## A Vaccination Against Social Prejudice

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Evolutionary psychologists suspect that prejudice is rooted in survival: Our distant ancestors had to avoid outsiders who might have carried disease. Research still shows that when people feel vulnerable to illness, they exhibit more bias toward stigmatized groups. But a new study in <a href="Psychological Science">Psychological Science</a>, a journal published by the <a href="Association for Psychological Science">Association for Psychological Science</a> suggests there might be a modern way to break that link.

"We thought if we could alleviate concerns about disease, we could also alleviate the prejudice that arises from them," says Julie Y. Huang of the University of Toronto, about a study she conducted with Alexandra Sedlovskaya of Harvard University; Joshua M. Ackerman of the Massachusetts Institute of Technology; and Yale University's John A. Bargh. The group found that the sense of security derived through measures such as vaccination and hand washing can reduce bias against "out" groups, from immigrants to the obese.

The researchers conducted three experiments. The first two (with 135 and 26 participants, respectively) looked at people's reactions to threats of the flu. In the first, some participants were already vaccinated, others not. Half the subjects—including members of both groups—read a cautionary passage about the flu. In experiment 2, all the participants had been vaccinated. They read a similar text, but some of them read one with a section saying the vaccine is effective; the others received only an explanation of how it functions. In both experiments, participants answered questionnaires assessing their level of prejudice—in the first, particularly toward immigrants, in the second, toward numerous groups, including crack addicts and obese people.

The findings: In experiment 1, among those who read the text—and were thus reminded of the disease threat—the vaccinated showed less anti-immigrant sentiment than the unvaccinated. There was no significant difference among those who didn't read the passage. In experiment 2, those who got assurances of the vaccine's effectiveness showed less disease-related bias. "Even when everyone is actually protected," comments Huang, "the perception that they are well protected attenuates prejudice."

In the third experiment, with 26 undergraduate participants, half used a hand wipe to wipe their hands and the keyboard of a computer they were using. The others didn't. The text they read included the statement that anti-bacterial hand wipes help protect against contagion. These students were assessed for their nervousness about germs—a signal of feeling vulnerable to disease—and their feelings toward seven out-groups and two in-groups (undergraduates and their families). As expected, among those who did not wipe their hands, germ aversion correlated positively with aversion to stigmatized groups. But the germ-averse hand-wipers didn't express prejudice. None showed bias toward people like themselves and their loved ones.

The study—which is unique in uniting evolutionary psychology, social cognitive psychology, and public health—holds promise for reducing physical and social maladies at once. Write the authors, a public

health intervention like vaccination or hand washing could be a "modern treatment for [an] ancient affliction."