including addiction and cannabis withdrawal syndrome.

"With more research, we can unpack the good, bad, and ugly of prolonged cannabis use. I'm open to understanding the bad and the ugly, especially if it means we can better inform patients," said Yasmin Hurd, PhD, director of the Addiction Institute at Mount Sinai within the Mount Sinai Behavioral Health System in New York, home to one of the country's largest addiction treatment programs.

Hurd believes that more research on both the benefits and risks of marijuana, especially high-THC concentrates, is long overdue. But she also cautions that we don't need definitive epidemiological studies before acting on product distribution and public education. "If we can smell the smoke, we don't need to wait until we see the fire before reassessing and potentially changing our environment," she said.

And from what she's seen, both in her own hospital and through the eyes of fellow scientists, the smoke is already thick.

Marijuana misconceptions

Even as pot becomes increasingly potent, the belief that marijuana is not addictive persists. This misconception partly stems from the fact that cannabis dependence develops more gradually than addiction to substances like opioids does. Further, withdrawal symptoms, though unpleasant, are rarely life-threatening like those from alcohol detox.

But myths about cannabis are also fueled by misunderstandings about modern products. Some users assume that because marijuana comes from a plant, it is natural and therefore harmless. In reality, today's high-THC concentrates are "as close to the cannabis plant as strawberries are to frosted strawberry pop tarts," according to a report by Beatriz H. Carlini, PhD, MPH, a research scientist at the University of Washington's Addictions, Drug and Alcohol Institute (*Cannabis Concentration and Health Risks*, Washington State PRSC Cannabis Concentration Workgroup, 2020).

These misconceptions mean that many regular users, including a

growing number of adolescents, may consume cannabis without recognizing the risks or the warning signs of dependence. "My goal isn't to stop people from using cannabis; it's to make sure they have accurate information to make their own health-related decisions. One of the biggest myths I hear is that cannabis isn't addictive or doesn't have harmful effects," said Weiner, who added that cannabis use disorder is the second most common condition he treats in rehabilitation programs.

Symptoms of cannabis overuse can be subtle but significant: apathy, irritability, difficulty concentrating, social disengagement, and loss of motivation. Withdrawal symptoms follow similar patterns. Frequent cannabis use—weekly or more often, over several months or longer—also raises the risk of more severe conditions, including cannabinoid hyperemesis syndrome (CHS), which is marked by cycles of nausea, vomiting, and severe abdominal pain ("Cannabis Hyperemesis Syndrome," Cleveland Clinic, 2024). One study found that nearly 33% of frequent cannabis users who visited an emergency department met the criteria for CHS (Habboushe, J., et al., *Basic & Clinical Pharmacology & Toxicology*, Vol. 122, No. 6, 2018).

Yet many patients experiencing these effects, as well as the providers treating them, fail to recognize the connection between their symptoms and cannabis use, according to Hurd. She hypothesizes that this is partly because the milder symptoms of cannabis dependence mimic the very conditions, like insomnia or anxiety, that users are trying to self-treat.

While these effects often develop gradually, in some cases, cannabis is associated with temporary psychosis—a sudden break from reality that lasts hours, days, or even months (Murray R. M., et al., *World Psychiatry*, Vol. 15, No. 3, 2016). In an ongoing lawsuit against California's top-selling marijuana brand, a former adolescent user claims the company's products led to multiple psychotic episodes (Fahmy, K., *Kron4 News*, May 29, 2024). During one, according to the lawsuit, a police officer found the teenager shirtless and soaking wet after he had jumped into a pool, convinced that a classmate had cursed him with witchcraft.

Cannabis-induced psychosis and other adverse reactions can affect people of all ages, but young users face especially pronounced risks. Hurd's research links their heightened vulnerability to the endocannabinoid system, a network of natural signaling molecules that fine-tunes the developing brain's emotional and cognitive regulation. When this system is flooded with high levels of THC, its delicate balance can be thrown off. In 2007, Hurd's team reported that repeated THC exposure during adolescence altered the structure and function of neurons involved in basic reward processing. In 2019, they confirmed similar disruptions in the prefrontal cortex, which handles higher-order emotional functions related to self-control and decision-making. The researchers' subsequent work revealed that adolescent rats exposed to high doses of THC showed greater impulsivity and risk-prone behavior as adults—effects that intensified when they were reexposed to THC. When Hurd's team analyzed data from human cannabis users participating in simulated gambling tasks, they found similar patterns (*Neuropsychopharmacology*, Vol. 32, No. 3, 2007; *Molecular Psychiatry,* Vol. 24, No. 4, 2019; *JAMA Psychiatry*, Vol. 80, No. 1, 2023).

Education and informed decision-making are critical for these young users, according to Susan Collins, PhD, a licensed clinical psychologist, president of the Society of Addiction Psychology (APA Div. 50), and codirector of the Harm Reduction Research and Treatment Center at the University of Washington. In recent years, she has worked with an increasing number of adults with cannabis use disorder, many of whom started using as teenagers. Unlike her patients with alcohol or opioid use disorders, who often acknowledge they were aware of the risks, Collins said many of her clients with cannabis dependence were never told about the potential harms. "The first time they hear about it is in my office or at the hospital when something is clearly wrong," she said.

Some adults may be able to use cannabis safely and in a way that benefits their overall well-being, Hurd and Collins agree. But we must also do better at restricting access for children and adolescents. Teens may ask adults to buy for them, take it from family members, or use fake IDs to purchase products themselves. These trends carry lasting implications. "Healthy children become healthy adults," Hurd said. "There's no perfect formula for predicting who is at risk for the worst effects of cannabis. But potency, frequency, and age are undeniably key factors in that equation."

A harm-reduction approach

Once cannabis dependence takes hold, treatment options can be frustratingly limited. For reasons still not fully understood, hot baths and showers can temporarily ease CHS-induced nausea and vomiting. Prescription medications can also help manage withdrawal symptoms like insomnia and appetite loss. However, to date no drug has been approved by the Food and Drug Administration to directly treat cannabis use disorder.

Scientists like Tom Freeman, PhD, director of the Addiction and Mental

Health Group at the University of Bath in England, are working to change that. In his lab in the United Kingdom, where cannabis research faces fewer restrictions, Freeman is investigating cannabidiol (CBD)—a cannabis derivative that doesn't produce a "high"—as a potential treatment. In 2020, he and his team published a randomized clinical trial showing that CBD was more effective than a placebo in reducing cannabis use among people with cannabis use disorder: Participants who took 400 mg of CBD daily cut their cannabis use by about half a day per week, while those who took 800 mg reduced their use by nearly a third of a day per week (*Lancet Psychiatry*, Vol. 7, No. 10, 2020). "Countries around the world are radically changing their cannabis policies, and it's becoming more and more important to have tools available to treat emerging health risks," Freeman said.

For now, therapy remains the primary treatment. Through motivational enhancement therapy and cognitive behavioral therapy, individuals can recognize triggers and develop coping strategies. Therapy may also help those using cannabis to self-medicate underlying conditions like anxiety or depression.

Collins believes this treatment should be as individualized as the reasons people use cannabis in the first place. In her practice, she starts by asking clients why they use cannabis, then she works with them to determine the best approach, whether that means cutting back, quitting entirely, or addressing related stressors. "What addiction looks like for a given person, with their unique constellation of stressors and symptoms, just varies. Treatment has to be specific to that person and their environment," she said.

She envisions this holistic, harm-reduction approach extending beyond clinical settings to cannabis regulation. "Our relationship with cannabis is as much cultural as it is medical," she said, explaining that the United States' history with marijuana has been a pendulum swing of extreme fear and praise. Now, as cannabis enters an era of mainstream acceptance, she believes psychologists and policymakers must strike a balance between destigmatizing and decriminalizing the drug while ensuring consumers have clear, science-based information about risks.

Hurd similarly opposes criminalizing cannabis use but believes that "legalization was the magic wand that opened up Pandora's box." She supports tighter potency regulations, such as those in countries like Switzerland and France, where THC content is capped at 1% and 0.3%, respectively. "I'd like to see tax revenues from cannabis sales directed toward education and treatment campaigns," Hurd added.

Stronger consumer protections could also make a difference. Psychologists and other experts can push for clearer risk disclosures on cannabis product labels, similar to the warnings found on alcohol containers. Currently, labeling requirements vary by state, with many offering only vague cautions like "keep out of reach of children and pets." Standardized potency measurements could help bridge this gap, too. In 2020, Freeman and his colleagues proposed a "standard THC unit," set at 5 mg of THC, to serve as a universal reference for all forms of cannabis consumption (*Addiction*, Vol. 115, No. 7, 2020). (Unlike THC percentage values, which indicate the amount of THC relative to a product's volume or weight, this unit is based on dose, providing a clearer sense of how much active compound a person is consuming across different forms of cannabis products.) A year later, the National Institutes of Health adopted this standard for cannabis-related research, but the commercial market has yet to follow suit.

Fixing the patchwork of cannabis regulations is an urgent and long-standing goal, according to Weiner. "Cannabis access should be shaped by public health priorities, not profits," he said.

To him, the real challenge for psychologists and other clinicians isn't only policy—it's perception. In a country where marijuana has been demonized, criminalized, glorified, and commodified in equal turns, getting people to see it for what it truly is—neither miracle cure nor harmless pastime—may be the most important task of all. ■

FURTHER READING

Balancing risks and benefits of cannabis use: Umbrella review of meta-analyses of randomised controlled trials and observational studies
Solmi, M., et al.
BMJ, 2023

Types and brands of derived psychoactive cannabis products: An online retail assessment
Rossheim, M. E., et al.
Cannabis and Cannabinoid Research, 2023

How cannabis use is changing across the U.S.
Blum, D.
The New York Times, Nov. 4, 2024

Safer use strategies: Cannabis
Collins, S. E., & Clifasefi, S. L.
University of Washington: Harm Reduction Research and Treatment Center, 2024

Brain function outcomes of recent and lifetime cannabis use
Gowin, J. L., et al.
JAMA Network Open, 2025

Anticipatory Anxiety at Graduation and Other Key Life Transitions

For those coping with fears involving uncertainty, psychologists can help patients create and reinforce healthier patterns of thinking for the long haul

BY CHARLOTTE HUFF

AT THIS TIME of year, millions of graduates at every age and level of education stand poised on the cusp of change. Whether that's transitioning from elementary to middle school, landing a first internship or job, or setting off toward the next educational or professional milestone, this stretch is both exciting and anxiety producing.

That potential for anticipatory anxiety, in which someone develops fear or dread in the face of an anticipated event or situation, can be rooted in uncertainty and unknown outcomes, said Julie Buckner, PhD, a psychology professor who directs the Anxiety and Addictive Behaviors Laboratory and Clinic at Louisiana State University in Baton Rouge.

"When we think of anxiety, it's really an emotional response to a perceived future threat," she said. "Even though the outcome might be good—they might get a job—there's also this perceived threat of not having a job and then of course what the implications of that would mean."

While not a diagnostic condition, what psychologists refer to as "anticipatory anxiety" often accompanies other diagnoses, such as generalized anxiety disorder or social anxiety disorder, said Stephanie Sarkis, PhD, a psychotherapist in Tampa, Florida, who specializes in treating anxiety. "And it can be excessive," she said. "It becomes an issue when it's taking over day-to-day functioning." The resulting distress is not just emotional but can spawn hyperventilation, stomach distress, and other physical symptoms, she said.

Anticipatory anxiety is not just limited to life transitions such as graduations. It can be sparked by more routine events, such as a dental appointment or a preventive cancer screening (Goodwin, B., et al., *Psycho-Oncology*, Vol. 32, No. 12, 2023). Or the symptoms may stem from more systemic sources of stress and uncertainty, for example,

AT A GLANCE

- Graduation season brings both excitement and anxiety as individuals face transitions and uncertainties that can often lead to anticipatory anxiety, which can manifest in emotional and physical symptoms.
- Some individuals may develop an inflated sense of a particular threat's cost and probability, along with exhibiting hypervigilance.
- Encouraging patients to build more structure into their lives, including plenty of sleep and rigorous exercise, may help ease perseverative thinking.

HEALTHY COPING

CONSTRUCTING NEW CONNECTIONS

Connecting with other like-minded people can be vital in uncertain times, said clinical psychologist Jack Nitschke, PhD. Along with strengthening bonds, these interactions can help new graduates ease anxiety in other ways. For example, since worry begets worry, every opportunity to disrupt that pattern provides an opportunity to strengthen neural pathways for healthy thoughts and behaviors instead, he said.

"Maybe part of what you're going to be doing in that social environment is just getting distracted from where your future is going to go," he said. "And that can be very reasonable. Because again, what we're wanting to do is minimize the amount of time that we're spending with worry so that we're not building those worry circuits up so strongly."

Moreover, psychologists can promote the long-term value of practicing mindfulness and other cognitive skills by educating patients about the inherent resilience and neuroplasticity of the brain, Nitschke said. With practice and time, the latest cadre of graduates can construct new neural pathways they can tap into during future encounters with uncertainty, rather than fall back into well-worn worry grooves, he said.

"Build a new [mental] path and strengthen it," Nitschke said. "That's where you need repetition. Repetition is absolutely key for these healthy coping strategies."



JULPO/GETTY IMAGES

Graduates at all levels face anticipatory anxiety because of uncertainty about future outcomes. This anxiety, rooted in fear of the unknown, can lead to emotional and physical symptoms, impacting day-to-day functioning.

ongoing worry about intense weather events by those living in hurricane zones or fire-prone areas.

Additional elements can further ratchet up anxiety during graduation season. New graduates may be transitioning from a structured setting and a schedule built around school for a dozen-plus years, including related feedback and support, said Sarah Allen, DClinPsy, a Chicago-area psychologist who specializes in anxiety. "Now you're going out into a very unstructured world where you don't get that feedback," she said. "That loss of routine and loss of structure could make people feel more anxious."

For the current crop of graduates, there may be a one-two punch that spurs anxiety, said Jack Nitschke, PhD. More traditional graduation-related angst may be amplified by economic and other employment-related uncertainties, said Nitschke, a clinical psychologist, neuroscientist, and an associate professor of psychology and psychiatry at the University of Wisconsin–Madison who has studied anxiety for 3 decades. Federal funding cuts, he pointed out, are limiting graduate school options. In addition, there are "potentially dramatic changes to what the workforce is going to look like," he said.

Younger children "graduating" elementary or middle school are not immune to anticipatory anxiety. Signs may first emerge during preschool age and studies indicate that young students can worry about acceptance by their peers or concerns about a specific teacher (Patel, D. R., et al., *Translational Pediatrics*, Vol. 7, No. 1, 2018). Another study, which looked at gender-related differences among children ages 8 to 18, found that the anxious girls reported more anticipatory anxiety and worry than anxious boys. But among anxious youth of either gender, both groups expressed similar avoidance tendencies (Smith, A. R., et al., *JCPP Advances*, Vol. 2, No. 3, 2022).

Nitschke and others talk about the importance of intervening early to defuse the worry circuit that's part of anticipatory anxiety to guard against individuals falling into a more deeply engrained anxiety rut. Those strategies can range from helping patients (for younger patients, their parents) to create more structure during life transitions, such as increasing sleep and exercise. In addition, patients can learn how to better ground themselves in the present, practicing mindfulness techniques and working through the what-ifs that an anxious brain can generate.

Cognitive roots

Individuals vulnerable to anticipatory anxiety may have an inflated sense of a particular threat's cost and probability.



Graduations, while exciting, can bring some of the biggest stresses in a person's life, with major losses such as friends and routines.

They may exhibit hypervigilance, which has been tied to heightened activity in the amygdala, according to an overview that pairs clinical insights with imaging findings (Grupe, D. W., & Nitschke, J. B., *Nature Reviews Neuroscience*, Vol. 14, No. 7, 2013).

In fact, imaging studies have shown that regions of the brain, including the amygdala and the hippocampus, are similarly activated regardless of whether the potentially bad outcome that's being anticipated has occurred or not, said Nitschke. "You're preparing in the event that something bad is either going to happen or potentially is going to happen, so the brain wants to get involved and ready for that," he explained.

While preparing for potential outcomes is healthy, it's a fine balance. With too many what-ifs and other anxious thoughts, the brain may construct a related circuitry of neural connections that feeds on and reinforces these thoughts over time, Nitschke said. In other words, the brain is creating patterns of thinking that don't prepare someone to better face uncertainty but instead trap that individual in a loop of worry. "Somebody who is concerned about something bad happening in the future, which is what we refer to as worry, is building up neural connections that support this process of worrying and often will support even specific worries that they can get stuck on," he said.

Still, there's good news for those trying to combat their own innate brain circuitry, Nitschke said. He described the brain as remarkably neuroplastic. With time and effort, patients can create new pathways of thinking to tap into instead of their prior worry-prone ways (see sidebar).

Psychologist Martin N. Seif, PhD, describes anticipatory anxiety as the "third layer" of fear, with the key element involving avoidance patterns. For instance, individuals first recognize that they are fearful about flying when they dread boarding their next flight, said Seif, who developed the airport-based Freedom to Fly program. That anxiety may morph into the second layer, in which they become anxious that their fear of flying will lead to a panic attack and other embarrassing behavior while in the air. Eventually, they may reach the third layer of fear, the avoidance layer, and decide to forgo flying entirely to circumvent the severe anxiety and distress.

In the process, anticipatory anxiety can fuel unhealthy behaviors. Individuals may lean on alcohol to dampen the physical arousal and other uncomfortable symptoms, for example before attending a social gathering, said Buckner, who authored a related study (*Addictive Behaviors*, Vol. 102, 2020). (At this point, that's a hypothesis, she noted, as the study didn't delve into underlying motivations.) In the study, individuals with high levels of social anxiety reported more drinking prior to a social event than those with nonclinical levels.

In scenarios in which people can't physically avoid the source of their anxiety, such as the impending first day of a new level of schooling, they may instead engage in cognitive avoidance, trying to distract themselves from their worries, said Seif, who coauthored the book *Overcoming Anticipatory Anxiety*. But an excessive attempt to suppress related fears can boomerang on itself to create a worry loop.

One way for new graduates to counteract these emotions is to create an action plan by themselves or with a therapist, Allen said. Break the big

YANA ISKAYEVA/GETTY IMAGES

CHECKING IN

SUBSTANCE MISUSE

Since alcohol and other substances can can be used by some teens and adults during anxious times, psychologists should check in and ask open-ended questions, Julie Buckner, PhD, said. If a patient has previously acknowledged leaning too much on substance use, you could say, "I know you mentioned when we first met that drinking tends to be a way you cope with things. How many days this week did you use alcohol to help you cope with all this stress?"

If a patient has a substance use disorder, therapists can strategize with them to find ways to avoid alcohol, such as keeping it out of their home and steering clear of any venue with a bar, Buckner said. "We love talking about setting up our patients for success."

picture down into smaller parts and related steps, she said. A high school graduate who is considering a legal career may start by speaking with a few attorneys to gain a better sense of what that career looks like day to day.

But first, individuals likely will need to sit for a while with their anxiety and ride it out until they are calm enough cognitively to develop such a plan, Seif said.

"Our job [as individuals] in some ways is to separate the wheat from the chaff, or the signal from the noise," he said. Working with a therapist, patients can learn to better identify what thoughts are fueled by anxiety and where they can take action in their own lives, he said.

Breaking the cycle

Therapists can assist patients in getting a better handle on what-if thoughts before those cognitive patterns spiral into a cycle of negativity, Allen said. For instance, a high school graduate may fret that they won't be able to meet the rigors of college academics. In that situation, a therapist can encourage them to reflect upon sucessful study skills they have already developed that they could apply moving forward, she said.

"Focus on their history. What does history tell us about them?" Allen said. "And usually, it tells us that they're resilient, that they have achieved some things. That's not all going to disappear just because they go into a new situation."

In other cases, a patient's anticipatory anxiety may lead them to hold back because their intolerance of uncertainty is so high, such as stalling on applying for a coveted job, Buckner said. "If they apply for a job and they



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Intervening early with strategies like creating structure, practicing mindfulness, and addressing what-if scenarios can help manage anticipatory anxiety. The brain's neuroplasticity allows for the development of healthier thought patterns over time.

don't get it, does that mean that they aren't going to get any job and that there's something wrong with them? That's a very scary thought."

Therapists can provide support through an exposure exercise, such as the mental and logistical process of applying for a job, Buckner said. Under the worst-case scenario, they don't land the job. Then the patient and therapist can talk through what that means—that it's one missed job and not a catastrophic individual failure.

"Again, with this anticipatory anxiety piece, oftentimes people are afraid of what's going to happen," Buckner said. "But if they actually do the thing, they realize they can handle it, if it does happen."

Therapists also can lower the stakes involved for people who are going through these stressful life transitions, Allen said. She reminds new graduates that they can always change their minds, that they don't have "to figure out the perfect job or the perfect degree: If you feel like this decision that you're making right now, or are about to make, is going to be the rest of your life, everybody is going to become very anxious about that."

Re-creating structure

To better reconnect with the external world, Allen recommends that anxious individuals leverage their five senses, naming items that they can see, feel, hear, smell, and taste. Grounding the body can dampen overactivation in the brain, including in the amygdala. Physical exertion plays a key role in settling anxious minds as well. Sarkis cited research showing that the more intense the exercise, the better to ease anxiety, though researchers noted that the dropout rates were higher in the high-intensity groups than in the low-intensity groups (Aylett, E., et al., *BMC Health Services Research*, Vol. 18, 2018).

Engaging in a regular exercise regimen can inherently provide structure during an unsettled life transition, Allen said. Getting regular sleep also matters, though Allen acknowledged that some graduates may be stepping into careers with grueling hours. But even then, she said, it's important "to figure out in your week where you can have downtime, where you can have control, that is important."

Shortchanging hours of sleep has been associated with a higher tendency toward perseverative thinking, including worry and rumination, according to one study. The study involved 270 adults ages 65 to 89 who were asked each morning to rate their level of worry about things they had to do or that might happen that day. In essence, researchers were tracking their anticipatory anxiety, said Zexi Zhou, the study's lead author and a doctoral student in human development and family sciences at The University of Texas at Austin (*Journal of Psychosomatic Research*, Vol. 179, 2024).

When participants slept more hours than usual, the researchers found it "played a buffering role in the link between [the] prior night's and [the] next morning's worry."

While anticipatory anxiety is a common experience during key life transitions, such as graduation, key strategies can help stem the uncertainty and perceived threats associated with these changes. By recognizing the signs and implementing increased structure, mindfulness, and physical activity, individuals can better manage their anxiety. Early intervention is crucial to prevent the development of deeply ingrained anxiety patterns, allowing new graduates to navigate their transitions with greater confidence and resilience. ■

FURTHER READING

Acute orexin antagonism selectively modulates anticipatory anxiety in humans: Implications for addiction and anxiety
Gorka, S. M., et al.
Translational Psychiatry, 2022

Anxiety and the neurobiology of temporally uncertain threat anticipation
Hur, J., et al.
The Journal of Neuroscience, 2020

Overanxious and underslept
Simon, E. B., et al.
Nature Human Behaviour, 2020

Temporal dynamics of uncertainty cause anxiety and avoidance
Holley, D., et al.
Computational Psychiatry, 2024

5 Questions for Jiaying Zhao

The University of British Columbia researcher uses cognitive science to help people enjoy protecting the planet

BY RACHEL ADELSON

AS THE PAST YEAR'S raging fires and storms have shown, the climate crisis is now. Jiaying Zhao, PhD, an associate professor of psychology at the University of British Columbia (UBC), says we need not feel helpless in the face of extreme weather.

Her guiding question for lab and field research is, "Can we make meaningful climate action feel happy instead of miserable?" The answer, as revealed in her 2023 TED Talk and a 2024 APA webinar on human-centered approaches to designing a sustainable future, is a resounding "Yes!" Reframing environmental responsibility as a positive, even joyful, undertaking is central to her work as Canada Research Chair in Behavioural Sustainability. Zhao (or JZ, as she is known) talked to the *Monitor* about putting psychological principles to work for the common good.

What's the biggest challenge in your area of research?

Right now, it's the climate crisis. It's not just the rising temperatures but also the ensuing natural disasters that people have to cope with. So, the questions are: One, how do we reduce carbon emissions? And two, how do we adapt to the changing climate going forward?

We're actively testing a lot of behavioral solutions in the lab. For example, in testing the relative power of four different message frames—a "happy climate" frame on how climate action boosts happiness, a doom-and-gloom disaster frame, a factual frame, and a control—the "happy climate" frame led to the greatest willingness to take individual and civic climate action overall. What's more, it was especially effective for people with low and average levels of belief in human-caused climate change. In a second experiment, "do more good" messages performed better than "do less bad" messages. That's a simple change in messaging from, say, "eat less meat" to "eat more plants."

This work is in close collaboration with Elizabeth Dunn [a UBC professor of social psychology]. We are also writing a how-to book to show people how they can reduce carbon emissions and increase happiness at the same time.



PHOTO BY ALBERT LAW

You're a big proponent of positive messaging for behavior change. Why?

Pioneering research by psychologist Alice Isen showed that positive emotions make people more creative at solving problems and other cognitive tasks. And as I just mentioned, our research on messaging for climate action confirmed that positive emotions are more likely to change behaviors across the ideological spectrum. We also know that positive reinforcement is more effective than negative reinforcement at changing behaviors. Negative emotions like fear, anxiety, and anger can get people to act but not sustain their actions over time. People burn out, they quit. They may share more on social media, but they actually do less. So, joy is important—we need to create and sustain behavior change over time.

How do you measure success and ensure sustained behavior change?

We look beyond the traditional measures of academic success—publications and grants—to improvement in the real world, measuring our societal and policy impact.

We do lab studies using hypothetical scenarios, but we also do field experiments. The field experiments are difficult—dealing with real-world noise and variance, recruiting participants, working with partner organizations, investing up front, and waiting longer for results—but it's the gold standard for this work. And the results, as with our earlier research on how cash transfers reduce homelessness, are more ecologically valid than lab studies.

What are some of your success stories?

Let's start with food, where we've been testing both individual and system changes. For example, "feng shui your fridge" means put your produce in the door and condiments in the drawers. You're more likely to eat the produce and reduce food waste, a major contributor to climate change. At the institutional level, my lab teamed up with Vancouver General Hospital and a celebrity chef to revamp the hospital menu and include low-carbon meats and fresh local food. Nutritionally, it was almost identical to the old menu, and it wasted a lot less food. Above all, patients loved it. One said, "I forgot I was in pain." We also plan to give patients a recipe booklet to take home after discharge.

To mention another good example of system change, Norway offers a bottle recycling lottery that gives people the traditional option of getting back a small amount of money, like 10 cents per bottle, or entering a bottle-recycling lottery with a chance to win a huge jackpot. But whether the lottery actually increased recycling was unknown. So, we were the first to test the recycling lottery. We found that people not only preferred the lottery option, but they were happier even if they didn't win. Most important, the lottery causally increased recycling by almost 50%, at no additional cost, compared with the status quo. This "gambling for good" can be adopted by governments to increase recycling rates, and we are working with our local government to help implement this policy.

What can psychologists do to improve sustainability?

We need to figure out how to make people change their behaviors for the benefit of their own well-being and for the planet. There's also not enough experimental evidence to show what intervention has a lasting impact. Behavioral science has prioritized making change easy, but making things easy doesn't build resilience—and change doesn't persist when things get hard. The best things I've done in my life were not easy but have been hugely rewarding in terms of social impact, connection, and other intangible rewards. We should be looking at intangible rewards and positive reinforcement, which can be very powerful in changing behaviors.

I'd also like to see psychology shift from focusing on individual behavior change to understanding the decision-making process of policymakers and politicians. At this point in my career, I only say yes to projects if they could have significant societal impact: Will this affect policy? The way people think more broadly? The way that businesses and governments operate? I'm interested in looking at ways to institute positive reinforcement to sustain those changes. ■

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KEYNOTE
Building Resilience, Social Competence, and Self-Regulation in Children and Adolescents
Mary Alvord, PhD
9:00 am ET

Using Quality Improvement to Bring Evidence-Based Approaches to the Pediatric Health Care Setting
Jennifer Verrill Schurman, PhD, ABPP, BCB
11:30 am ET

Supporting Children and Adolescents' Use of Specific Strategies to Manage Emotions
Zi Jia Ng, PhD
2:00 pm ET

Adolescents in the Digital Age: Understanding Technology's Impact on Mental Health and Development
Anne J. Maheux, PhD
4:30 pm ET

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Is Pretrial Publicity as Biasing Today as Ever?

"Judicial Notebook" is a project of APA Div. 9 (Society for the Psychological Study of Social Issues).

More research is needed on how to prevent extensive media coverage from impairing a defendant's right to a fair trial

BY JONATHAN P. VALLANO, PhD, AND JONATHAN TRAUB, UNIVERSITY OF PITTSBURGH AT GREENSBURG

LEGAL CASES HAVE long been subject to tremendous amounts of media coverage. One of the first modern cases involving extensive pretrial publicity was O. J. Simpson's "trial of the century," but there is no shortage of heavily publicized cases today. And although the way people get their news has changed, pretrial publicity is arguably just as, if not more, prominent and potentially damaging to a defendant's right to a fair trial.

One recent example is the 2022 murder of four University of Idaho students at an off-campus residence in Latah County, Idaho. The extensive pretrial publicity of the case led the defense to seek a change of venue. In support of the motion, the defense hired a trial consultant to conduct a change of venue survey that they argued illustrated a substantial amount of bias, ostensibly against the defendant within Latah County. The court granted this motion and moved the case to Ada County in southern Idaho.

This case is just the latest to reinitiate the consideration of important, long-standing issues regarding cases with extensive media coverage, namely: Is pretrial publicity just as biasing today as ever, and if so, what is the best remedy for an overly biased prospective jury pool?



AT ISSUE

How should courts best protect a defendant's right to a fair trial in highly publicized cases?

In today's digital and social media age, it is often difficult for prospective jurors to avoid pretrial publicity, especially in high-profile cases. But is this coverage just as biasing today? A recent meta-analysis by Lori Hoetger, PhD, at the University of Nebraska, and colleagues, which replicated and extended a 1999 meta-analysis led by Augsburg University's Nancy Steblay, PhD, supported the notion that pretrial publicity exerts small but significant effects on jurors' legal decisions by slanting their judgments toward (against) the side it favors (disfavors) (*Law and Human Behavior*, Vol. 46, No. 2, 2022). As most of the studies in this meta-analysis did not examine pretrial publicity in the form of social media, perhaps this is an underestimate regarding its biasing impact.

The remedies considered by courts to reduce the biasing effects of pretrial publicity include conducting a more extensive jury selection, delaying the trial until media coverage has lessened (a continuance), importing jurors from a less biased jurisdiction, and changing the trial venue. No remedy is perfect, though changing the venue is arguably the best option in cases where the trial venue is overly saturated with media coverage. In support of these change of venue motions, defendants frequently use social scientists to conduct change of venue surveys that involve polling prospective jurors in the trial jurisdiction and in a comparison venue to determine whether the present venue is significantly more prejudiced than the comparison venue. Whether the trial is moved is at the trial judge's discretion, with no bright-line rule for how much pretrial publicity and bias are necessary to change venues. And judges rarely approve a change of venue, in part because of logistical and financial considerations, which makes the Idaho murders case a relative rarity.

All things considered, courts must still routinely address whether extensive, potentially biasing pretrial publicity substantially impairs a defendant's right to a fair trial. In fact, the pervasive nature of social media has likely made finding an impartial jury even more challenging today. Yet judges' general resistance to change venues—along with increased national pretrial publicity saturating all prospective trial venues—leaves judges with no ideal solution. Perhaps the justice system should strive for the routine use of change of venue surveys and continued exploration of ways to enhance judges' willingness to move cases when necessary and feasible in an effort to obtain the least biased—rather than a completely unbiased—jury pool. ■

DAVINDRAAJA/THE NOUN PROJECT



The new APA guideline on chronic musculoskeletal pain focuses specifically on nonpharmacological treatments, which evidence shows are among the most promising treatments for chronic pain.

CE Corner

New Guideline for Nonpharmacological Treatment of Chronic Musculoskeletal Pain

BY STEPHANIE PAPPAS

CHRONIC PAIN IS widespread. More than 1 in 5 American adults experience pain on most days or every day (Yong, R., et al., *PAIN,* Vol. 163, No. 2, 2022). It is expensive, too: A National Academy of Medicine report estimated that chronic pain costs the U.S. economy between $560 billion and $630 billion annually (*Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*, National Academies Press, 2011).

A new APA clinical practice guideline for treating chronic musculoskeletal pain highlights the best current evidence for psychological and behavioral treatments for these pervasive conditions. But a lack of sufficient high-quality research on interventions also has psychologists and their colleagues from related disciplines calling for new, rigorous investigations into how to tackle chronic pain.

Chronic musculoskeletal pain is a broad umbrella, covering any pain related to the muscles, joints, and bones, whether linked to a known injury or not.

While some interventions, such as cognitive behavioral therapy and exercise, have strong evidence for improving some types of musculoskeletal pain, the panel that developed the new *APA Clinical Practice Guideline for Psychological and Other Nonpharmacological Treatment of Chronic Musculoskeletal Pain in Adults* could not recommend other widely used interventions due to insufficient evidence. These interventions may work well, said panel chair Ravi Prasad, PhD, a licensed clinical psychologist and director of behavioral health in the department of anesthesiology and pain medicine at the University of California, Davis School of Medicine, but the research on which the guideline is based contained studies that were often limited by their sample size, lack of sufficient comparison groups, or lack of functional outcome measurements, such as pain's impact on daily life.

"We were, quite frankly, surprised not to see strong support for many of the therapies that we see our patients benefiting from, at least anecdotally," Prasad said. "It's not that there's a lack of research in these areas; rather, the quality of evidence rating for many of the studies was low."

For that reason, Prasad and members of the panel—a multidisciplinary group including specialists from psychology, medicine, social work, and nursing as well as individuals with lived experience—emphasized that clinicians and patients should share decision-making in pain treatment. Patients may benefit from multipronged approaches that simply have not been researched, said Penney Cowan, a panel member and patient advocate who has lived experience with chronic pain. "When you're living with pain, it's not one thing that's going to help you," she said. "It's [a] number of different treatments and therapies combined."

Often, patients are offered surgical solutions that are not necessarily proven to be any more effective than noninvasive treatments, said Daniel Bruns, PsyD, a pain psychologist in Greeley, Colorado, and a member of the guideline panel who has helped to develop medical treatment guidelines for pain for other organizations. The prescribing of opioid medications for chronic pain has also fueled the opioid epidemic, he added, making the development of

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Learning objectives
After reading this article, CE candidates will be able to:

1. Explain why psychological treatments are an important component of addressing chronic musculoskeletal pain.
2. List the treatments judged to have a strong evidence base for improving physical functioning and performance in patients with chronic musculoskeletal pain.
3. Discuss the reasons that the research base is limited and why the guideline may exclude effective treatment.

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alternative, evidence-based treatments even more essential.

Ultimately, the panel based the guideline on three systematic reviews that drew from up-to-date research. These included a review of studies on nonpharmaceutical interventions by the Agency for Healthcare Research and Quality (Skelly, A. C., et al., *Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review Update,* 2020), another on self-management interventions for widespread chronic pain (Geraghty, A. W. A., et al., *PLOS ONE,* Vol. 16, No. 7, 2021), and a third on psychological interventions for chronic pain, excluding headache (Williams, A. C., et al., *Cochrane Database of Systematic Reviews,* 2020).

The evidence for combating pain

Multiple organizations have put out guidelines regarding chronic pain, but the new APA guideline focuses specifically on chronic musculoskeletal pain, the most common chronic pain condition. That was in an attempt to provide clear guidance, homing in on a specific patient population.

"Evidence-based medicine is an increasingly specific process," Bruns said. "As the science progresses, you try to become more and more focused on particular populations, particular conditions."

The guideline also focuses specifically on adults and on nonpharmacological treatments, which play a major role in the treatment of musculoskeletal pain. Psychological treatments are among the most promising for chronic pain: In earlier guideline development for the American College of Occupational and Environmental Medicine, Bruns and his colleagues found that of the 15% of treatments supported by evidence, many were psychological.

To create the guideline, the APA panel conducted a scoping review of the literature to identify which reviews to use. It focused on two major outcomes: physical functioning and performance, which includes activities of daily living, impairment, disability, pain-related interference, changes in strength or stamina, and range of motion, and mental health and emotional functioning, which includes anxiety, depression, anger, and pain coping (e.g., fear avoidance, pain catastrophizing, acceptance of pain). In addition, the panel looked at health-related quality of life, pain intensity, patient self-efficacy, patient global impression of change, employment status and disability benefits, and adverse events.

It was important to the panel to focus on studies that looked at functional outcomes, not just physical goals like range of motion, said Kathryn Mueller, MD, MPH, an occupational preventative medicine physician at the University of Colorado School of Medicine and member of the panel. "Historically, medical research has focused on physical outcomes only," Mueller said. "So, if I can move my back, I'm cured. But maybe I'm not, because I've had to change my lifestyle so much that I can't do the things I want to do."

Studies that ask patients how they are functioning in different domains—family, work, and recreation, for example—are more informative because they get at meaningful improvements in a person's life, Mueller added. Functional outcome tools "help the provider start to understand what the patient's needs are and what is concerning to them," she said.

Recommended treatments

The guideline panel then organized its recommendations into first and second line based on the strength of the evidence, the balance of benefits versus harms, patients' values and preferences, and applicability. The guideline is not a practice standard and does not cover all possible effective treatments—only those researched with high-quality methodology with an eye toward functional outcomes.

For people with **chronic musculoskeletal pain**, the guideline recommends cognitive behavioral therapy (CBT) over treatment as usual or other active interventions. "We've known for a while that CBT is effective in treating chronic pain, so having it as a first-line recommendation really makes a lot of sense," said panel member Cindy McGeary, PhD, ABPP, a licensed clinical psychologist and associate professor in the department of psychiatry at the University of Texas Health Science Center at San Antonio. "CBT includes a lot of different components, such as psychoeducation, relaxation training,

KEY POINTS

1. First-line recommendations for chronic musculoskeletal pain include cognitive behavioral therapy, multicomponent self-management interventions, and, for specific areas, exercise and psychological therapies.
2. Other treatments may be effective, but quality of evidence issues preclude making recommendations about those treatments.
3. It is important for care to be patient-centered and use a shared decision-making model between providers and individuals experiencing chronic pain.

cognitive restructuring, and pain action plans, to name a few."

The panel also found strong evidence to recommend multicomponent self-management interventions over no treatment or usual care. Multicomponent self-management can include a broad range of interventions, often including patient education, physical components such as stretching and movement, and psychological treatment focused on the patient's feelings, cognitions, and behaviors in response to pain. Interventions might also encourage self-compassion and walk patients through stress-management tools such as relaxation exercises or meditation.

For **chronic low back pain**, the guideline panel recommends exercise for short-term pain management and psychological therapy for short-, intermediate-, and long-term pain management. Psychological therapy for low back pain can include CBT, progressive muscle relaxation, and operant therapy, which uses positive reinforcement to help patients meet targets for healthy behaviors such as exercise.

Finally, for patients with **osteoarthritis knee pain**, the panel found strong evidence for a professionally designed tailored exercise program, since avoiding exercise can worsen knee pain over time.

The panel also offers **second-line recommendations** for interventions where the evidence was weaker or dependent on the patient's situation and preferences. For low back pain, there was some evidence for spinal manipulation and mindfulness-based stress reduction over usual care, attention control (efforts to ignore the pain), and other interventions. The panel also suggests exercise over yoga for low back pain because yoga has a slightly higher risk of harm than exercise; however, if the patient prefers yoga, the panel notes that those risks are low. For shorter-term pain management of low back pain, in one study the panel found tentative

One of the first-line recommendations is multicomponent self-management, which includes physical components such as stretching and movement.



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evidence for the efficacy of acupuncture. For short and intermediate relief from chronic low back pain, the panel also suggests multidisciplinary or interdisciplinary rehabilitation.

For chronic neck pain, the panel suggests acupuncture, noting that while it was found to improve outcomes over sham treatments, placebo, or usual care in the short and intermediate term, the strength of the evidence was low. Finally, the panel concludes that providers could suggest exercise for patients with osteoarthritis hip pain, though, again, the quality of evidence is low and the benefits small.

The panelists encourage treatment providers to share in decision-making as well as to screen for patients' psychiatric, psychological, and behavioral histories. Also important, they emphasize, is considering how easy or difficult it is for patients to access treatment, which might be impacted by things such as where they are located—in urban or rural areas—or their gender identity, sexual orientation, socioeconomic status, racial or ethnic identities, and disability status. Providers may also need to modify treatments based on some of these factors.

The guideline also notes that the optimal type of care for chronic musculoskeletal pain is interdisciplinary, wherein an array of health care providers communicate with each other and focus on a shared treatment goal. But the guideline also acknowledges that most pain care is delivered by a multidisciplinary team, a group of providers who treat the same patient from their specific areas of expertise but not necessarily in a coordinated fashion. Systems that allow for sharing treatment notes across specialties and otherwise ease communication can help combat this barrier to ideal care.



The optimal type of care for musculoskeletal pain is interdisciplinary, where a variety of providers communicate with each other and focus on a shared treatment goal.

A call for more and better research

One of the panel's most surprising findings was how many commonly prescribed chronic musculoskeletal pain treatments failed to meet the APA guidelines' standards for recommendation, Prasad said. One oft-used therapy is acceptance and commitment therapy (ACT), which encourages patients to accept their thoughts and emotions about pain and work toward not letting those reactions stop them from making the changes that may help them cope. While a few large studies have found that ACT may hold promise for treating chronic pain, the overall evidence is not strong enough



AZMANJAKA/GETTY IMAGES

to make a recommendation, the panel determined (Luciano, J. V., et al., *PAIN*, Vol. 155, No. 4, 2014; McCracken, L. M., et al., *The Journal of Pain*, Vol. 14, No. 11, 2013). This does not mean that ACT does not work, the panel emphasized, but that more formal research is needed before the therapy can be recommended.

Other treatments with insufficient evidence include self-management or behavioral therapy for chronic musculoskeletal pain, low-level laser therapy, massage, Qi Gong, Tai Chi, acupuncture, and pain coping skills training for osteoarthritis knee pain. (See the guideline for the full list.)

The panel urges providers to consider factors like comorbidities and available resources when suggesting these therapies to patients.

But the lack of evidence for possibly beneficial treatments led the guideline panel to include a call for new studies on all chronic musculoskeletal pain treatments. Prasad said the panel felt the need to point to what is missing: robust comparisons and studies focused on functional pain outcomes that strike a balance between internal and external validity.

Studies in the area generally lack standardization, panel members added. There is no one definition of "usual care," for example, making it hard to determine what type of treatments an intervention is being compared to. There is also a big disconnect between real-world care for chronic pain, which is typically based on a combination of treatments, and clinical studies, which tend to pull out a single treatment and compare it to one or two comparison treatments, said Cowan, who advocates for more patient input into clinical trials. Moreover, studies of a specific intervention do not always use the same comparative treatments, making it difficult to evaluate effectiveness across studies. Hence, future research needs to take these factors into account and investigate interventions more comprehensively, Cowan said.

"Let's look at all of it together," she said, "so we finally have the evidence to say, 'It's this combination of treatments and therapies that are going to give the best possibility of a person living with pain to actually become a person again and get out of that patient role.'" ■

FURTHER READING

APA clinical practice guideline for psychological and nonpharmalogical treatment of chronic musculoskeletal pain in adults
APA, 2024

Recommendations from the 2019 symposium on including functional status measurement in standard patient care
Mueller, K. L., et al.
Journal of Occupational and Environmental Medicine, 2020

Mechanisms of injustice: What we (do not) know about racialized disparities in pain
Mathur, V. A., et al.
PAIN, 2022

Does integrative medicine reduce prescribed opioid use for chronic pain? A systematic literature review
Hassan, S., et al.
Pain Medicine, 2020

Resilience and return-to-work pain interventions: Systematic review
Wainwright, E., et al.
Occupational Medicine, 2019

HELPING YOUTH MOVE



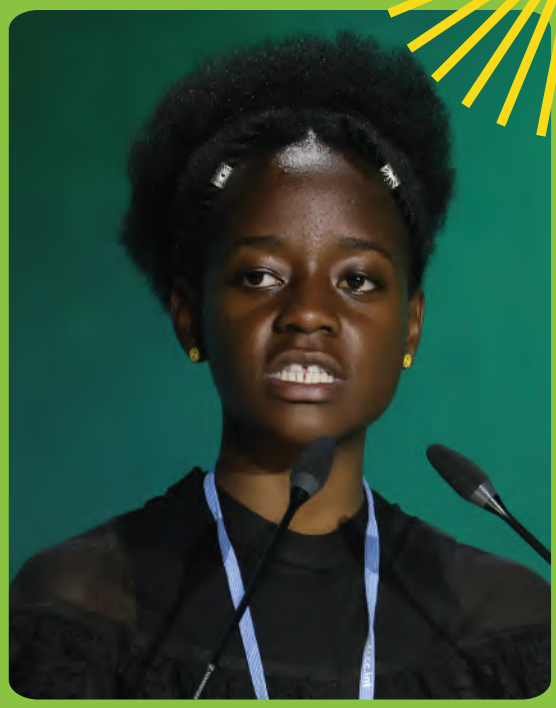




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FROM CLIMATE ANXIETY







TO CLIMATE ACTION

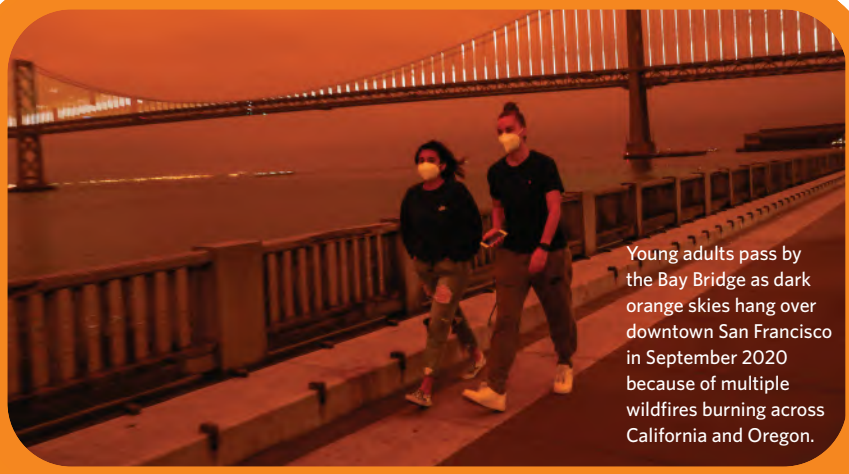
Psychologists and youth are addressing climate change anxiety through knowledge, action, and hope

BY MYRIAM VIDAL VALERO

IN 2020, 15-YEAR-OLD Natalie Heller stepped outside her San Francisco home to an orange sky, a result of Northern California's massive, climate-driven wildfires. "It was like we were on Mars," recalled Heller, now a sophomore in environmental studies at the University of Southern California and a Gen Z adviser at the Climate Mental Health Network, an organization that offers tools to address the emotional impacts of the climate crisis.

Almost 99% of children in the world have been exposed to at least one climate or environmental hazard in their lifetime, whether that is heat waves, cyclones, floods, water scarcity, or vector-borne diseases (*The Climate Crisis Is a Child Rights Crisis*, UNICEF, 2021). Children are also more physically vulnerable to extreme weather events than adults, facing bigger risks in terms of physiological consequences and even death.

"We have lots and lots of evidence that experiencing these kinds of extreme events, the storms, the wildfires, etc., is associated with threats to mental health, increases in anxiety, depression, post-traumatic stress disorder," said Susan Clayton, PhD, a member of APA's Climate Change Advisory Group and a professor of psychology at The College of Wooster in Ohio.



Young adults pass by the Bay Bridge as dark orange skies hang over downtown San Francisco in September 2020 because of multiple wildfires burning across California and Oregon.

SAN FRANCISCO CHRONICLE/HEARST NEWSPAPERS/GETTY IMAGES

AT A GLANCE

- Research is finding that the ongoing reality of climate change and its consequences has significant psychological implications for youth.
- Knowing that a climate disaster could strike at any moment can morph into what is now known as climate anxiety, also referred to as eco-anxiety or eco-distress.
- Some psychologists are starting to address eco-anxiety with patients as a regular part of their practice.
- More research is needed on how children of different ages perceive the threat of climate change and what interventions are most effective.

The ongoing reality of climate change and its consequences has significant psychological implications for young people, research is finding. In a survey of 15,793 U.S. youth ages 16 to 25, 85% said they were at least moderately worried, and 57.9% said they were very or extremely worried about climate change and its impacts on people and the planet. Meanwhile, 42.8% said that climate change impacted their mental health, and 38.3% said their feelings about climate change negatively affected their daily lives (Lewandowski, R. E., et al., *The Lancet Planetary Health*, Vol. 8, No. 11, 2024). Similarly, a survey of 10,000 young people ages 16 to 24 in 10 countries found that 59% felt very or extremely concerned about climate change, expressing anger, sadness, powerlessness, fear, and other negative emotions, and they attributed a decrease in their ability to eat, sleep, concentrate, perform at school or work, engage in leisure activities, and maintain relationships to those feelings (*How Youth Climate Anxiety Is Linked to Government Inaction*, Avaaz, 2021).

Climate anxiety can even impact the cognitive development of children and youth, according to research highlighted in APA's *Mental Health and Our Changing Climate: Children and Youth Report 2023*. Extreme weather events caused by climate change can disrupt normal fetal development, increasing the risk of anxiety, depression, attention-deficit/hyperactivity disorder, educational challenges, lower self-control, and psychiatric disorders later in life.

In fact, anxiety related to climate change could be considered a public health issue, said Lise Van Susteren, MD, a forensic psychiatrist and cofounder of the Climate Psychiatry Alliance, an organization that educates mental health professionals and the public about the effects of the climate crisis on mental health. This anxiety can resurface when young people encounter something later that reminds them of the event, such as thick cloud cover or smoke. In

turn, such emotions can impact the cardiovascular, immune, digestive, and neurological systems, research finds (*Child and Adolescent Mental Health*, Vol. 26, No. 3, 2021).

Knowing that a climate disaster could strike at any moment can morph into what is now known as climate anxiety, also called eco-anxiety or eco-distress, according to the Climate Mental Health Network (*Climate Change & Youth Mental Health: Psychological Impacts, Resilience Resources, & Future Directions*, Climate Mental Health Network, 2021). The terms describe the distress people feel about the effects of climate change on the environment and human life and has led to the emergence of related concepts like eco-grief—sadness about ecosystem changes—and solastalgia, or nostalgia for what the environment used to be.

At its core, climate anxiety is fear about a lack of security and is a completely natural response to environmental challenges, said Leslie Davenport, MS, LMFT, a mental health professional who specializes in climate issues and leads the Climate Psychology Certificate program at the California Institute of Integral Studies in San Francisco, the first such program in the United States. "It means you care about what's happening. You're paying attention. You're empathetic."

In an overall sense, young people may feel anger and frustration that decision-makers and older generations have left them with a world in crisis—one they did not create but must fix, said Sarah Newman, MPH, a public health expert and founder of the Climate Mental Health Network, which helps communities address climate-related emotions through resources for mental well-being. While it is important to help young people cope with their feelings around climate change, "this is about governments and structures failing," she said.

In fact, research finds that this perceived inaction by political leaders is also linked to feelings of climate anxiety, distress, and betrayal among young people (*How Youth Climate Anxiety Is Linked to Government Inaction*, Avaaz, 2021). Although ultimately governments are responsible for large-scale efforts to mitigate climate change, psychologists, educators, and organizations supporting youth can play a crucial role by implementing training programs to manage climate emotions and foster resilience. Additionally, they



Children participate in a climate action day as part of a Fridays for Future climate protection event held in Vienna, Austria, last year.

JEFF J MITCHELL/GETTY IMAGES

> "We need hope; we need positive emotions. Also, we need meaning to buffer, not to get rid of, the negative emotions."
>
> **Maria Ojala, PhD,** research psychologist at the University of Oulu in Finland

can create initiatives to ensure that young voices are heard in climate policy discussions to help mitigate feelings of powerlessness among young people (*The Role of the Youth Sector in Addressing Young People's Climate Emotions*, European Union–Council of Europe Youth Partnership, 2024).

"[Anger] can be a good motivator for people to get involved, and get engaged, and take action," Clayton said, pointing out that research has shown that getting involved can be helpful for mental health "because then people don't feel like passive victims."

Addressing climate anxiety

The mental health impact of climate change on youth is increasingly drawing attention from psychologists, other mental health professionals, researchers, and activists. In the clinical realm, some psychologists are starting to address eco-anxiety as a regular part of their practice. About a decade ago, for example, Laura Carter Robinson, PsyD, a clinical psychologist in Ann Arbor, Michigan, who is part of APA's Climate Change Community of Scholars and Practitioners, began noticing that several of her teenage and young adult patients were expressing concern about the climate, whether it was extreme weather, the damage to ecosystems near them, or pollution. They also told her that some of their peers and prior therapists tended to dismiss their feelings.

Robinson saw an opportunity to create a niche that allowed young people to safely explore these topics. "It was like the floodgates opened," said Robinson, who has incorporated in her practice specific tools to address climate anxiety like hiking therapy and support for those taking climate-based action. "People came from all over the place because they were like, 'Here's someone who knows what to do with this and someone who is open to talking about it.'"

As Robinson continued to work in the area, she became more attuned to subtle signs of her young patients' concerns. For example, when they brought up topics like air-conditioning or a thunderstorm, it sometimes revealed deeper fears about the dangers that extreme weather can pose. Robinson also has observed that climate anxiety can feed into young people's thinking about major life decisions, including where to live and whether to have children. "A huge amount of what we do is work on uncertainty, and on developing some measure of comfort with living with uncertainty," she said.

Other psychologists and researchers are contributing to these issues on a larger scale, lending their theories and ideas to help others explore broader topics such as how meaning-focused coping—a strategy that transforms anxiety and distress into a sense of purpose—can enhance mental well-being. They are also examining how constructive hope, a positive mindset that combines optimism with the belief in working on meaningful goals, can help improve mental health (Ojala, M., & Chen, X., in Haase, E., & Hudson, K. [Eds.], *Climate Change & Youth Mental Health*, Cambridge University Press, 2024).

For instance, youth activism programs, where young people feel they are contributing to solve an issue, can foster these types of positive feelings, said Maria Ojala, PhD, a research psychologist who is teaching socio-ecological resilience at the University of Oulu in Finland. Research shows that hope is not about sitting passively waiting for something to happen; it can also be action-oriented, involving taking steps toward a specific goal.

The organization DearTomorrow is a case in point. It encourages youth and others to write personal letters to their loved ones and the versions of themselves living in the future to help them imagine a better future and focus on the actions they can take to create it. Anyone can participate, and through various activities and exhibits the organization encourages intergenerational conversations where adults and children can exchange points of view and young people can find a sense of community.

Researchers have found that such constructive hope can help reduce symptoms of depression and anxiety (Baudon, P., & Jachens, L., *International Journal of Environmental Research and Public Health*, Vol. 18, No. 18, 2021). "We need hope; we need positive emotions. Also, we need meaning to buffer, not to get rid of, the negative emotions," Ojala said.

Positive actions by kids

Children themselves, as well as their schools and teachers, are applying some of these ideas and tools in creative ways. For example, Lulu Homer, a 10-year-old living in Los Angeles, began Future Fighters, a group that creates kid-friendly ways to engage in activism. The group is the result of an aha moment she had when she was 7 and attending summer camp. She was



Youth activism programs, where young people feel they are contributing to solve an issue, can foster positive feelings and improve mental health.

JOE KLAMAR/GETTY IMAGES

about to have a salad for lunch, but it was entirely wrapped in plastic. She had just read a book about the damage plastic was doing to the environment and felt distraught when she learned that plastic waste harms sea animals and the ecosystem as a whole.

Homer did not eat the salad; instead, she brought a letter to the camp director, signed by fellow campers, that asked the director to use more earth-friendly packaging. Eventually, the director did. Today, with the support of parents, Homer's group holds beach cleanups and bake sales to raise funds for climate groups, among other activities.

Meanwhile, after seeing the sky turn orange, Heller also felt a deep sense of urgency to get involved and do something for the planet. She joined her school's environmental club as well as an independent group organized by some of her classmates, which ultimately grew into the Bay Area Youth Climate Summit, a nonprofit that empowers youth to become climate educators, activists, and leaders.

Having a space to share with others who were also feeling anxious or frustrated about climate change helped her deal with those emotions, Heller said. "Not being so isolated has helped so much—it is like a coping mechanism," she said. "I've met some of my best friends there, and I learned how to become a leader."

Besides her action and advocacy work, Heller's participation in different activist and mental health organizations has taught her strategies to take care of her mental health, like journaling and giving herself time to rest and pause whenever she feels burned out or overwhelmed.

Positive actions by schools

Schools, too, are beginning to introduce coping tools to support climate-related emotions. A 2021 UNESCO study that evaluated the curricula of schools in 100 countries around the world found that 53% of them include climate change (*Getting Every School Climate-Ready*, UNESCO, 2021). However, there is a long way to go and teachers are not always trained to deal with the emotions that can emerge, said Davenport, author of APA's Magination Press book *What to Do When Climate Change Scares You* (2024).

For example, discussions about environmental impacts often start in science classrooms, but those conversations usually lack an aspect that helps kids process their emotions. There is an important opportunity for teachers to craft activities that help kids process what they have learned and to reflect on it, said Davenport. One option educators and parents can use is toggling, an emotion regulation technique that helps people build cognitive flexibility, which allows for having difficult conversations about climate change and related feelings as well as sharing positive emotions and actions that can help the environment and bring joy, Davenport explained.

Meanwhile, the Climate Mental Health Network has developed a tool that is being used in schools and other



Interacting with nature helps promote emotional resilience for youth in the face of climate anxiety.

SOLSTOCK/GETTY IMAGES

settings to help people identify feelings related to this anxiety. In collaboration with Panu Pihkala, PhD, an eco-anxiety researcher at the University of Helsinki in Finland, the group created the Climate Emotions Wheel, which identifies 23 climate-related emotions that are divided into four main quadrants: anger, sadness, fear, and positivity (*Frontiers in Climate*, Vol. 3, 2021). The wheel has been translated into more than 20 languages, including an emoji version for children.

"It's really about recognizing that these emotions are normal, that they are valid," Newman said. In addition, the network's 2021 report identified seven components that help promote emotional resilience in the face of climate anxiety: acknowledging and validating feelings, developing emotional coping tools, making social connections, interacting with nature, taking climate action, employing self-care, and building climate justice awareness.

Parents and teachers can also create spaces to practice mindfulness, said Davenport. For kids, that does not necessarily mean having to sit still and take notice of their breathing: Any activity that helps them focus on the present moment and come back to themselves is great, whether that is running a lap around the block, practicing a sport, or doing artwork.

It is also important to support parents and their emotions around a changing climate, said Elizabeth Bechard, the public health manager of Moms Clean Air Force, a nonprofit that mobilizes parents and caregivers to act on behalf of kids to fight climate change and air pollution. A survey of more than 1,000 parents with children under age 6 across the United States found that extreme heat is causing increased stress, impacting both their work and their ability to care for their children, and 84% reported that extreme weather negatively affects their physical health or emotional well-being (*Heating Up: Extreme Weather Is Increasing Stress for Parents and Child Care Providers*, The RAPID Survey Project, 2024). "Many parents are struggling with their own emotions about climate change," Bechard said, which can get in the way of the conversations they have with their kids. Ways to support caregivers might include opening spaces where parents can talk about their emotions in a "climate café," or crafting group events or listservs where they can check in with each other.

Given that children and adolescents spend most of their day in schools, APA is working to support schools in their climate resiliency efforts. To this end, APA has partnered with 11 national associations to form the Network for Resilient Pre-K to 12 Schools in Extreme Climates in order to leverage collective efforts to address the impacts of severe weather events and build resilience among school personnel and students. These efforts include focusing on mental health and overall well-being in ways that are practical, scalable, and contextually relevant to the diverse needs of school communities. The partner organizations are the American Academy of Pediatrics, American Federation of Teachers, American Public Health Association, Children's Environmental Health Network, Climate Mental Health Network, National Association for the Education of Young Children, National Association of School Nurses, National Education Association, National Environmental Education Foundation, National Parent Teacher Association, and Project Drawdown. Updates will be featured on APA's Center for Psychology in Schools

and Education webpage as their work evolves.

Future directions and needs

While there is good work underway, the field is ripe for more input, Climate Psychiatry Alliance's Van Susteren and others said. To name just one example, there is still a big need to create additional actionable programs that address climate anxiety and are tailored to young people. Other knowledge gaps include how racial and ethnic differences shape climate emotions, the mental health effects of climate change awareness on those most likely to suffer its worst consequences, and how to design effective interventions in low-income countries where survival takes precedence over mental health concerns like climate anxiety.

Research is also needed to better understand how children at different ages perceive the threat of climate change, what kinds of interventions or programs might help them be resilient in the face of these challenges, and how to create educational resources for teachers to help youth cope, said Clayton.

Clayton remains optimistic and hopes that governments and institutions will see the value of funding such research but also understands this can be challenging because the political agenda plays a big role. On the positive side, public agencies are becoming increasingly aware of the ways in which climate change threatens health, "so I think there's interest in funding a lot of these kinds of programs," she said.

Beyond research and interventions aimed at addressing climate anxiety among youth, Van Susteren believes the issue must be addressed at its root. "Either we treat the cancer that is carbon emissions, or we sit in hospice care until we're ready to treat the cancer," she said. ■

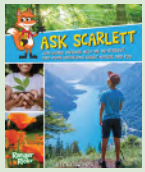
GET OUTSIDE

NEW BOOKS TO INSPIRE KIDS TO CONNECT WITH NATURE

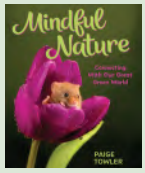
APA's Magination Press has partnered with the National Wildlife Federation on a new series of books for youth about how being in nature improves mental health, reduces stress, boosts self-esteem, and builds connections. Psychologist Derrick Sebree, PsyD, consulted on the series, representing APA Div. 34 (Society for Environmental Population & Conservation Psychology).



Take a Hike! And Other Ways to De-Stress and Relax in Nature
A mixture of inspirational text and practical tips, this tween-friendly handbook encourages kids to seek out nature for health and mental health benefits and to feel more empowered in their communities and cities.



Ask Scarlett: Can Being Outside Help Me De-Stress? And More Questions About Nature and You
Based on the popular *Ranger Rick* magazine feature "Ask Scarlett," this question-and-answer book explains why nature helps the brain, how it supports creativity and physical activity, and how it helps kids become "planet protectors."



Mindful Nature: Connecting With Our Great Green World
Through a blend of thought prompts and nature photography, this picture book creates a meditative experience for young readers.

APA's other books for youth related to climate change include *What to Do When Climate Change Scares You*, *All the Feelings Under the Sun*, and *What to Do When the News Scares You*.

FURTHER READING

Mental health and our changing climate: Children and youth report 2023
APA and ecoAmerica, 2023

We deserve to live in a thriving world: Child-centred indicators for climate change
Young and Resilient Research Centre, Western Sydney University, and UNICEF Australia, 2024

Gen Z mental health: Climate stories
Paramount, Climate Mental Health Network, Hollywood Climate Summit, and Yea Impact!, 2023

How heat affects the mind
Pappas, S.
Monitor on Psychology, June 2024

2024 Gen Z and millennial survey: Living and working with purpose in a transforming world
Deloitte, 2024

Climate and your mind
Van Susteren, L. (Ed.)

Rebuilding a Full Life After Religion

Many Americans leave religion. Here's how psychologists are helping them cope with distress and form new beliefs to build meaningful lives.

BY ASHLEY ABRAMSON



WHILE PREVIOUS RESEARCH has shown a steep decline in religion in America, more recent surveys show the decline is leveling off. Still, according to a February 2025 Pew Research Study, 35% of U.S. adults have switched or left religion since childhood, leading to an increase in the religiously unaffiliated. As a result, many therapists find themselves helping patients to rebuild lives outside of a religious tradition.

The 2025 Pew study shows that after rising for decades, the number of religiously unaffiliated has at least temporarily stabilized. A 2021 Gallup poll found that since 1973, the percentage of Americans who say they have no religion had increased from 5% to 22%. The percentage of Americans who say they're members of a church, mosque, or synagogue fell from 70% in 1999 to just 45% in 2023. This steep decline, according to Gallup, includes people of all ages, genders, and ethnicities.

For many, religion provides an important sense of meaning, belonging, and community, which can contribute positively to mental health and well-being. Some psychological research has associated religious practices with positive mental health outcomes and high scores on scales assessing self-esteem, self-efficacy, optimism, and hope (Levin, J., *International Journal of Applied Psychoanalytic Studies*, Vol. 7, No. 2, 2010).

Yet, for some, religion has the opposite effect. Often, "religious dones," or individuals departing from religion, choose to leave after experiencing mistreatment or abuse in the church or in the name of religion. Others cite a kind of cognitive dissonance as reason for leaving. "There can be a mismatch between a person's identity or values and the values of their church," said Daryl Van Tongeren, PhD, a professor of psychology at Hope College in Holland, Michigan, and author of *Done: How to Flourish After Leaving Religion*.

For example, a person who just received a cancer diagnosis may find their church's view of suffering doesn't make sense anymore. Or a person who finds a meaningful bond with a same-sex partner may leave if their church doctrine or fellow congregants discourage the union. The recent political climate may make these differences feel more pronounced, Van Tongeren said, which could be contributing to the recent uptick in religious dones. Cultural emphases on mental health and authenticity among younger generations could also play a role, along with the proliferation of social media, which may make leaving religion less isolating.

It can feel empowering to step away from religion, but rebuilding life after faith isn't always easy. Religions with strict doctrines encourage members to socialize, work with, and marry other members, which can leave little room to include people outside their faith. When religious environments and doctrines cause harm, people often require a period of healing, said Marlene Winell, PhD, a clinical psychologist in Massachusetts who specializes in religious trauma. Post-religious people eventually form new beliefs about themselves and the world, but this can take time. "Religion has played a significant role in human life throughout history, and when people walk away from it, they often feel a sense of emptiness that needs to be filled," said Van Tongeren.

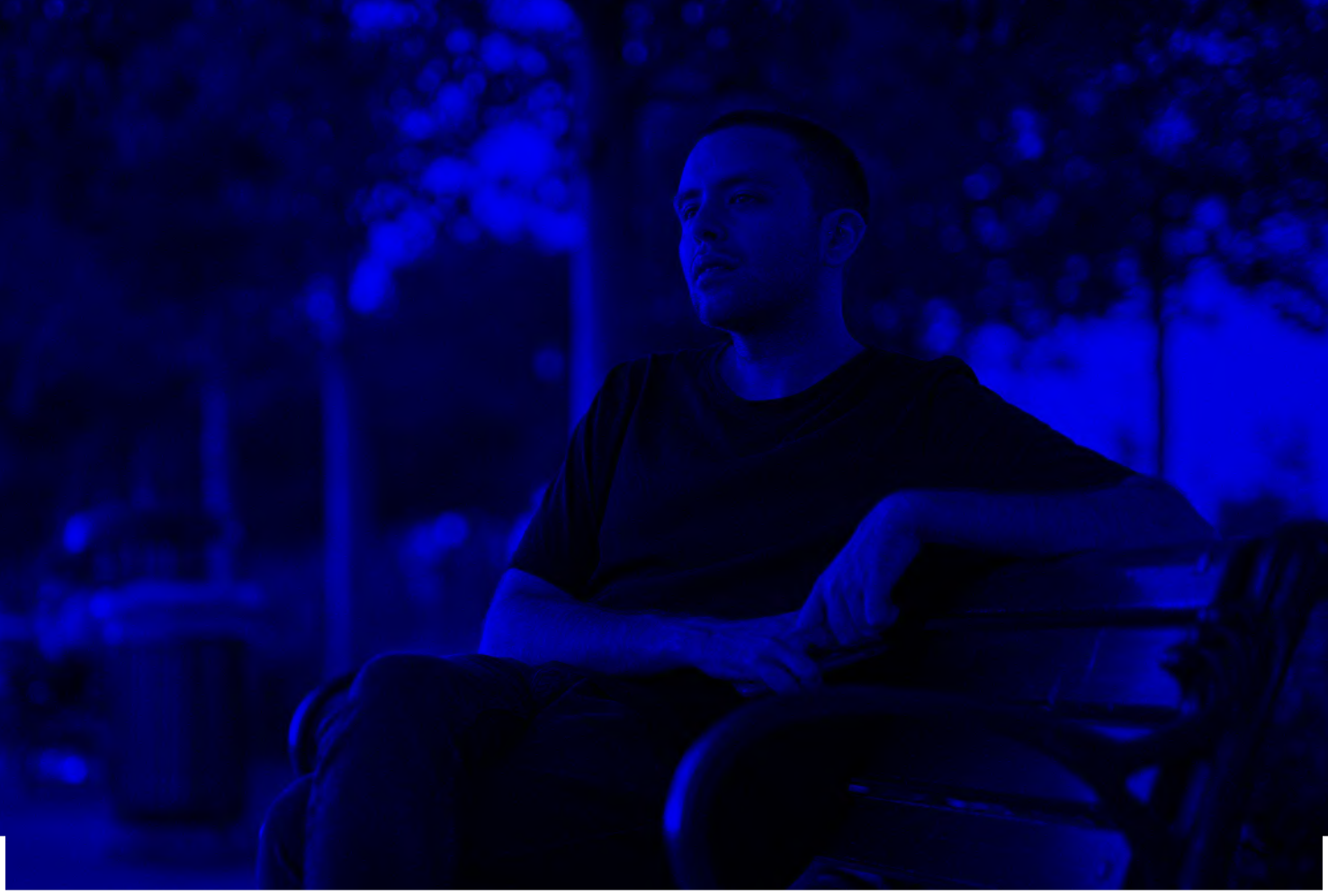
One of the most difficult aspects is learning how to view oneself as a "good" person separate from religion. In fact, research shows that most people believe that faith is key to morality. But research also shows that religiosity does not equate to prosocial behavior, especially toward outsiders (Shariff, A. F., et al., *Trends in Cognitive Sciences*, Vol. 18, No. 9, 2014).

Leaving can be even more costly for those who participated in a fundamentalist religion. "For some people, religion defines their identity, values, purpose, and behavior, and many of them are lacking important information about how to function in a different world context," said Winell.

Some psychologists—many of whom are formerly religious themselves—specialize in spiritual reconstruction, or helping people build meaningful lives after leaving religion, and are stepping in to help people recover as they unlearn potentially harmful ways of thinking, reconstruct new beliefs, and find a renewed sense of purpose. On the following pages, read about the ways they're supporting religious dones.

AT A GLANCE

- Studies show more Americans are leaving religion than ever before.
- Departing from religion can be a positive change, but it also poses major challenges, forcing many formerly religious people to form completely new belief systems.
- Psychologists who specialize in faith deconstruction are helping people recover from religious trauma and create a new sense of meaning in their lives.



Psychologists are helping individuals who leave religion, often because of mistreatment or cognitive dissonance, to rebuild their lives and find new purpose.

EUROPHOTO/AGENCY

Recovering from trauma

When someone has experienced trauma in the context of church or religion, psychologists can play a crucial role in recovery. Some patients may qualify for a diagnosis of post-traumatic stress disorder in the event of physical or sexual abuse, but religious trauma can often be insidious in other ways as well.

Certain religious beliefs can negatively impact people over time. For example, the doctrine of eternal conscious torment, which teaches that people who don't believe or behave a certain way will go to hell after death, can cause long-lasting anxiety, while being taught you're sinful can instill a profound sense of shame. In 2011, Winell coined the term "religious trauma syndrome" to describe these experiences (*CBT Today*, Vol. 39, No. 3, 2011). Rather than a formal diagnosis, the syndrome identifies a set of symptoms—such as anxiety, depression, or even flashbacks—that commonly affect current and former religious individuals.

Fundamentalist religious groups, which exert high control over congregants, can be particularly harmful to peoples' mental health and well-being. "These groups often provide rigid rules for how to live and use manipulative tactics to keep people in a belief system," said Arielle Marston, PsyD, a clinical psychologist in Arkansas who specializes in religious trauma. Some religious people feel trapped, as though they can't leave their religion for fear of going to hell or being shunned by their community.

When working with people who have had negative religious experiences, Winell prioritizes validating her patients. Feeling heard and believed helps support the therapeutic relationship, which is key to healing, she said. Evidence-based modalities such as cognitive processing therapy can support religious trauma recovery, but treatment can also be individualized to support someone's healing journey. Laura Anderson, PhD, LMFT, a psychotherapist in Nashville, Tennessee, who specializes in religious trauma, said many of her patients struggle to talk about their experiences early in that journey.

Her approach is to help patients build internal resources and coping skills—such as deep breathing or mindfulness techniques—that help them feel safe after experiencing a threatening environment. Once they learn self-regulation skills, they can more easily process their emotions and make choices according to their values, another important step in moving forward after religion.

Resolving guilt and fear

Leaving organized religion, even when it ultimately leads to positive changes, can cause initial distress. Abandoning beliefs is scary, especially when someone derived their worth from going to church or associated God with eternal life. "Those are deep assumptions about oneself that go beyond religious doctrines," said Winell.

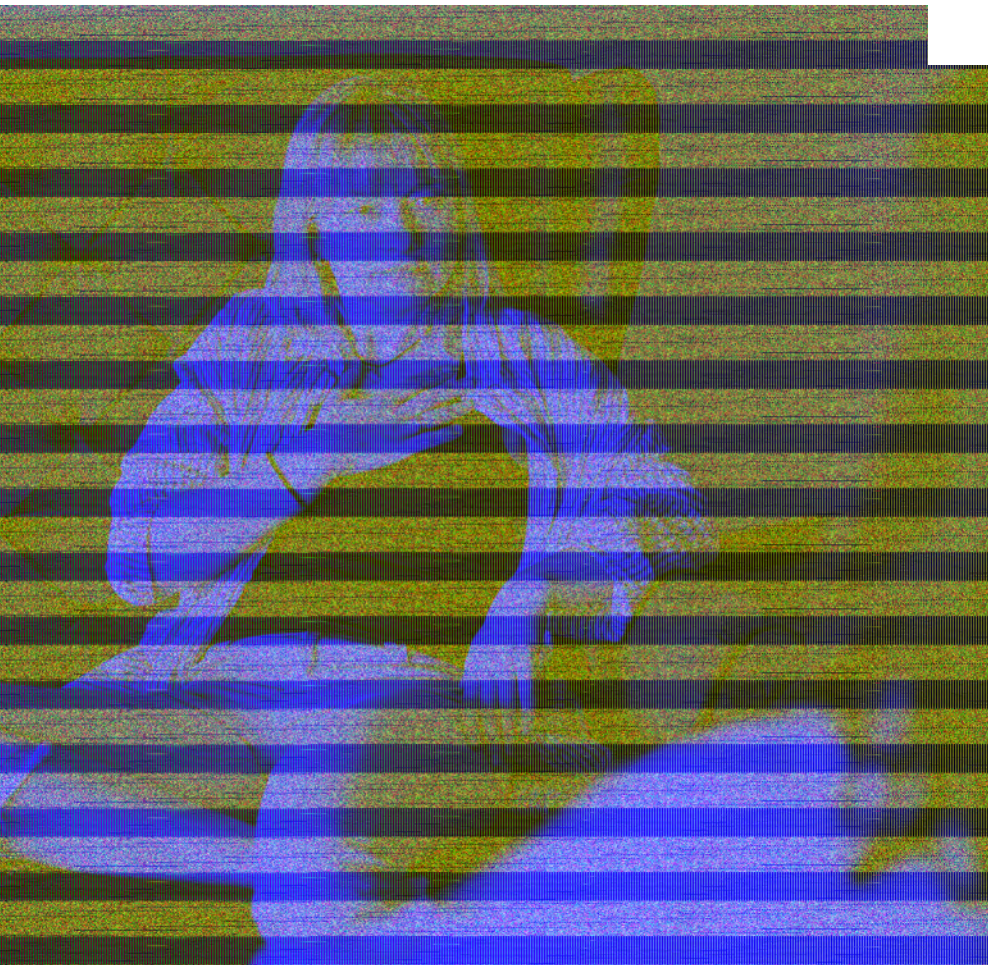
Many people, according to Van Tongeren, feel guilt or grief about having "wasted" a portion of their lives following doctrine to which they no longer adhere. Others feel bad about leaving friends or family behind. In either case, psychological studies suggest that it can be helpful to forgive oneself and the religious community, correlating this sense of peace and acceptance with lower distress rates after leaving religion (Keller, Y., unpublished master's thesis, Case Western Reserve University, 2024).

Psychologists can help patients work through forgiveness by using self-compassion to accept the role religion once played in their lives. "It's easy for that critical voice to pop up, asking 'Am I going to hell?' 'Why didn't I figure this out earlier?' 'Why don't I understand this?'" said Jared Warren, PhD, an associate professor of psychology at Brigham Young University and clinical psychologist in private practice. "We want to teach patients the skill of self-compassion, or treating themselves with kindness and gentleness."

Heidi Ellis, PhD, a provisionally licensed counseling psychologist in Plano, Texas, often works with patients experiencing spiritual struggles. Ellis encourages patients to tune in to the meaning behind their emotions—something they may not have much practice with.

For example, patients may try to erase the guilt and shame related to negative religious experiences by performing acts of penance, or self-punishment, taught by some religions. However, no amount of penance can erase the guilt and shame if they do not address the thoughts behind those feelings. "Sitting in the discomfort and supporting patients in unpacking scary emotions helps them process these feelings in an intentional manner rather than acting out unconsciously or reactively," Ellis said.

Emotions like guilt can also reveal what's important to people, according to Sara Showalter Van Tongeren, LMSW, a psychotherapist in Holland, Michigan, who specializes in religious transitions (the Van Tongerens are married). One of her patients who had always tithed (a church-requested donation of 10% of a member's income) struggled with guilt after leaving religion. Showalter Van Tongeren encouraged the patient to identify nonreligious organizations for charitable giving instead. The patient "found a sense of purpose in being generous in other ways and noticed that they didn't burst into flames when they stopped giving to their church," said Showalter Van Tongeren.



Religious trauma resulting from harmful or oppressive beliefs or practices can manifest as anxiety, depression, or other symptoms. Therapies like cognitive behavioral therapy and dialectical behavioral therapy help patients patients develop healthier thought patterns.

TATSIANA VOLKAVA/GETTY IMAGES



Sometimes leaving a religion results in social ostracism or distancing from still-religious friends and family. Therapists support patients in resolving guilt, fear, and grief for the people and traditions left behind by fostering self-compassion and helping them process their emotions and build new, meaningful lives.

MASKOT/GETTY IMAGES

Identifying personal values and beliefs

Leaving church is often the result of changing beliefs about oneself, others, and the world. Departing can be a rejection of what someone can no longer believe in, and it can be important to fill that void with a new sense of meaning. One psychological study found that people who left ultra-Orthodox Judaism were more at risk for symptoms of anxiety and depression when they continued to identify with what they'd left behind versus moving toward new meaning (David, Y., & Keller, Y., research under review).

Acting in ways that feel consistent with their identities can support positive mental health outcomes, said Daryl Van Tongeren.

Psychologists can serve as guides in supporting patients as they explore and "try on" new beliefs after leaving religion. "The goal of our work isn't to tell people what to believe but instead to allow them to make choices for themselves," said Anderson. Identifying new beliefs can be difficult because people leaving organized religion may not trust themselves. Further, Showalter Van Tongeren added, if someone was raised in religion during key developmental stages, such as childhood and adolescence, they may not have much experience practicing critical thinking skills—church often teaches people to accept religious dogma while strongly discouraging doubt or questioning.

Psychological research supports certain virtues and practices as key pillars for mental health and a meaningful life. For example, studies suggest altruism supports mental and physical health, along with happiness (Post, S. G., *International Journal of Behavioral Medicine*, Vol. 12, No. 2, 2005). Researchers have also found awe—or being in the presence of something greater than oneself—can strengthen both the mind and body (Monroy, M., & Keltner, D., *Perspectives in Psychological Science*, Vol. 18, No. 2, 2022). These virtues are often present in religious practices, which is why it can be important to help patients explore which of these values they want to use as a compass to guide their lives moving forward after leaving a particular religion. To start, Marston encourages patients to identify elements of spirituality that still feel relevant or important. "By examining what's important to them, patients can realize that they may not believe in God anymore, but they still believe in compassion, kindness, and generosity," said Marston.

KEEPING THE FAITH

HELPING PEOPLE WHO WANT TO STAY IN RELIGION

Those who have had negative experiences with religion don't always decide to leave their faiths. Some simply reconsider certain beliefs, while others swap a particular place of worship or faith tradition for a different one.

Yet faith institutions sometimes discourage doubt, which can make it difficult for religious individuals to reevaluate their beliefs. Psychologists can be an important support during these faith pivots.

Camden Morgante, PsyD, a clinical psychologist and author of *Recovering From Purity Culture*, works with many Christian patients who want to hold on to faith as they make sense of adverse religious experiences.

Morgante commonly uses dialectical behavior therapy and cognitive behavioral therapy to help people think critically about their beliefs and their effects. Then, she encourages patients to explore their personal values so they can align their beliefs and faith practices.

This sense of cohesion can support better mental health, especially in those who didn't enter religion by choice. "I'm empowering them to figure things out for themselves, so they can hold onto the meaningful parts of their faith while leaving behind what feels unhelpful or untrue," she said.

Unlearning religious ways of thinking

Even after leaving a particular religion, religious ways of thinking often remain, which Daryl Van Tongeren calls "religious residue" (*Journal of Personality and Social Psychology*, Vol. 120, No. 2, 2021). A person may still struggle with black-and-white thinking, he said, which may make it difficult to grow into a more complex view of the world. Psychologists are uniquely equipped to help.

Some psychologists use cognitive behavioral therapy (CBT) to help patients identify cognitive distortions and form new ways of thinking, and as a result, support healthy behavior changes. For example, if someone constantly feels like they're a bad person because of religious teachings about original sin, a therapist can help them reframe their thinking to reflect reality.

Marston often uses dialectical behavioral therapy (DBT) to help patients develop psychological flexibility. Helping people embrace a "both/and" mindset can be useful if someone's religious beliefs encouraged a sense of rigidity (e.g., the dichotomies of good and evil, heaven and hell, and believers and nonbelievers).

For example, Elizabeth Hoose, PsyD, a clinical psychologist in Raleigh, North Carolina, grew up adhering to the Mormon religion, which forbids drinking coffee. Though she's left Mormonism and enjoys coffee today, Hoose still notices that a part of her feels the behavior is wrong. "DBT allows me to hold my Mormon self and my new self at the same time, even when they disagree," she said. "I can sit with the discomfort of two different distinct truths or values, which I try to teach in therapy as well."

Developing distress tolerance is also key for moving forward, according to Daryl Van Tongeren. Teaching mindfulness can help encourage accepting discomfort when it accompanies uncertainty, an especially helpful skill to have when leaving behind religious beliefs. "Noticing discomfort without trying to change it can expand capacity to accept gray areas that can be destabilizing for people," said Warren. "It doesn't answer questions, but it puts people in a position to manage discomfort."

Moving forward with meaning

Treating patients moving on from religion isn't only about healing wounds; it's also about helping them build a vibrant, purposeful life outside of religion. Once people identify what makes their lives meaningful, psychologists can play a role in helping them integrate these things into their lives. Acceptance and commitment therapy, for example, can help

people identify where they are living out of line with their values and better incorporate meaningful experiences in their everyday lives.

Like identifying values, building a new life post-religion is a highly personalized process. If a patient was very involved with volunteering in church, a therapist can help the patient identify this as a core value and find ways to volunteer in the community instead. For patients who spent a lot of time in classes or groups studying religious texts, therapists can help them continue their love of learning, perhaps steering them to sign up for a class or book club. "As people transition their identities, they don't have to give up what's important to them," said Ellis. "We can help them live it out a little differently."

Patients may need support making changes in their lives as they identify how they want to move forward. For example, church often serves as someone's primary source of community, so formerly religious people may not have experience making friends outside of religion or building relationships with people who have different beliefs. "In that case, I'd help with social-skill building and solution-focused problem-solving to come up with ways to form meaningful relationships," said Showalter Van Tongeren.

Supporting patients in religious deconstruction

Some psychologists practice in connection with churches or as part of faith organizations; however, licensing requires that psychologists prioritize support for patients over religious doctrines, prioritizing the patient's well-being over their own beliefs, said Warren. Psychologists should also "view faith transitions like any other major life transition, whether divorce, migration, or coming out," said Yehudis Keller, a clinical psychology graduate student at Case Western Reserve University who studies religious transitions.

Clinicians can practice cultural humility with religion just as they would with any other cultural factor, such as race, ethnicity, or gender. Learning about the patient's religious background will help clinicians understand the ways religion may have informed a person's identity development, relationships, beliefs about self, and mental health. "If I'm a cisgender white woman from the northeastern United States, and I am treating a nonbinary person of color from the West Coast, I need to do my due diligence to understand and work with their cultural frame in order to provide effective therapy," said Hoose. "It's no different with a person's religious or spiritual identity."

You may consider referring your patient to a therapist who specializes in treating patients who have left religion—potentially through a directory such as the Reclamation Collective—or help them to find places to tap into a community to reduce isolation. Anderson and Winell, through their organizations the Center for Trauma Resolution and Recovery and Journey Free, respectively, offer online support groups for people who have left religion, allowing them to share their experiences with people who understand what they've been through. "It seems that the most powerful intervention is just to be with other people who can tell you you're not alone, you're not making this up, you're not becoming an evil person," said Winell. "People feel so much relief and healing from that." ■

FURTHER READING

Done: How to flourish after leaving religion
Van Tongeren, D. R.
APA, 2024

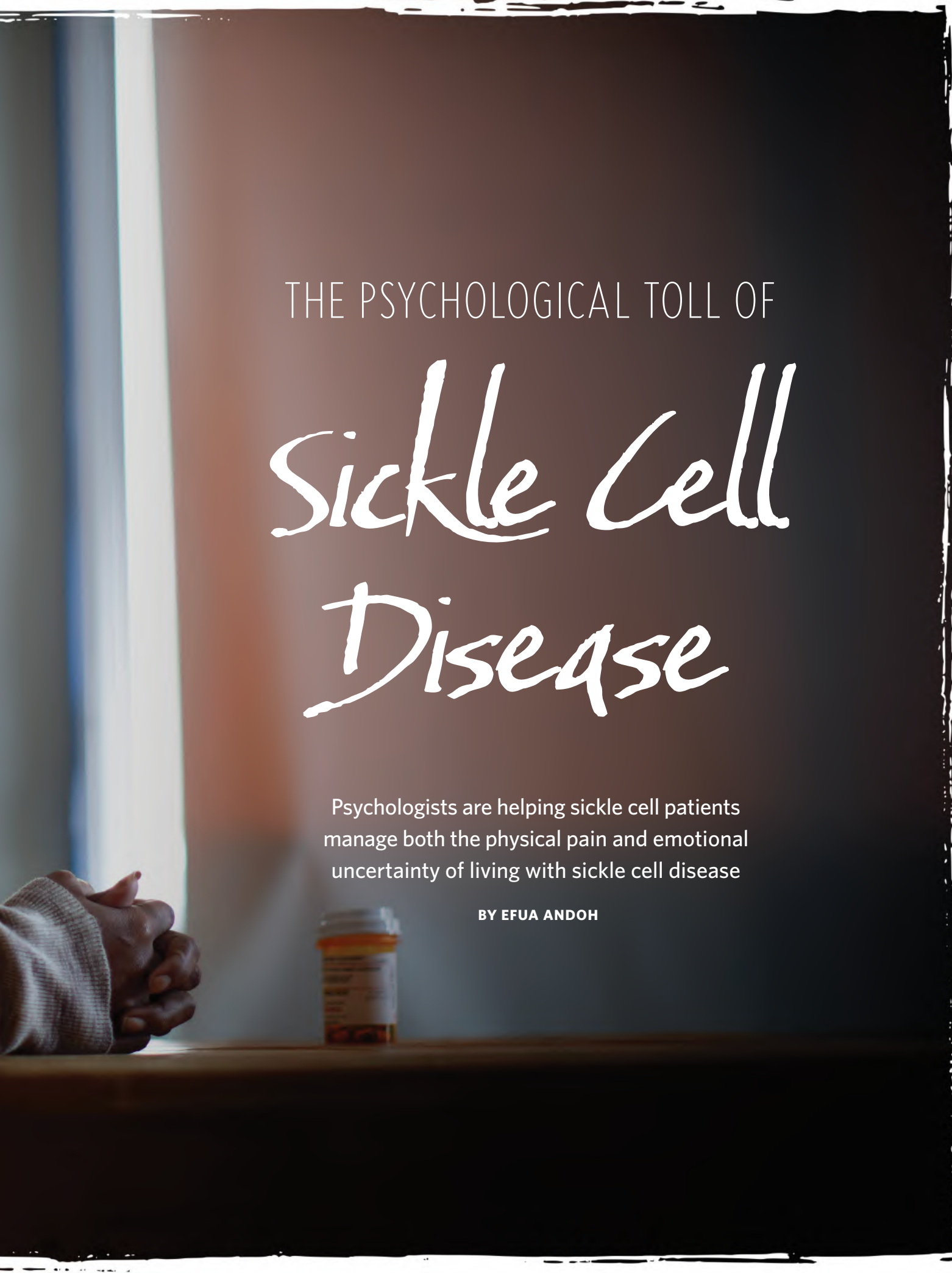
Leaving the fold: A guide for former fundamentalists and others leaving their religion
Winell, M.
Apocryphile Press, 2024

Religious trauma syndrome: It's time to recognize it
Winell, M.
CBT Today, 2011

When religion hurts you: Healing from religious trauma and the impact of high-control religion
Anderson, L .E.
Brazos Press, 2023



BOSTON GLOBE/GETTY IMAGES



THE PSYCHOLOGICAL TOLL OF Sickle Cell Disease

Psychologists are helping sickle cell patients manage both the physical pain and emotional uncertainty of living with sickle cell disease

BY EFUA ANDOH

IN 2024, 12-YEAR-OLD Kendric Cromer made medical history as the first sickle cell patient to receive a revolutionary gene therapy that effectively cured what would have been a lifelong condition. Cromer's therapy targeted the root cause of sickle cell disease (SCD): a genetic mutation that causes atypical hemoglobin and distorts red blood cells into a crescent or "sickle" shape. These rigid cells struggle to flow through small blood vessels, often clumping together and causing painful blockages called vaso-occlusive crises (see sidebar).

The treatment Cromer received, one of two approved by the Food and Drug Administration (Lyfgenia and CASGEVY), consisted of modifying his stem cells to produce normal red blood cells. The impact of this gene therapy could extend far beyond Cromer. For the estimated 100,000 Americans living with SCD, most of whom are of African descent, it promises liberation from a painful and often exhausting disorder that shortens life expectancy by an average of 20 years.

"I didn't think I would ever see the day," said Sharee Turpin, a patient advocate for the pediatric hematology and oncology unit at the University of Rochester's Medical Center, who lives with sickle cell. "It's finally giving a glimpse of what life could be, figuring out who we are without this illness and the hurdles that it continuously puts in front of us." Currently, gene therapy has a hefty price tag of more than $2.2 million, which is out of reach for most SCD patients.

Living with sickle cell disease creates significant challenges for a person's mental health and quality of life. Psychologists are crucial for helping those living with SCD manage numerous neurocognitive, emotional, and psychosocial issues. These include depression, anxiety, poor sleep quality, and social isolation as they grapple with their condition (Essien, E. A., et al., *Medicine*, Vol. 102, No. 47, 2023). Frequent vaso-occlusive crises disrupt daily life and can lead to missed work, school, and activities. Acute and chronic pain, which is common to SCD patients, takes a significant toll on their mental health.

People with SCD face a unique set of challenges at the intersection of race, poverty, and disability, placing them at heightened risk of inadequate mental and physical health care. Recent research shows that SCD coupled with socioeconomic hardship may accelerate cognitive aging. In a study of 200 young Black adults from St. Louis and the surrounding

AT A GLANCE

- Sickle cell disease (SCD) is an inherited blood disease that causes severe pain, damage to vital organs, and cognitive impairments.
- The psychological toll includes mood disorders, neurocognitive difficulties, and the effects of stigma and racism.
- Psychologists help SCD patients meet physical and emotional challenges with support such as self-advocacy skills training.

Sickle Cell Disease 101

How prevalent is sickle cell disease?

Sickle cell disease (SCD) affects approximately 100,000 people in the United States, most of whom are of African descent (90% of patients identify as Black or African American and 3% to 9% identify as Hispanic or Latine).

What are the symptoms of sickle cell disease?

Sickle-shaped red blood cells cause blood vessel blockages that lead to acute and chronic pain, neurocognitive impairment, and tissue and organ damage. Sickle-shaped blood cells also tend to break down prematurely, leading to anemia.

How is it treated?

Most patients with SCD manage their symptoms through medications such as hydroxyurea, which prompts the cells to change shape and more easily pass through blood vessels, and opioids, which dull the pain. A more invasive and grueling treatment, exchange blood transfusions, can lead to fatigue and nausea. Before the advent of gene therapy, the only other curative option was a bone marrow transplant. The best matches for transplants tended to be siblings with a close genetic match, who had the same tissue type as the recipient. However, recent medical advances have allowed other family members and even unrelated donors to supply stem cells if they have the same tissue type as the patient.

How do psychologists help young patients living with sickle cell disease?

Psychologists perform multiple tasks to support patients, which include treating depression and anxiety, providing techniques to manage pain, assisting with medication adherence, and teaching effective communication strategies for speaking with medical professionals about their symptoms. For patients who struggle with cognitive challenges, psychologists administer and interpret assessments and recommend accommodations that can be made in schools and workplaces.

KENNY HOLSTON/THE NEW YORK TIMES/REDUX



Former sickle cell disease patient Kendric Cromer, age 12, received a revolutionary gene therapy in 2024 to spur his stem cells to produce normal red blood cells. The months-long procedure was arduous, involving the removal of stem cells from bone marrow, chemotherapy, and transfusions.

region, researchers found that participants with the disease had brains that appeared, on average, 14 years older than their actual age (Ford, A. L., et al., *JAMA Network Open*, Vol. 8, No. 1, 2025).

Two of the most common aspects of the disease—chronic anemia and decreased oxygen supply—can increase the probability of strokes, which directly affect cognition. As a result, researchers have found that some who have SCD have "spatial and constructional deficits, attention and memory weaknesses, working memory issues, lower academic functioning, poor social skills, and abnormal executive functioning" (Braniecki, S., et al., *Frontiers in Neurology*, Vol. 15, 2024). For children and teenagers, these symptoms can cause difficulties in the classroom and with building social skills, while adults may find it difficult to maintain steady employment or healthy relationships.

SCD interventions for youth

Sickle cell disease is an invisible disability, leading many youth to hesitate in disclosing their condition. Jeffrey Karst, PhD, a pediatric psychologist at the Midwest Athletes Against Childhood Cancer (MACC) Fund Center for Cancer and Blood Disorders at Children's Wisconsin and the Medical College of Wisconsin, notes that for many children and teenagers, admitting to having a disease can be uncomfortable. Younger children may fear that their condition is contagious or worry about being ridiculed. Furthermore, because of the nature of their illness, they often have lower energy levels, which can prevent them from participating fully in activities. Many teenagers may even choose not to inform friends about hospital admissions: "They often are very worried about admitting or acknowledging that. So both the disease and its impact have stigma," Karst explained.

Recognizing the complexity of SCD, psychologists are providing comprehensive support for children and youth with the disease. In pediatric settings, psychologists often work as part of multidisciplinary teams to deliver care. They help parents of young children understand SCD and managing their child's care, including developmental screenings to identify early therapeutic needs.



Rahman Oladigbolu, a 52-year-old Harvard-educated filmmaker with SCD, has had both of his knees, shoulders, and hips replaced because of the disease. He hopes to one day undergo the new gene therapy and live free of SCD.

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As children living with SCD grow to school age, psychologists can support parents in requesting a meeting with the school principal, school psychologist, teachers, and special education coordinator to make sure these individuals are informed about the physical aspects of SCD and the child's specific cognitive disabilities, if any, and to set up school-based testing and accommodations. Because testing and accommodations in schools require significant resources in terms of time and funds, many school systems—especially those unfamiliar with SCD—may rely on the expert recommendations of psychologists, when available, on how to proceed. Psychologists also provide emotional support as children form friendships and figure out how to discuss their illness in social interactions.

Psychologists can help patients manage acute and chronic pain, improve medication adherence, as well as support emotional well-being and foster self-advocacy skills to deal with ongoing health and social challenges. Effective interventions include cognitive behavioral therapy, acceptance and commitment therapy, distraction methods, deep breathing exercises, and mindfulness practices.

Psychologists are also at the forefront of developing interventions for children with SCD-related cognitive difficulties. A randomized controlled trial of an adaptive cognitive training program for children with SCD showed promising results. Those who completed the intervention showed significant improvement in visual working memory compared with a waiting list group. Treatment effects were especially notable for patients who completed 10 sessions. They demonstrated improved visual working memory, verbal short-term memory, and math fluency (Hardy, S. J., et al., *Journal of Pediatric Psychology*, Vol. 46, No. 8, 2021).

Sickle cell and the system

Research has revealed a troubling pattern of discriminatory treatment toward SCD patients in medical settings (Power-Hays, A., & McGann, P., *The New England Journal of Medicine*, Vol. 383, No. 20, 2020). Pain treatment is a key concern for patients with SCD. Studies on racial biases in health care have shown a common erroneous belief among medical trainees that Black patients have a higher tolerance for pain than Whites, leading to racial disparities in treatment of

pain (Hoffman, K. M., et al., *Proceedings of the National Academies of Science*, Vol. 113, No. 16, 2016). Similarly, a recent meta-analysis showed that both Black and Hispanic patients were less likely than non-Hispanic White patients to receive opioid medication (Hirani, S., et al., *Journal of Pain Research*, Vol. 17, 2024). Additionally, research evidence shows how race-based discrimination can exacerbate depressive symptoms and pain among those living with SCD (McGill, L. S., et al., *Stigma and Health*, advance online publication, 2024).

In health care settings, patients with SCD often experience microaggressions and even racial trauma, especially if they are in crisis. These experiences can lead to misunderstandings and mistreatment, particularly when it comes to pain management. For example, patients might face skepticism and disbelief when seeking emergency medical attention during a crisis. Katlyn Rice, PhD, a pediatric psychologist at the University of Rochester Medical Center, noted that some physicians and nurses do not always fully understand the intense pain and other symptoms of the disease, which may require pain medications to treat, especially if they are not connected to a hematology center. "Patients with sickle cell sometimes worry they will be discriminated against in the emergency room and subsequently receive inappropriate or harmful care because they may be seen as 'drug seekers.' It's a pervasive problem without proper education about the disease and its effects. It's rooted in systemic racism."

The challenges are even more pronounced for young Black males. Justin Williams, PhD, a pediatric psychologist at Children's Healthcare of Atlanta, addresses this directly with her patients: "I often say, 'You are a young Black male, and you have a chronic health condition that requires you to take opioids. Put that together, and there can be increased challenges when engaging with the health care system." She advises her patients on effective self-advocacy strategies to navigate these systemic biases when they are in moments of discomfort or crisis.

Socioeconomic barriers further complicate care for people with SCD. About 50% to 60% of SCD patients are enrolled in Medicaid, but high treatment costs and limited access to specialized care exacerbate existing disparities. The average cost of care for a Medicaid enrollee with SCD is more than double that of the general Medicaid population (Speller, J., et al., *Health Affairs Scholar*, Vol. 2, No. 4, 2024).



SEVENTYFOUR/GETTY IMAGES

At least half of SCD patients are enrolled in Medicaid, but Medicaid's limited diagnostic coding and low reimbursement rates for mental health services make it difficult for providers to sustainably offer crucial services like pain management and self-advocacy strategies.



Mortality rates more than double for SCD patients ages 20 to 24 compared with those ages 15 to 19. To bolster these youth, psychologists start working with patients as young as 12 years old to build a foundation of knowledge and skills crucial for navigating adult health care systems.

Funding challenges present significant obstacles in delivering comprehensive care. Rice points out that Medicaid's limited diagnostic coding and low reimbursement rates for mental health services make it difficult for providers to sustainably offer these crucial services. Moreover, medical institutions often view the sickle cell population as "expensive" rather than prioritize their specific needs, which includes multidisciplinary and systemic care.

The disparity in research funding is also stark. For instance, despite being 3 times more prevalent than cystic fibrosis in the United States, sickle cell receives significantly less funding. Researchers found that federal funding per person for cystic fibrosis was 3.4 times greater than for SCD ($2,807 versus $812) and foundation funding was 75 times greater ($7,690 versus $102) (Farooq, F., et al., *JAMA Network Open*, Vol. 3, No. 3, 2020). Rice noted that this disparity is likely tied to the demographics of those affected and systemic racism: "There are many layers to that, but sickle cell primarily affects people of color."

Adolescent to adult care

The transition from pediatric to adult care marks a critical juncture for young people with SCD. As they step into adolescence and young adulthood, they must quickly learn to navigate a complex health care system that often lacks the nurturing support they experienced in pediatric settings. This shift is not just a matter of changing doctors; it's a movement into a new world in which they must become their own primary advocates. The stakes are high—mortality rates more than double for patients ages 20 to 24 compared with those ages 15 to 19 (Kayle, M., et al., *Pediatric Blood & Cancer*, Vol. 66, No. 1, 2019).

Recognizing these challenges, psychologists are stepping up to bridge the gap. Christopher McCormick, PhD, a pediatric psychologist in the sickle cell program at Seattle Children's Odessa Brown Children's Clinic, employs a proactive approach, gradually shifting responsibilities to young patients starting as early as age 12. This method aims to build a foundation of knowledge and skills crucial for navigating adult health care systems.

They begin by ensuring young patients know basic information, from their clinic's contact information, medication details, and disease subtype to more practical skills for navigating adult settings. "We try to find a balance between supporting autonomy, skill development, and mastery with the understanding that if they're not successful, their families and the care team will step in to support them because the consequences of not doing so are devastating," he said.

Caryn R. R. Rodgers, PhD, a pediatric psychologist at the Children's Hospital at Montefiore at the Albert Einstein College of Medicine in Bronx, New York, focuses on empowering her college-age patients through support groups. Given the systems at play that

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often put her patients at a disadvantage, Rodgers emphasizes building self-efficacy and advocacy skills to help them navigate adult health care.

Many of her patients have identified the burden of navigating health care with SCD. Rodgers works with her patients by validating their struggle and helping them build skills to navigate adult health care systems. Rodgers encourages her patients to ask questions, identify appropriate resources, and persist when they encounter barriers or insensitivity from providers.

"When you have an invisible disease, your voice needs to be bigger to ensure you get your needs met," Rodgers said. "I tell my patients 'Figure out what you want to let people know. Figure out the person to ask about follow-up appointments. If someone ignores your requests for help, who is the next person you need to go to?'"

Amy Williams, PhD, a pediatric psychologist at Riley Hospital for Children at the Indiana University School of Medicine, is examining how perceptions of injustice in medical care impact young SCD patients' mental and physical health. Her 2-year study of 50 youth ages 11 to 18 aims to develop targeted interventions that address the unique challenges faced by this population, including the emotional toll of chronic pain and social burdens. "We're interested in understanding what it is like to live with sickle cell disease and the experiences they have with injustice so we can support them with the most effective intervention," said Williams.

Williams and her team have begun analyzing baseline data while continuing to collect information on longitudinal health outcomes. "Some teens report a lot of experiences with stigma and injustice, while others don't report as much. That helps us to identify the patients who might be at highest need and be more effective in delivering interventions because of those types of experiences," she said. "Some are health care–related experiences of feeling pain-related stigma, of 'people don't believe my pain' or 'I've been treated poorly because of my sickle cell disease.' Some of it is racial bias more broadly that they've experienced outside of a health care setting as well. There is a lot of variability."

Innovative tools are also emerging to support this transition. The iManage for SCD app—codeveloped by Lori Crosby, PsyD, director of the Crosby Research Lab at Cincinnati Children's Hospital, and her team—offers a holistic approach to managing their health. The app allows users to monitor and track their pain, symptoms, and overall mood. It also allows them to create and complete goals for how they manage their disease. Data gathered from users show favorable results, with frequent app use linked to improved mood, reduced pain, and better self-management skills (Hood, A. M., et al., *Translational Behavioral Medicine*, Vol. 11, No. 10, 2021).

A number of new medications are in various stages of development. In December 2024, the Centers for Medicare and Medicaid Services (CMS) reached agreement on a payment model with two gene therapy manufacturers. CMS invited states to join the payment program between January 2025 and January 2026. This initiative could significantly improve access to gene therapy for those who need it most, potentially covering not just the treatment itself but associated behavioral health services as well.

For SCD patients who are already adults, living with the disease may not get easier anytime soon. But the promise of widespread use of the revolutionary gene therapy that liberated Kendric Cromer—and emotional, cognitive, and psychosocial support from psychologists—puts hope on the horizon. ■

FURTHER READING

Confronting racial inequity in health and education: Supporting students with sickle cell disease
Jones, P. C., et al.
Psychology in the Schools, 2024

Implementation of two developmental screening programs in sickle cell disease specialty care
Schlenz, A. M., & Schatz, J.
Clinical Practice in Pediatric Psychology, 2023

Perceptions of a self-management intervention for adolescents with sickle cell disease
Crosby, L. E., et al.
Clinical Practice in Pediatric Psychology, 2022

Psychologists as leaders in equitable science: Applications of antiracism and community participatory strategies in a pediatric behavioral medicine clinical trial
Williford, D. N., et al.
American Psychologist, 2023

Understanding barriers to transition from pediatric to adult care among young adults with sickle cell disease to develop a transition mentor program
Viola, A. S., et al.
Clinical Practice in Pediatric Psychology, 2021


SALOVEY


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Psychologists in the News

Stanford alumnus **Peter Salovey, PhD,** former Yale president and psychology professor, recently began a 5-year term on Stanford's Board of Trustees. At Yale, Salovey held several key leadership roles, serving as president from 2013 to 2024 and before that as provost from 2008 to 2013. Since joining the faculty in 1986, Salovey also took on influential positions such as dean of Yale College, dean of the Graduate School of Arts and Sciences, and chair of the psychology department, each reflecting his commitment to education and research.

Megan Paxton, PhD, vice president of clinical effectiveness at Home of the Innocents, has been named a 2025 Health Care Hero Health Equity Champion, the only psychologist honored by Louisville Business First this year. In her role as director of professional affairs for the Kentucky Psychological Association, she leads trauma-informed behavioral health initiatives for vulnerable youth and advocates for expanded mental health access. Her recognition highlights the crucial role psychologists play in advancing equitable health care.

Ayanna Thomas, PhD, was appointed dean of the Graduate School of Arts and Sciences at Tufts University. Thomas joined Tufts in 2007 as an assistant professor in the Department of Psychology, where she established the Meta-Cognition and Applied Memory Lab. She was promoted to associate professor in 2013 and professor of psychology in 2019. Previously, she served as director of graduate studies for the Department of Psychology for 5 years. As the new dean, Thomas aims to prioritize interdisciplinary programs for graduate students, enabling them to better navigate technological and humanistic perspectives in evolving environments.

Charles "Chuck" Callahan, PhD, has joined the University of Toledo (UT) as its first executive vice president for health affairs. Callahan previously served as president of the five-hospital Memorial Hospital Group and president and CEO of the 500-bed Springfield Memorial Hospital, in addition to his work as a clinical psychologist. In his new role, Callahan plans to foster greater collaboration among the UT Medical Center, UT physicians, and the UT College of Medicine and Life Sciences.

Matthew Picerno, PhD, a clinical child psychologist and native of Bristol, Rhode Island, was recently honored as the 2024 Senior Civilian of the Year by the U.S. Navy for his work at the Naval Hospital in Sigonella, Italy. Picerno, who was on active duty from 2000 to 2008—serving on an assault warship and two fast-attack submarines—has been a vital figure in the Sigonella community, supporting families and collaborating with local schools and organizations to provide comprehensive resources for children and teens.

Mary Beth Oliver, PhD, a Penn State faculty member specializing in media psychology, has received the Paul J. Deutschmann Award for Excellence in Research from the Association for Education in Journalism and Mass Communication (AEJMC). This prestigious award honors scholars who have made a significant, career-long impact on the field. A Penn State faculty member since 1998, Oliver is a fellow and former president of the International Communication Association. Her research includes media stereotyping and positive media psychology, with publications in renowned journals such as the *Journal of Communication* and *Human Communication Research*. ■



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A professional will provides a road map for managing all the practical and legal aspects of closing a practice and offers psychologists peace of mind that these details have been taken care of.

Protecting Patients When Tragedy Strikes

Professional wills give practitioners an opportunity to plan how to close a practice and who will take responsibility for carrying out their wishes

BY HEATHER STRINGER

LISA HARRIS, PhD, was worried when her therapist's health steadily deteriorated each month, with symptoms of a worsening cough and noticeable weight loss. Harris shared her concerns, and the therapist—who was experiencing a recurrence of breast cancer—told Harris she was confident she would beat the disease. Soon the therapist started bringing an oxygen tank to sessions and occasionally would not show up.

"She kept telling me she was fine," said Harris, who was in her 20s at the time and hadn't earned her doctorate yet. "For months, I struggled with confusion and hurt—and guilt for having these feelings." She felt ashamed for wanting to

find a new therapist, but eventually she did. Six months later, she heard that her previous therapist had died.

When Harris launched her own private practice in New York City years later, she promised herself she would never subject patients to the same experience. She created a professional will, which outlines a practitioner's wishes for closing a practice in the event of illness or death. This document can include instructions for who will contact patients and how to protect patient confidentiality, passwords to access records, suggested referrals, and other details. A will also names a practice executor who will carry out these instructions.

While most states do not require therapists to draft a professional will, APA's Ethics Code states that "psychologists make reasonable efforts to plan for facilitating services in the event that psychological services are interrupted by factors such as the psychologist's illness, death, unavailability, relocation, or retirement," and having a professional will is one way to achieve this objective. This type of will—which provides a road map for managing all the practical and legal aspects of closing a practice—protects patients from perceived abandonment and the psychologist's family members who may unexpectedly be responsible for closing the practice. It also offers psychologists some peace of mind that these details have been taken care of.

Despite the ethical imperative to create a plan, 68% of therapists in a recent survey reported that they did not have a professional will (Miller, R. B., *Independent Practitioner*, Vol. 45, No. 1, 2025). The primary reasons given were procrastination, anxiety, and lack of guidance. Forty percent reported feeling dread when thinking about creating a professional will. Finding a practice executor was another significant barrier, with 46% reporting that they did not want to burden anyone with this responsibility and 27% feeling they were not close enough to any colleague to ask.



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Attorneys can assist psychologists with preparing a professional will, but they are not able to execute the clinical aspects of the will.

The survey was conducted by Robyn Miller, PhD, a psychologist in private practice in Bethesda, Maryland, who stepped up as practice executor when a friend and colleague was diagnosed with stage IV cancer several years ago. As the practice executor, Miller had the responsibility to sensitively deliver the news to more than 30 patients and manage referrals to other providers, but those conversations and duties took an emotional toll (*Psychoanalytic Perspectives,* Vol. 18, No. 1, 2021).

"One of the common misconceptions is that [serving as practice executor] is simply an administrative task that will take a couple of hours, but it was incredibly stressful and draining," said Miller, who estimates that she spent 60 hours fulfilling this role.



"Professional wills are a form of insurance for the emotional safety and well-being of our patients."

Lisa Harris, PhD, private practitioner in New York City

Preparing to share the news

The experience with her friend motivated Miller to found TheraClosure in 2024, a company that helps therapists create a professional will and serves as the practice executor in the event the therapist dies. Patients should be informed and provide consent to having a practice executor involved in the unlikely event that their therapist becomes ill or incapacitated. Attorneys can also assist psychologists with preparing a professional will, but they are not able to execute the clinical aspects of the will. Some psychologists form groups of colleagues who agree to share the duties of covering for one another. Miller recognized that mental health providers, who pride themselves on navigating difficult emotions, often fear or avoid this task. Sidestepping this ethical obligation can have unintended mental health consequences. "Patients are vulnerable people, and they have formed a therapeutic bond," she said. "By creating a plan, we can help these bereft people get the support they need if we are incapacitated."

Miller's experience in this role for her friend and colleague helped her learn the considerations for clinicians when drafting a plan. Initially, the two friends grappled with the devastating diagnosis, but the grieving process was cut short because of the immediate implications for a caseload of patients. The friend gave Miller her schedule, patient contact information, and details about each patient's history, progress in therapy, transference and attachment, and future goals for treatment. Her friend also found a colleague who would be a good fit for a referral for each patient.

Miller agreed to call each patient directly with the news. She let them know that her colleague's disease was terminal, and she did not have any hope of returning to practice. In some cases, Miller's colleague provided specific guidance about how to share the information, such as putting off explaining the full situation to a pregnant patient until she was safely in her second trimester.

For those first 2 weeks, Miller called her friend's patients in the evening after she finished seeing her own patients. She explained that her colleague wished she could speak to them herself, but she was sick and unable to do so. "I wanted them to leave with a feeling of being cared for despite the tremendous loss, and I would often hang up and cry after these calls," said Miller.

Protecting loved ones and colleagues

Ben Rutt, PhD, who runs a solo private practice in Baltimore, Maryland, did not have guidance from a professional will when his sister, a therapist, died unexpectedly in 2023. Years earlier she had informally asked him to step in if she was ever incapacitated. He knew where she kept the keys to her business mailbox, but getting information about her patients required him to retrieve paper charts she stored in her home. "I had to figure out which ones had more serious issues like suicidal ideation because they might need intervention sooner," he said. He contacted a large local group practice, and they agreed to assign his sister's patients to individual providers.

There were also challenges because his sister had been leading a group practice with eight employees. The employees did not receive paychecks for a few weeks because Rutt could not access her business bank account. His sister also did not have a personal will, which meant the probate court appointed an attorney who took responsibility for accessing her bank account and managing her records—which according to her state's law needed to be kept for 7 years after a patient's discharge date. "There came a point when I could not handle it anymore," Rutt said. He took a leave of absence from his practice for 2 months after his sister's death to focus on his grief and recovery.



States have different requirements dictating how long practitioners must maintain patient records, and patients who have been discharged within that time should be notified of who is in possession of their records.

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Like Rutt, psychologist Dale Blunden, PhD, had to scramble when a colleague in her group practice died. The colleague, who had liver cancer, had been seeing patients in the office just days before she died. The group struggled to pinpoint who her patients were and how to reach them, so in most cases they resorted to asking people in the waiting room who they were scheduled to see. If they named the colleague who had died, a group member would take them aside to share the news. "We were grieving, angry, overwhelmed, and sad for the clients who were getting this shocking news," Blunden said. After the experience, the group spent hours together researching professional wills, and each member of the group created one.

When Blunden started working on her professional will, the process of planning for the unexpected motivated her to transition from paper to electronic records. She realized that accessing electronic patient records would be far easier for a practice executor.

Business details to remember

While contacting current patients is a pressing priority after a clinician's death, executors also tackle the business aspects of closing the practice. States have different requirements dictating how long practitioners must maintain patient records, and patients who have been discharged within that time should be notified of who is in possession of their records. To protect patient confidentiality, records outside this time period should be destroyed, such as by shredding paper documents or deleting electronic health records on a personal computer. Electronic records maintained on a server, such as a Health Insurance Portability and Accountability Act (HIPAA)–compliant cloud service, should be deleted, and any backups, trash, or files in a "recently deleted" folder should be permanently deleted. A log should be kept of the records that were deleted, the deletion date, and the deletion method.

Information about the practice closure and who to contact with questions should be explained on the website and in outgoing voicemail

messages. Executors should also notify the licensing board and malpractice insurance carrier about the practice closing, and automatic bill payments should be stopped. If someone is leasing a space, the executor informs the landlord and addresses the lease according to the terms of the agreement.

Richard Bloch, JD, general counsel for the Maryland Psychological Association, has helped many psychologists create a professional will. "For a solo practitioner, having this documentation is even more necessary than if others are in the practice who know the client base and have some sort of process available to manage an unexpected death," he said. APA has also created a sample professional will that can be accessed online.

Lisa Harris tackled the task when she was working with an attorney to draft her personal will and testament. The attorney helped her with the professional will as well, and Harris asked a colleague who was leading a group practice to manage the distribution of her patients.

Harris was relieved to have a plan in place when she had major surgery 10 years ago. Before the surgery, she let her patients know that she expected to recover but reassured them that if anything unexpected happened, someone would contact them. More recently, she had a cancer scare. Although testing revealed that the mass in her lung was benign, she was administratively prepared if the news had been different. "Professional wills are a form of insurance for the emotional safety and well-being of our patients," said Harris.

The importance of this forethought was clear to Leilani Salvo Crane, PsyD, whose own therapist of 12 years died in 2022. A psychologist who was a friend and colleague of her therapist called Crane to tell her about the death. Crane appreciated the love and care she felt as the psychologist listened, offered to provide referrals, and invited Crane to touch base with her. "I felt that this was my therapist's gift to me," she said. "She had seen me through significant trauma, and this experience confirmed that she was exactly the sort of person I thought she was." ■

After a clinician's death, the executor should first contact current patients and then tackle the business aspects of closing the practice.



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FURTHER READING

Fostering engagement during termination: Applying attachment theory and research
Marmarosh, C. L.
Psychotherapy, 2017

Mental health professionals preparing for cognitive decline and death: Denial and action
Cohen, J.
Professional Psychology: Research and Practice, 2022

Key issues and recommendations for ethical and effective endings in psychotherapy
Barnett, J. E., et al.
Professional Psychology: Research and Practice, 2024

Psychotherapist professional wills: Easy to avoid, crucial to address
Miller, R.
Society for the Advancement of Psychotherapy, 2024



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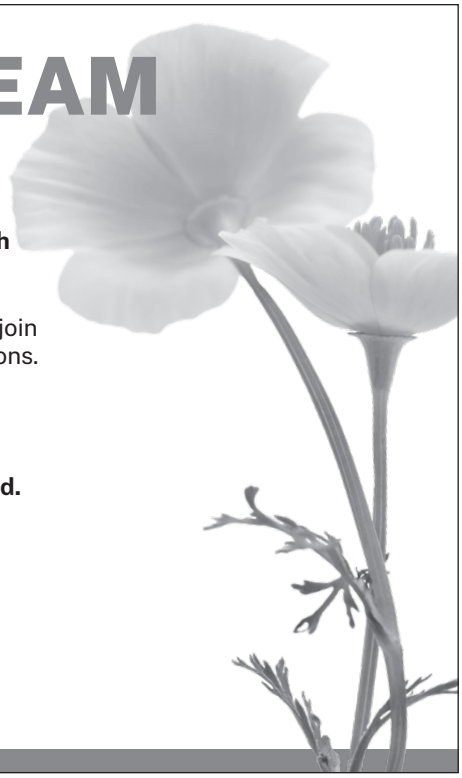
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MISSISSIPPI

CLINIC DIRECTOR: Mississippi State University-Meridian (MSU-M) is thrilled to announce an exciting opportunity for a Clinic Director at our soon-to-be-launched Mental and Behavioral Health Clinic in Meridian, Mississippi. This clinic will play a vital role in expanding access to mental and behavioral health services in the community, while also serving as an essential training facility for MSU students. The clinic will accept insurance, Medicaid, and Medicare, ensuring its services are accessible to a broad range of individuals. MSU-Meridian is a dynamic and expanding campus, committed to providing accessible, high-quality education and fostering community engagement. Located in the heart of East Mississippi, Meridian is celebrated for its rich cultural history, vibrant arts scene, and welcoming atmosphere, making it an ideal place to live and work. Position Overview: The Clinic Director will report to the Head of the Division of Education and lead mental and behavioral health services at the MSU-Meridian campus. Key responsibilities include: Overseeing therapy services, educational programs, workshops, and crisis management for the Meridian area and surrounding counties. Recruiting and supervising clinical and support staff in collaboration with the Division Head. Promoting partnerships with MSU-Meridian faculty and staff. Seeking additional funding and external support. Providing direct clinical services and engaging in teaching responsibilities. Teaching opportunities available, if desired. This position offers a unique opportunity to significantly impact the community while advancing student learning and development. Contact Kimberly Hall: krj4@msstate.edu.

ASSISTANT OR ASSOCIATE PROFESSOR IN CLINICAL PSYCHOLOGY: Mississippi State University-Meridian (MSU-M) is thrilled to announce a tenure-track opportunity for an Assistant or Associate Professor in Clinical Psychology for our PsyD program in Combined Health Service Psychology with concentrations in clinical, counseling, and school psychology. Position Overview: The selected candidate will engage in graduate teaching and advisement, supervise field experiences, conduct research, and participate in service and outreach. Clinical work and research can take place at our new Mental and Behavioral Health Clinic or in local clinical settings. Located in the heart of Meridian, MSU-Meridian serves the educational and health needs of Lauderdale County. The city is known for its cultural heritage, vibrant arts scene, and beautiful outdoor spaces, making it an excellent place to live and work. Qualifications: Doctorate in Psychology or a closely related field with an emphasis in Clinical Psychology. Eligibility for Mississippi licensure as a clinical psychologist. Demonstrated excellence in teaching, research, or service for Associate Professor candidates; potential for excellence for Assistant Professor candidates. ABD candidates will be considered if the degree is completed by August 15, 2025. If you are a dedicated psychologist eager to make an impact, we encourage you to apply! Submit your cover letter, curriculum vitae, transcripts, and references at MSU Jobs under Assistant/Associate Professor (#507402): https://explore.msujobs.msstate.edu/cw/en-us/job/507402/assistantassociate-professor. Join us in shaping the future of mental health care at MSU-Meridian!

NON-TENURE-TRACK ASSISTANT OR ASSOCIATE TEACHING PROFESSOR: Mississippi State University-Meridian (MSU-M) is excited to offer a non-tenure-track Assistant or Associate Teaching Professor position in Psychology for our PsyD program in Combined Health Service Psychology, with concentrations in clinical, counseling, and school psychology. Position Overview: The successful candidate will contribute to graduate teaching, advisement, and supervision of field experiences, and participate in service and outreach. They may also have the opportunity to serve as Training Director and engage in clinical work at the new Mental and Behavioral Health Clinic at MSU-Meridian. Located in the heart of Meridian, MSU-Meridian is a growing campus dedicated to addressing the educational and health needs of Lauderdale County. Meridian offers a rich cultural heritage, vibrant arts scene, and outdoor attractions like The MAX, Bonita Lakes Park, and the historic Dentzel Carousel. Its welcoming, diverse community provides a high quality of life. Qualifications: Doctorate in Psychology or a related field. Eligibility for Mississippi licensure as a psychologist. Excellence in teaching or service for Associate Professor candidates; potential for excellence for Assistant Professor candidates. ABD candidates will be considered if the degree is completed by August 15, 2025. To apply, submit a cover letter, curriculum viatae, transcripts, and references through MSU Jobs: Assistant/Associate Teaching Professor (#507541 or #507542): https://explore.msujobs.msstate.edu. For accommodations, contact Human Resources at (662) 325-3713 or ada@hrm.msstate.edu. Join us at MSU-Meridian to shape the future of mental health care!

OHIO

FACULTY POSITIONS IN THE INSTITUTE FOR MENTAL AND BEHAVIORAL HEALTH RESEARCH AT NATIONWIDE CHILDREN'S HOSPITAL: The Institute for Mental and Behavioral Health Research is located in the state-of-the-art Big Lots Behavioral Health Pavilion and will be hiring for multiple positions from 2025 to 2027. The mission of faculty within the institute is to conduct innovative translational, clinical and epidemiological research focused on assessment, etiology, prevention, and treatment of mental, emotional and behavioral disorders. About the Faculty Position: Seeking Assistant, Associate, or Full Professor. Highly collaborative researcher with expertise in areas such as m-health, artificial intelligence, data science, genomic medicine, implementation science, school-based intervention, prevention, cost-effectiveness, or evidence-based assessment is strongly encouraged. Content areas of interest include assessment, mood, anxiety, attention problems, externalizing and aggressive behavior, trauma, sleep, early onset psychosis. A generous start-up package is available for highly qualified candidates. Qualifications Required: Doctoral degree in Clinical, School, or Quantitative Psychology, Nursing, Medicine, Health Services Research, or related field. Two years of post-doctoral research training or equivalent experience. Strong track record of publishing in high-quality journals. Current K level or R level federal funding. Applications will be accepted until the position is filled. Send correspondence, including curriculum vitae, a brief statement of research interests, and contact information for three references to Dr. Eric Youngstrom via Patrick.Kennedy@nationwidechildrens.org in Faculty Recruitment.

TENNESSEE

DIRECTOR OF THE PSYCHOLOGICAL SCIENCE AND COUNSELING CLINIC (PSCC) AND CLINICAL ASSISTANT PROFESSOR: The Department of Psychological Science and Counseling at Austin Peay State University (APSU) invites applications for the position of Director of the Psychological Science and Counseling Clinic (PSCC) and Clinical Assistant Professor position in the area of Counseling Psychology with a start date of

August 1, 2025. The department also seeks to fill a tenure-track faculty position in the area of Counseling Psychology with a start date of August 1, 2025. The Department of Psychological Science and Counseling is a diverse, dynamic, and collegial environment that in addition to the PsyD program, is home to a large undergraduate program in psychological science, a Master of Science program in Industrial and Organizational Psychology (MSIO), a Master of Science program in Counseling, and a graduate certificate program in Academic Advising. The department is housed within the College of Behavioral and Health Sciences, which affords rich opportunities for interdisciplinary collaborations. Austin Peay State University is located in Clarksville, TN, which Money Magazine rated number 1 in its 2019 Best Places to Live rankings: https://clarksvillenow.com/local/clarksville-named-best-place-to-live-by-money-magazine/. Clarksville is a vibrant, diverse community with a low cost of living, and easy interstate access to nearby Nashville. For additional information about APSU including our mission and vision visit: https://www.apsu.edu/about-apsu/index.php. A doctorate (PsyD or PhD) in Counseling Psychology (preferred) or Clinical Psychology (acceptable) from an APA-accredited program is required for these positions. ABD considered if conferred before August 1, 2025. Applications taken online only at https://www.apsu.edu/human-resources/.

TEXAS

PRIVATE PRACTICE IMMEDIATE OPPORTUNITIES: for Neuropsychologist, Psychologist, (Formal Internships, Post Doc/PLP, LCSW, LPCs, LPC Associates, LPA, Psychiatrist, Nurse Practitioner available at The Ludden Group P.C. for Outpatient and Nursing Homes. Visit https://www.psyccareers.com/company/the-ludden-group-p.c.-99958 for details or to apply. Locations: Rockwall, Dallas, Round Rock, Kaufman, Greenville, and Paris, Texas.

VIRGINIA

CLINICAL PSYCHOLOGIST: Virginia Department of Behavioral Health and Developmental Services (DBHDS) is seeking an experienced Clinical Psychologist to join our team. Responsibilities include evaluating individuals with serious mental disorders, providing, and referring them to necessary services, and collaborating with other disciplines to ensure quality interdisciplinary care. The ideal candidate will participate in planning for effective transitions and continued recovery in a community care setting as well as contribute to departmental, hospital, and statewide committees. In addition, the Clinical Psychologist will prioritize and deliver psychological services, assessments, therapy and lead or co-lead PSR groups. Other duties include conducting initial psychology assessments for admitted patients making recommendations for treatment plans, attending treatment planning meetings and completing progress notes. The candidate must also perform forensic evaluations in compliance with legal and professional standards. If you are a dedicated professional who is passionate about providing high-quality mental health services, we encourage you to join our team and help create A Life of Possibilities for All Virginians. Apply online at: https://bit.ly/DBHDSPsychologist.

PUBLICATIONS AND OTHER

PSYCHPROFILER: The PsychProfiler is a reliable and valid DSM-5-TR instrument assessing 20 psychiatric, psychological, and educational disorders in children and adults. Simple email administration, online completion, automatically scored, $5 per use. www.psychprofiler.com.

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Will Artificial Intelligence Harm Future Jobs?

More than half of U.S. workers are worried about how artificial intelligence (AI) will affect jobs in the future, with low- and middle-income workers more concerned than their upper-income counterparts.

BY TORI DEANGELIS



16%

Percentage of workers who say at least some of their work is currently being done with AI, with an additional **25%** saying that while they're not using AI now, at least some of their current work could be done with it. About half (**51%**) of AI users have at least a bachelor's degree versus **39%** of non-AI users.

52%

Percentage of workers who say they're **worried** about how the use of AI will impact jobs in general, with **32%** believing it will lead to fewer job opportunities for them over time. **Low- and middle-income workers** are more concerned about the impact of AI on jobs than **upper-income workers** (37%, 33%, and 26%, respectively).

33%

Percentage of workers who say they feel **overwhelmed** about how AI may be used in the workplace in the future, though **36%** of workers say they feel **hopeful** about how it may be used. Commonly reported current uses include **research** (57% have used it this way), **editing** (52%), and **writing** (47%).

Source: Lin, L., & Parker, K. (February 25, 2025). U.S. workers are more worried than hopeful about future AI use in the workplace. From a Pew Research Center survey of 5,273 U.S. employed adults conducted October 7–13, 2024. Available at https://www.pewresearch.org/social-trends/2025/02/25/u-s-workers-are-more-worried-than-hopeful-about-future-ai-use-in-the-workplace.

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