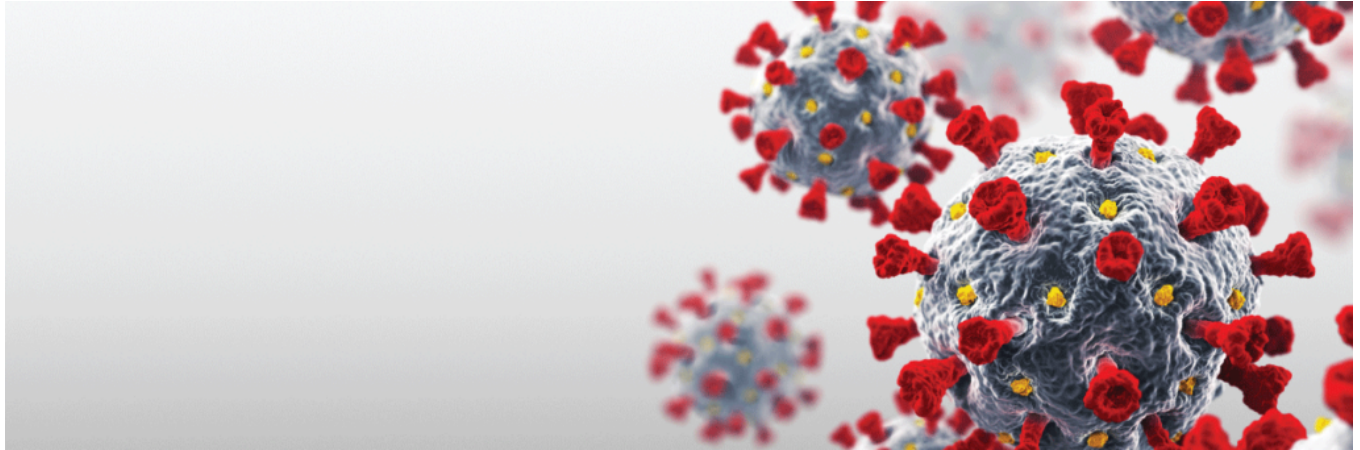


Human Behavior in the Time of COVID-19: Learning from Psychological Science

April 29, 2020



Visit APS's main COVID-19 page for more psychological science research and insights.

[A Collective Crisis](#) | [Moral Responsibility](#) | [COVID-19 Backgrounders](#) | [Chronic Anxiety](#) | [Fast-Tracking Research](#) | [Behavior and Risk](#) | [Lab Hygiene](#)

In the wake of the closures of their universities and labs, psychological scientists around the world are experiencing new demands on their time as they adjust to teaching remotely, overseeing dispersed labs, and managing family caregiving. At the same time, many have found themselves on the front lines of exploring the psychological factors that can help the public understand the impact of COVID-19. The comments that follow are excerpted and adapted from a variety of sources, including a virtual roundtable featuring APS members with specific areas of expertise, a series of “backgrounders” assembled in response to the crisis (see opposite page), a podcast featuring an APS Fellow, and appearances by APS members in the news media. Find links to these resources and more at psychologicalscience.org/covid-19-information.

A collective crisis heightens sensitivity to social interactions.

This is a situation that can have both positive and negative effects as a function of it being a collective crisis. On the positive side, there is a sense that we’re in it together, and we see many amazing examples of people supporting one another. On the negative side, we see some people respond to this with a sense that they need to “protect their own,” and it is “us versus them.”

APS Fellow Bethany Teachman, University of Virginia, [APS roundtable discussion](#)



Many people are feeling both impulses at the same time. They're obviously going to feel fear because of the uncertainty, the present threat, and the potential threats. And the social cues around people right now are going to raise their perception that we're in danger. Then there's the talk of the long-term impact to the economy too, and you have a real recipe for people to be anxious and frightened.

APS Fellow Valerie Reyna, Cornell University, [APS roundtable discussion](#)

In ambiguous situations, people look for social cues from others. You say, "Well, if other people are doing it, maybe they know something about whether this is an acceptable risk."

APS Fellow Baruch Fischhoff, Carnegie Mellon University, quoted in The Atlantic

Children learn many of their own fears and anxieties from what they hear and what they see. In other words, seeing something scary on television, hearing something scary on the news, or seeing their parents look nervous or afraid are common learning mechanisms for young children. The recommendation for parents here is to be aware of the emotional information and the factual information about the coronavirus that is being transmitted to children, as they are apt to learn from whatever information happens to be around them.

Vanessa LoBue, Rutgers University, [APS Backgrounder series](#)

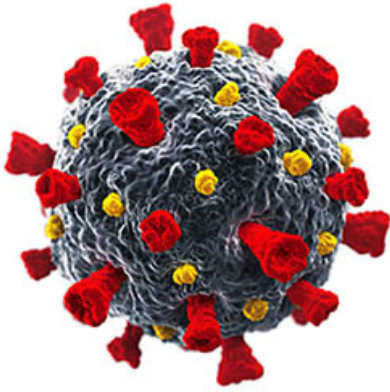
Moral responsibility can be a powerful motivator.

If your worldview is that you're always asked to make sacrifices and you never get anything out of it, maybe you don't want to comply with [social distancing]. But if you have a worldview that tells you it's important to help others, then maybe you're happy to make these sacrifices. You're looking around to see what people are doing. If you take your cues from other people, you might be more inclined to take strong action yourself because you see other people doing it.

APS Fellow Gretchen Chapman, Carnegie Mellon University, quoted on Slate.com

You're probably going to have a hard time not scratching your nose, no matter how much you want to. But moral responsibility can be a powerful motivator. The potential consequences start to feel real when you spend just a couple of minutes considering the people you know who are at heightened risk of complications due to COVID-19—people like your parents or grandparents, that friend whose husband has a heart condition, or your colleague with diabetes. Even if we can make only a 5-percent difference, we really should try.

APS Member Adam Grant, the Wharton School of Business, writing for The Atlantic



One of the most important things crisis communications research tells us is that our leaders should be honest and transparent. Insincerity is very alienating, and it leads to distrust. Empathy from our leaders, honesty from our leaders, and being frank with the uncertainty, not promising more than can be delivered, is likely to help us through this crisis. In contrast, contradictory messages or insincerity are probably going to exacerbate the distress level. Moreover, we do know that once trust is lost, it's very difficult to regain it.

APS Fellow Roxane Cohen Silver, University of California, Irvine, [APS interview/podcast](#)

COVID-19 Backgrounders

Through an ongoing series of “backgrounders,” APS is exploring many of the psychological factors that can help the public understand and collectively combat the spread of COVID-19. Each backgrounder features the assessments, research, and recommendations of a renowned subject expert in the field of psychological science.

- [Remaining Resilient During a Pandemic](#): George A. Bonanno, Columbia University
- [Social Impact on Children](#): Vanessa LoBue, Rutgers University
- [Social Impact on Adults](#): Chris Segrin, University of Arizona
- [Working Remotely](#): Tammy Allen, University of Southern Florida
- [Marriages and Close Relationships](#): Paula Pietromonaco, University of Massachusetts, Amherst

See the growing [Backgrounder series here](#).

Continued exposure and chronic anxiety can worsen outcomes.

This is unquestionably a period where people are experiencing an enormous amount of stress, given the

large demands the situation is placing on our daily lives—the changes in our routines and structures that we typically rely on, and the uncertainty surrounding how long this is going to last and what the ultimate impact is going to be on our families, our communities, and our workplaces. Psychological science has taught us quite clearly that in situations of mass trauma or mass stress, like a natural disaster or a terrorist attack, there's a very clear link between the degree of media exposure that people have and their symptoms of anxiety, depression, and substance abuse.

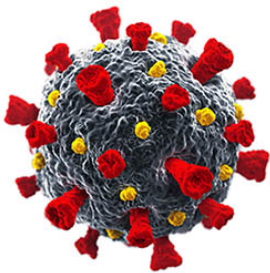
APS Member Katie McLaughlin, Harvard University, [APS roundtable discussion](#)

Decades of scientific research show that how we make meaning out of situations can leave us vulnerable to unhelpful, out-of-proportion anxiety. When our environment is inherently ambiguous—open to interpretation and unknown outcomes—our interpretations matter. They matter a lot. Ambiguity breeds anxiety; more so when the “facts” change hourly.

APS Fellow Lori Zoellner, University of Washington, writing (with others) for The Seattle Times

Humans often can develop a robust and pathological fear of things that might not happen, to create realities that don't exist. In the old days, the virus update would be a mention on the 6 o'clock news, but today, it's tweets and Facebook posts 24/7. Fears can be learned. If you're communicating with people online who are afraid or are seeing people online who are afraid, that exposure is more likely to invoke fear in you.

APS William James Fellow Elizabeth Phelps, Harvard University, quoted in USA Today



The work that I've been doing with colleagues since the September 11th terrorist attacks tells me the very important role the media can play in coping with this kind of a crisis. I would be very cautious for people to seek out information from authoritative sources and to make sure that they check out the messaging that they're receiving to ensure that it's accurate. In addition, we want to encourage people to monitor how much time they're spending immersed in the news about COVID-19 and try to break away, engage in some sort of downtime so that they can cope as best as possible.

APS Fellow Roxane Cohen Silver, University of California, Irvine, [APS interview/podcast](#)

Human beings are inherently social, not solitary, creatures. When people's actual or achieved social contact falls below their desired level of social contact, they begin to feel lonely, and loneliness is stressful. The stress of loneliness degrades mental and physical health (e.g., cardiovascular fitness, immune fitness) through disruption of recuperative behaviors (e.g., sleep, leisure) and corruption of health behaviors (e.g., substance use, diet, exercise).

APS Member Chris Segrin, [APS Backgrounder series](#)

APS and SAGE: Fast-Tracking And Expanding Access

To facilitate the dissemination of findings on psychologically relevant aspects of the COVID-19 crisis, APS and SAGE Publications have joined together to expedite the review and fast-track the publication of *Psychological Science* articles that deal with COVID-19. Learn more about [fast-tracking COVID-19 submissions here](#). In addition, APS has made its journal research pertaining to [epidemics and related health issues](#) publicly available.

Examples include:

- [Distress, Worry, and Functioning Following a Global Health Crisis: A National Study of Americans' Responses to Ebola](#) (*Clinical Psychological Science*, April 26, 2017)
- [Effects of Symptom Presentation Order on Perceived Disease Risk](#) (*Psychological Science*, March 5, 2012)
- [Fear of Ebola: The Influence of Collectivism on Xenophobic Threat Responses](#) (*Psychological Science*, May 20, 2016)
- [It's Not All About Me: Motivating Hand Hygiene Among Health Care Professionals by Focusing on Patients](#) (*Psychological Science*, November 10, 2011)
- [Increasing Vaccination: Putting Psychological Science Into Action](#) (*Psychological Science in the Public Interest*, April 3, 2018)
- [How Do People Value Life?](#) (*Psychological Science*, December 22, 2009)
- [Sneezing in Times of a Flu Pandemic: Public Sneezing Increases Perception of Unrelated Risks and Shifts Preferences for Federal Spending](#) (*Psychological Science*, January 22, 2010)

Finally, SAGE has made publicly available the [latest medical research related to COVID-19](#) as well as top behavioral and social research to help individuals, communities, and leaders make the best decisions on dealing with the outbreak and its consequences.

How we behave determines how we will cope.

Human behavior affects everything from the stock market to the actions people take or don't take to reduce risk, like social distancing. Behavior will determine the actual public health risk in the end. If we're able to understand why behaviors are risky, and therefore follow appropriate guidelines, we will have a far better outcome than if we don't.

APS Fellow Valerie Reyna, Cornell University, [APS roundtable discussion](#)

The human need for connection with other people is probably what fuels a lot of disease transmission. One could think of this as the price we pay for our inherently social nature. [We should] practice

PHYSICAL distancing, not SOCIAL distancing. The term “social distancing” has an unfortunate connotation and is actually not an accurate descriptor of what public health officials are trying to achieve. Meaningful social contact can occur in the absence of close physical contact.

APS Member Chris Segrin, [APS Backgrounder series](#)

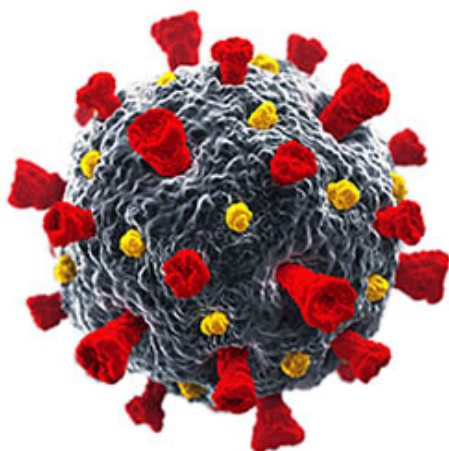
The key psychological objective for most people is to keep stress at a minimum. Everyone is adapting to the new reality, which includes the fear of viral spread and contagion, self-quarantine, and supply shortages. More seriously, some are coping with illness and fear of death. To overcome the stresses of these situations and remain resilient throughout, it is important to use the tools we already have at our disposal, including:

- Staying optimistic
- Relying on the support of others
- Bonding with those close to us
- Keeping informed but not overindulging in media consumption
- Distracting oneself
- Finding ways to laugh and have fun through things like movies and reading
- Most especially, finding ways to minimize isolation with joint family activities and keep in touch with friends, colleagues by phone, video, email.

APS James McKeen Cattell Fellow George Bonanno, Columbia University, [APS Backgrounder series](#)

Social relationships are an incredibly important buffer against the negative consequences of stress. We know that having strong emotional support not only prevents anxiety and depression in periods of stress, but also buffers against the negative physiological consequences of stress on the immune system and physical health. One of my very favorite studies shows that the stress-buffering effects you get from receiving social support you also get when you give social support. And this is something that people can control right now—the degree of support they provide to others, including to members of our communities who are more vulnerable.

APS Member Katie McLaughlin, Harvard University, [APS roundtable discussion](#)



It's reasonable to have some anxiety and sadness. At the same time, it's important not to get stuck there. There are a number of things that we can do to maintain as much of our normal lives as possible.

- Relationships. Social distancing does not have to equal social isolation. Those are two very different concepts and virtual interaction can make a big difference.
- Thoughts and feelings. It really doesn't help us to spend 10 hours a day scrolling through newsfeeds and posts on COVID-19. So in a number of anxiety treatments, we encourage people to pick a couple of times a day when they focus on their worries and get the information that they need to problem-solve, but then spend the rest of their time living their lives as normally as possible.
- Behavioral self-care. A lot of what helps at this time is healthy eating, sleep, exercise, and perspective-taking so that you don't get stuck in assuming the worst.
- To live your values. Be kind to yourself and be kind to others. This is a stressful time and anxiety is normal. We have to give ourselves permission to experience the feelings that we're having and then to try to do as much as we can to maintain normality in the face of that situation.

APS Fellow Bethany Teachman, University of Virginia, [APS roundtable discussion](#)

Above all, psychological science tells us this:

We not only have to understand our ability in our agency, but we also have to know the limitations of our minds. We really need to spend time trying to trust the experts. We have physicians and epidemiologists who are really good at explaining the effects of the virus on society. We also have psychologists who are really good at giving advice on how to cope with isolation, fear, and anxiety. In uncertain times like now, when it is impossible to have a full understanding of the situation, we need to rely on trusted sources of information.

APS Member Andreas Olsson, Karolinska Institute, [APS roundtable discussion](#)

We are not just passive recipients of what is happening. We can collectively work together to respond to this situation as a challenge, as opposed to appraising it as an impossible threat that we cannot manage.

APS Fellow Bethany Teachman, University of Virginia, [APS roundtable discussion](#)

Giving support to other people is just as effective at helping to reduce stress responses and the negative consequences of stress for our physical and mental health as receiving support from others. We know very clearly that exposing yourself to a lot of media coverage about the pandemic is going to increase anxiety. The more we can create positive habits and boundaries around our exposure to media, the better.

APS Member Katie McLaughlin, Harvard University, [APS roundtable discussion](#)

One of the most important fundamental findings that inform what we're dealing with right now is that people react to the gist of the events rather than the details and the facts. It's how people interpret reality that governs their emotions and their actions, not the actual reality itself. So we have to think about this torrent of information washing over everybody. How can we help people extract the bottom-line gist of that information so that they can take effective action?

APS Fellow Valerie Reyna, Cornell University, [APS roundtable discussion](#)

We can cope with this. My research (and the research of others) has shown repeatedly that the majority

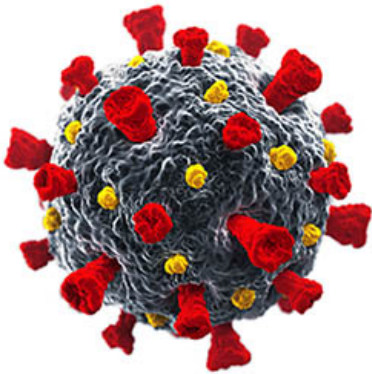
of humans cope well and are resilient to just about any adversity. There is no single best way to cope for everyone. Research has shown many different factors predict resilience, but the effects of all of these factors are small because they don't always work or they don't work for everyone.

Research also shows that we need to be flexible and adapt. This means paying attention to what is happening to us and being nimble so we can adjust to what the situation is calling for. Each person should try different ways of coping and adapting to see what works best for them.

This is not easy but we can do it. Human beings have shown abundant psychological resilience in the face of just about any adversity imaginable.

APS James McKeen Cattell Fellow George Bonanno, Columbia University, [APS Backgrounder series](#)

Prioritizing Lab Hygiene Amid a Pandemic



“With entire universities moving to remote instruction and virtually all other functions online, researchers are facing an unexpected and sudden end to on-site, in-person data collection. For psychological scientists, this moment brings both promise and peril.”

In an editorial in the May issue of *Psychological Science*, Dwight J. Kravitz and Stephen R. Mitroff (both at The George Washington University), along with *Psychological Science* editor and APS Fellow Patricia J. Bauer (Emory University), note that COVID-19 offers unique opportunities to advance psychological science, but they warn researchers not to forego rigor and transparency in the quest for expedience. The hiatus of in-person data-collection may also push researchers to run analyses of incomplete data sets or terminate data collection before reaching the predetermined sample size. The authors introduce the [Airport Scanner applet](#) to illustrate how practices that seem “logical” and “reasonable” can lead to inflated false-discovery rates and to provide suggestions for improving research practices. They also provide a series of links to other resources for reproducible and transparent research. Kravitz and colleagues believe that psychological scientists can keep improving the quality of research even during the pandemic. “As long as we are appropriately reflective—and transparent—we can maintain positive momentum, even as we shelter in place,” they write.

[Read the full editorial here.](#)
