New research, set in China, suggests that using masks for health reasons also leads people to behave more ethically

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Since 2020, the COVID-19 pandemic has led to a global increase in the number of people wearing masks to limit the spread of illness. Now, new research co-authored by MIT scholars suggests that, in China at least, wearing masks also influences how people act.

The research, conducted across 10 studies focused on deviant behavior—such as running red lights, violating parking rules, and cheating for money—shows that people wearing masks were less likely to behave deviantly than those who were not wearing them. The researchers say this is not just happenstance, but that in China using masks increases moral awareness and thus spurs some people to be more rule-abiding.

"We found that masks, in China, function as a moral symbol that reduces the wearer's deviant behavior," says Jackson Lu, an associate professor at the MIT Sloan School of Management and co-author of a newly published paper detailing the findings.

As Lu and his co-authors note, a variety of factors, not just masks, can influence behavior. Overall, they estimate, mask-wearing accounts for about 4 percent of the variance in deviant behavior they observed, when comparing those wearing masks to those not wearing them.

"Mask-wearing explains a meaningful but reasonable proportion of the variance," Lu says, adding: "We're talking about likelihoods here."

The paper, "Masks as a Moral Symbol: Masks Reduce Wearers' Deviant Behavior in China During COVID-19," appears today in Proceedings of the National Academy of Sciences. The authors are Lu, who is the Sloan School Career Development Associate Professor of Work and Organization Studies; Lesley Luyang Song, a Ph.D. student in marketing at Tsinghua University in China; Yuhuang Zheng, an associate professor of marketing at Tsinghua University; and Laura Changlan Wang, a Ph.D. student at the MIT Sloan School of Management.

Two hypotheses, one answer

Since the pandemic began at a large scale in early 2020, social scientists have learned a great deal about what makes people inclined to wear masks, but generally have not explored the behavioral consequences of masking. In conducting the studies, Lu and his co-authors tested two competing hypotheses about the effect of mask-wearing on deviant behavior in China.

One hypothesis, Lu notes, is that "masks can disinhibit wearers' deviant behavior by increasing anonymity," making people "more likely to engage in" norm-breaking actions.
A competing hypothesis is that masks may be "heightening people's moral awareness" when worn, Lu says. "If it's a moral symbol that symbolizes the moral duty and virtue of protecting others and sacrificing one's personal convenience for the collective welfare, maybe masking can lead the individual to choose the morally right course of action," he adds.

To examine these ideas, the researchers conducted 10 separate studies in China to tackle the issue empirically. In one study, for example, they analyzed traffic-camera recordings of an intersection, and found that pedestrians and cyclists who were wearing masks were less likely to run red lights, compared to those who were not wearing masks.

Of course, it could be that people choosing to wear masks are more cautious overall than those without masks, and that pedestrian or cycling behavior may reflect this predisposition. To rule out individual differences in risk aversion as an alternative explanation, the scholars conducted other studies. One of their studies shows that even when it comes to bike parking places—a matter that does not bear on an individual's personal safety—mask-wearers tend to follow the rules and park legally more than non-wearers do.

In another case, the researchers conducted experiments to establish causality. They found that participants randomly assigned to wear a mask (as opposed to those who were not) were less likely to cheat for money. Increased moral awareness partly explained the difference in behavior.

"The common thread is they're all examples of deviant behavior that could hurt individuals, organizations, or society," Song says. The research also included survey work showing that Chinese citizens regard masks as a moral symbol.

The 10 studies involved roughly 68,000 observations, a large scale that underscores the reliability of the results.

"We have confidence in terms of different measures of deviant behavior providing converging evidence," Lu says. "It's remarkable to see how consistent the evidence is across different studies."

Results specific to China

To be sure, the researchers acknowledge that while masks have been worn globally over the last few years, the current research only applies to Chinese society.

"We only have data from China, so we are careful not to generalize," Lu says.

Among other things, Lu believes that in China, wearing masks is not the same kind of political flashpoint that it has become in other countries. That political element could make it harder to disentangle the behavioral effects of mask-wearing elsewhere.

And even in China, Lu notes, the way masks influence behavior could change over time as well. The current research provides a snapshot of a phenomenon, but further work in other times and places could reveal new insights.

"The meaning of masks is probably dynamic, and contextualized," Lu says. "Right now masks may function as a moral symbol, but … over time, the meaning of masks could change. Future research is needed."


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