A Behavioral Study of Public Health Messaging: Community, Self-interest, Vulnerability and Racial Bias

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Motivating people to take science-backed public health measures is critical. I studied whether messages encouraging people to protect others are more effective than messages encouraging people to protect themselves, and also whether other-oriented messaging is more effective when focused on the whole community or on particularly vulnerable people. I also investigated whether the race of vulnerable people featured in public health messages affects people's actions. I displayed KN95 masks outside a store and then rotated different messages encouraging people to take an upgraded mask. For each message, I observed how many people walked by the sign and how many took a mask. Based on my observations (N=1460), community messaging was most effective in persuading people to take a mask, more effective than self-protection (?2=4.1143, p=.0425) or vulnerability (?2=12.5462, p=.0004). The other-oriented vulnerability messaging was statistically indistinguishable from the self-protection and control messaging. For messages featuring a vulnerable person, the data unfortunately confirmed my hypothesis that people would be more likely to act if the sign showed an elderly white, rather than Black, person. People were even less likely to act if the sign showed an elderly Asian, rather than white or Black, person. These results were also statistically significant. In a follow-up Qualtrics survey (N=2090), people likewise expressed higher willingness to follow public health recommendations if the featured vulnerable person was white instead of Asian (p= <.0001). These results inform optimal public health messaging, and future work should continue to explore how racial bias may infect decisions about public health.

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