

Title of Project: *Unmasking the Truth of Masks: How Science and Community Have Affected the COVID-19 Pandemic*

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Abstract:

Before the start of the pandemic, wearing masks to curb the transmission of diseases was a niche societal norm specific to certain east asian countries such as China, Japan and Korea. It was also used as a method to protect people from bad air quality. With the dawn of the COVID-19 pandemic, the scientific and societal view on wearing masks reached a global scale such that wearing a mask is synonymous with caring for the health and safety of one's community. Several factors have played a role in this paradigm shift in the use of masks including the media, politics and scientific evidence. While it is a medical necessity, it has become a societal responsibility causing there to be disagreements on its usefulness, its effects on the environment and for some a question of whether it took away people's freedoms. In this study, the question of how and why

masks have become a social responsibility as well as whether it will maintain its role even after the pandemic ends will be explored. We look at masks from a scientific but also philosophical lens in order to determine the juncture at which they meet. Wearing a mask has become the norm, but the underlying basis as to why this is goes much deeper than meets the eye. Community, politics, empathy, and science all play a role in how we perceive the use of masks in the COVID-19 pandemic; this project asks not why this is, but how.

Annotated Bibliography:

Barry, Colleen L., Kelly E. Anderson, Hahrie Han, Rachel Presskreischer, and Emma E. McGinty. "Change Over Time in Public Support for Social Distancing, Mask Wearing, and Contact Tracing to Combat the COVID-19 Pandemic Among US Adults, April to November 2020." *American Journal of Public Health* 111, no. 5 (May 2021): 937–48. doi:10.2105/AJPH.2020.306148.

This article examines how sociodemographic, political, and civic characteristics of individuals influence their trust in science and public health efforts aimed at eliminating COVID-19. The study focused on 1,222 representative respondents from the Johns Hopkins COVID-19 Civic Life and Public Health Survey from 2020 and evaluated each respondent's evolving public support for social distancing, indoor mask wearing, and contact tracing between April 2019 and November 2020 over three waves. While it should be noted that the study cannot be generalized to account for pre-pandemic beliefs, Barry and colleagues' research shows that various factors influenced public support for such measures. Division among political lines was significant and fixed vs. fluid worldviews. Barry and colleagues ask us to consider our world, in terms of danger or not, and demonstrates that this affects how we perceive and follow public health initiatives.

Blevins, Ryan. Interview by Joy Kassel, William Neupert, and Isoken Ogli. Personal online interview. Valparaiso, March 31, 2022.

This personal interview conducted with Valparaiso University's Dean of Students, Ryan Blevins, detailed the procedure he and colleagues followed to implement and enforce the university mask guidelines. Blevins cited using CDC guidelines in concordance with the Indiana and Porter County Departments of Health, the Association of University Health Centers, Department of Education, and the American College Housing Authority with COVID-19 committee members on campus to ensure that the University created a mask policy that was factual, digestible, and doable for the campus community. At the heart of such discussions, Blevins mentions the goal of keeping both faculty and students healthy on campus in an environment conducive to in-person learning. By actually collecting vaccination proof of

students and faculty, the university is the only one in the region with a 95% vaccination rate, something that Belvins attributes to a dedicated and community-oriented faculty, staff, and students. Though mask policy variations have come and gone with time at the university, Blevins remains committed to fostering a safe and healthy campus.

Burgess, Adam, and Mitsutoshi Horii. 2012. "Risk, ritual and health responsabilisation: Japan's 'safety blanket' of surgical face mask-wearing." *Sociology of Health & Illness* 34, Issue 8: 1184-1198. <https://doi.org/10.1111/j.1467-9566.2012.01466.x>.

This article examines the use of masks in pre-pandemic Japanese society. Through the use of historical context and surveys of residents, authors Adam Burgess and Mitsutoshi Horii examine what they term Japan's 'safety blanket' and whether these practices emphasize individual or community health. The article opens by exploring the nature of masks in Japan and other East Asian countries. Noting that masks aren't always the most effective at preventing disease, the authors wish to explore why masks are worn in contemporary Japan, and what cultural phenomena are behind this. After examining the history surrounding masks in Japan, the authors look at their survey results. While not all respondents wore masks, it is noted that 2009 represents a prominent year in mask history, and that most respondents thought that the action to wear a mask should be an individual choice. Finally the paper examines the culture surrounding masks in Japan and concludes, generally, that wearing a mask in Japanese society is a complex balance between individuality and societal norms.

Cozzens, Susan E. "Distributive Justice in Science and Technology Policy." *Science and Public Policy* 34, no. 2 (March 2007): 85-94. doi:10.3152/030234207X193619.

This article explains that scientific and technological policy is implicit in the realm of distributive justice due to philosophical and ethical implications and understands the conversation between such policy and the philosophical world in the terms of the four perspectives. Most relevant to the idea of masks is Cozzens' communitarian perspective which sees policy action as moral only if they strengthen community life. Cozzens feels this strengthening of community can be implemented via policies which seek to respect human rights and accept social responsibilities. The premise of wearing a mask to strengthen and protect community health has been a common theme among several major U.S. cities such as Chicago, St. Louis, and Los Angeles. Combining this knowledge with Cozzens' "communitarian" perspective, this article adds to the discussion of the moral and philosophical impacts of wearing a mask in addition to the pre-established scientific reasons.

Hartanto, Broto W., and Dyah Samti Mayasari. "Environmental Friendly Non-Medical Mask: An Attempt to Reduce the Environmental Impact from used Masks during COVID 19 Pandemic." *Science of the Total Environment* 760, (2021): 144143-144152.
<https://doi.org/10.1016/j.scitotenv.2020.144143>

As the COVID-19 pandemic rages on and we continue to wear masks, the environmental impact of these masks cannot be overlooked. As the name of the article implies, this study uses the analytical hierarchy process to examine the best material for environmentally friendly non-medical face masks in terms of filtration efficiency, breathability and an environmental impact index. In determining the material that would be the most environmentally friendly, Hartanto and Mayasari's environmental impact index considers the material's CO₂ absorption and emission, renewable resources, land use, fertilizer and pesticide, recyclability, biodegradability, and life cycle. Drawing from past studies on face mask material and in accordance with the WHO's pressure drop and filtration efficiency, 26 out of 91 materials were eligible to be used in this study. The materials of "quilt" and "cotton 600 TPI" were found to be the most breathable and filtered while having the lowest environmental impact.

Sin, Maria Shun Ying. 2016. "Masking fears: SARS and the politics of public health in China." *Critical Public Health* 26, Issue 1: 88-98.
<https://search.ebscohost.com/login.aspx?direct=true&db=cmh&AN=110848504&site=chc-live>.

This article introduces the reader to the history of mask wearing in China and how media and politics of the SARS outbreak shifted perceptions of mask usage. According to author Maria Shun Ting Sin, mask-wearing has a long history in China, although 2003 is the year she notes that wearing them became publicly visible. During the SARS outbreak, mask use became widespread in China. This was due in part to the heavy influence of Chinese media, which heavily advocated for mask use. In part due to the media at the time, the author notes that this is the time period in which wearing a mask became racialized in western media as an 'Asian' phenomenon. This unrest about masks subsequently spreads back to China and has various effects which eventually leads to the view of masks in (pre-covid) contemporary western media. Sin concludes that "Today, the meaning of the mask as a cultural sign is changing further as the masking trope gets reabsorbed and recirculated through new media."

Image Links:

<https://www.businessinsider.com/deadly-sars-virus-history-2003-in-photos-2020-2#on-april-20-the-chinese-government-admitted-there-were-10-times-as-many-sars-cases-as-reported-in-beijing-339-cases-rather-than-37-to-make-amends-chinas-health-minister-and-the-mayor-of-beijing-were-both-dismissed-18>

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