

Medical News & Perspectives

The Science of Persuasion Offers Lessons for COVID-19 Prevention

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Hand washing, mask wearing, social distancing—experts agree these protective behaviors are key to stemming coronavirus disease 2019 (COVID-19). But how should leaders encourage their uptake?

Look to the science of persuasion, says communications professor Dominique Brossard, PhD. Brossard is part of a new National Academies of Science, Engineering, and Medicine group called the Societal Experts Action Network, or SEAN, whose [recent report](#) lays out research-based strategies to encourage COVID-19-mitigating behaviors.

Brossard says the changes must feel easy to do—and to repeat, which helps to form habits. Past public health campaigns also suggest it's wise to know and understand one's target audience, and to tailor messages and messengers accordingly.

"It's difficult to change people's behavior at the massive level," Brossard, chair of the life sciences communications department at the University of Wisconsin-Madison, said in a recent interview with *JAMA*. The following is an edited version of that conversation.

JAMA: You and your coauthors write that simply explaining the science of COVID-19 and its risks will rarely translate to a change in attitudes and behaviors, even if people understand and accept the facts. Why isn't it enough to explain the science if you want to change health behaviors?

DR BROSSARD: Because human beings rely more on the psychological dimensions of the risk than the quantitative aspect of the risk. If experts measure risk in numbers, such as the probability of getting harmed by something, human beings in general—you and me included—look at what we call the qualitative aspect of that risk: the potential magnitude of the effect, the potential dread, how much it may impact people [close] to us, and so on. So, psychological dimensions.

JAMA: How does that translate to people's unwillingness to change their attitudes and behaviors?

DR BROSSARD: If we're asked to do something new, that will impact our willingness to do it for a variety of reasons. It might be because people around us, our social network, the norms around us tell us that this is something that's not acceptable. It might be because it's a little inconvenient. It might be because we forget about it. At the end of the day, when we perform certain behaviors, rarely do we think about the science that tells us why we shouldn't do it and why this might be dangerous. We do it because, as social animals, we pay attention to cues that our minds tell us to pay attention to and our community and people around us tell us to pay attention to. Therefore, our behavior is really based on the psychological components rather than more quantifiable aspects.

JAMA: Your report recommends 5 habit-promoting strategies: make the behavior easy to start and repeat; make the behavior rewarding to repeat; tie the behavior to an existing habit; alert people to behaviors that conflict with existing habits and provide alternative behaviors; and provide specific descriptions of desired behaviors. How can these strategies be applied today?

DR BROSSARD: People are more likely to act in healthy ways when it's easy for them to perform that behavior. So let's think in terms of hand washing, for example. It will be very important to have hand washing stations and hand sanitizer easily accessible to people. Making the behavior very easy to start and to repeat is very important. If you put a mask next to your front door, and it's easy to grab when you go out the door, that's going to be easy to implement and you may be more likely to actually do it again. If you want to encourage people to physically distance from other people around them, having signs on the floor is actually something that works. They don't have to calculate in their mind: what does it mean to be physically distanced? How far am I from other people? They simply stand where the mark tells them. It makes the behavior easy to repeat and easy to perform.



JAMA: So you're trying to take away any barriers to the behaviors?

DR BROSSARD: Exactly. The idea is if you take away as many barriers as possible, you encourage people to repeat the behavior. And then you end up creating a habit.

JAMA: In your report you mentioned that having many hand sanitizer stations sets the norm—that it's normal to hand sanitize.

DR BROSSARD: Mask wearing and physically distancing are new habits we're creating from scratch. As social animals, that's not something we do, in general. However, hand washing is a habit that we would have hoped the population already had. The problem is it hasn't been really implemented. People do it very inconsistently. If you have hand sanitizers everywhere, it's very easy. As a matter of fact, in supermarkets, when you have the hand sanitizer at the door, people line up and do it. So it's that idea of the social norm and making it sound like, this is something you do, it's widely available, other people do it as well, and therefore, this is socially acceptable and highly encouraged, and we should just all do it.

JAMA: The report also discusses 10 strategies for communicating risk, like using clear, consistent, and transparent messaging. It feels like that's the opposite of what we've had. What's your take on the federal government's messaging around COVID-19 mitigation?

DR BROSSARD: I think that in this case what's really crucial is the messaging at the local level. At the state level vs county level vs town level, having a consistent strategy, consistent messages, is very important. It's clear that for public health-related issues, really what makes a difference is the action of local leaders. It's really the community-based action that can change people's behavior. At the local level people trust the doctors, the public health officials.

JAMA: Masks unfortunately have become politicized. Is it too late for universal masking to be accepted or do you think minds can still be changed?

DR BROSSARD: You will always have extremes on both ends. The vast majority of the population will be somewhere in between. People that are extremely set on the attitude not to wear a mask, which is, by the way, a very, very small minority, are unlikely to change their views. However, all the others can change their views. People are reasonable in the sense that they want to protect their own, they want to protect the community, they want to have the economy reopen, and so on. So I would say, yes, there's still hope. And we see it. Every week, our group at the SEAN Network publishes a summary of all the polls that address [COVID-19-related] behaviors. We see that mask wearing is increasing. It's not yet at the level that we would like to make sure that we are protected, but it's indeed increasing.

JAMA: You reported that highlighting crowded beaches or people who aren't wearing masks can be counterproductive. Why? And what's a better approach?

DR BROSSARD: They end up thinking that it's a more prevalent behavior than it actually is. Or it may actually prompt them to think, "Oh, I wish I was on the beach." You want to highlight good behavior and make it sound like this is socially acceptable rather than highlighting undesirable behavior and making it sound like it's more frequent than it actually is.

JAMA: So local leaders should emphasize that mask wearing is increasing, for example?

DR BROSSARD: Exactly. The research on social norms is extremely, extremely important here. We tend to get cues based on the people around us. Human beings have something that we call fear of isolation. We don't like to

be the lonely person that is the only one doing a certain thing when the vast majority around us are doing another thing. So it's very important to actually show, "Look, this is going in this direction. Political leaders from both sides of the spectrum are doing it." To show that the desirable behavior is something that's becoming prevalent and that this is the direction society is taking.

JAMA: One lesson in your report is that it's important to concede uncertainty. Why should leaders say things like, "Based on what we know today..."?

DR BROSSARD: This is a really key message of risk communication. If you highlight something as being certain and then the science changes and suddenly you say, "Well, wait a minute, actually this was wrong, and now it is this," you destroy trust. Science evolves, particularly in the context of COVID-19. We are all discovering this virus. The social sciences have shown that acknowledging uncertainty will actually increase trust, much more than painting things as certain. So it's very important to say, "Based on the science of today, this is what we should do." It's very important to show that it's a work in progress.

JAMA: What about the messengers themselves? Have we tapped into social media influencers enough? And who are community influencers that have the power to change our collective behaviors?

DR BROSSARD: It makes us think of the AIDS community, where the leaders of the communities were messengers in helping promote protective behaviors. Using messengers that are trusted by the target audiences and relying on social media is extremely important. And as far as influencers in the communities, this will depend from one community to the other. Let's take Wisconsin, for example. Football is a sport that people enjoy regardless of their political ideology, age, and so on. So the [Green Bay] Packers are messengers that transcend potential barriers there. It's important to find trusted messengers that can connect with the audience on social media but also face-to-face. That can be a trusted local business leader, for example.

JAMA: What have we learned from past public health campaigns, like antismoking and wearing seatbelts, that can be applied now?

DR BROSSARD: In the '70s, we had social marketing approaches that suggested that we needed to stop trying to educate people

and actually adapt a marketing technique to social issues. The antismoking Truth campaign, as it was called, was a successful application of social marketing techniques. The idea that you need to segment your audience and tailor the message specifically to that audience is something that the Truth campaign very well illustrated. A specific audience that needed to be targeted was adolescents and teenagers, and one thing that adolescents do is rebel against authority. They don't like people to force them to do things. So the Truth campaign tried to appeal to their drive for autonomy by showing them that the tobacco industry was taking advantage of the adolescent population. That was extremely powerful.

The problem is that a mass media campaign like that can be extremely, extremely expensive. That's why it's very important also to rely on what we think of as organic dissemination of messaging through social media, which we couldn't do when the Truth campaign was put together.

JAMA: How can physicians apply these strategies of persuasion with patients, in their communities, or on social networks?

DR BROSSARD: We are all tempted to correct misinformation. And right now, we see it everywhere, right? However, we need to be careful because by repeating the misinformation itself, we make it more prevalent. When physicians want to communicate about COVID-19, it's better to actually communicate the right information without repeating the misinformation itself. I think it's very important to remember that all of us are part of the solution by making sure that those right behaviors get communicated to as many people as we can. I think physicians have a really, really big part to play in this organic dissemination.

JAMA: How will these strategies apply once we have a COVID-19 vaccine?

DR BROSSARD: It goes back to that idea of targeting and audience segmentation to understand who has issues with the vaccine—in this case potentially COVID-19—and why. We actually do not know why people think the way they do. What we do know is that there's no wrong concern. If people are concerned, they're concerned. We need to listen and try to understand why and then address that. ■

Note: Source references are available through embedded hyperlinks in the article text online.