

To Mask or Not to Mask: Epistemic Injustice in the COVID-19 Pandemic

Techné: Research in Philosophy and Technology
Special Section on Technology & Pandemic

Hsiang-Yun Chen, Academia
Li-An Yu, Bielefeld University
Linus Ta-Lun Huang, University of Hong Kong¹

Abstract: Reluctance to adopt mask-wearing as a preventive measure is widely observed in many Western societies since the beginning of the COVID-19 pandemics. This reluctance toward mask adoption, like any other complex social phenomena, will have multiple causes. Plausible explanations have been identified, including political polarization (Bruine de Bruin, et al., 2020), skepticism about media reports and the authority of public health agencies (Bramble, 2020), concerns over liberty (Zagury-Orly, 2020), amongst others. In this paper, we propose potential explanations hitherto unnoticed, based on the framework of *epistemic injustice* (Fricker, 2007). We show how testimonial injustice and hermeneutical injustice may be at work to shape the reluctant mask adoption at both the societal and individual levels. We end by suggesting how overcoming these epistemic injustices can benefit the global community in this challenging situation and in the future.

Keywords: mask adoption, sound science, precautionary science, epistemic injustice, COVID-19

1. Introduction

It is the second week of March in 2020. Your university, based in the US, has just announced that all classes next week will be cancelled due to the outbreak of what will turn out to be the worst pandemic in recent history. You tell your colleagues that you have ordered some masks online a few days ago for yourself. One responds that you are overreacting. In fact, they claim that you shouldn't have purchased those masks because, other than medical professionals, only really sick people should be wearing them; additionally, they tell you that there is no evidence that masks are useful to healthy people. You explain that in Taiwan, where you are from, it is considered responsible for healthy people to wear masks as a preventive measure, and the coronavirus has been contained relatively well there.² Moreover, it seems odd to you that the masks are believed to help medical professionals but not healthy people. Your colleague is dumbfounded but remains unconvinced. They emphasize that they are following the recommendation of the Centers for Disease Control and Prevention (CDC) that only certain people need to wear masks.³ You feel the all too common powerless

¹ Each author contributed equally to this paper.

²<https://www.nbcnews.com/health/health-news/what-taiwan-can-teach-world-fighting-coronavirus-n1153826>

³ https://www.youtube.com/watch?v=PRa6t_e7dgl

feeling of having your opinions slighted and frustration that your colleague neither seems to, nor tries to, understand where you are coming from.

The example above is a common experience of the authors in the early phase of the COVID-19 pandemic. Similarly, this individual-level phenomenon is mirrored in social practice and public health policy in many Western countries, especially in comparison to Asian countries.⁴ For example, in Taiwan, the general population voluntarily wore masks in public before it was recommended by its public health agency. The Taiwanese government also took proactive measures to prepare for population-wide mask wearing: it stopped the export of medical grade masks on January 24, 2020, started rationing masks domestically on February 6, and made mask-wearing in public mandatory on April 1.⁵ Among other Asian countries, Vietnam mandated masks on March 16, and Thailand followed on March 25. In sharp contrast, Italy and Spain, two of the first and worst-hit European countries, did not mandate wearing masks until May 4 and May 2, respectively. Similarly, two of the first affected states in the US, New York and Washington, mandated it only on April 17 and July 7, respectively. Similar patterns can be found in other European countries, with notable exceptions such as Czechia (we will come back to this outlier later).⁶

Moreover, the reluctance of Western societies toward masks-wearing can also be observed through a large percentage of people who resist wearing them even when recommended or mandated. For example, based on a survey conducted in mid-July, 2020, only 22 percent of the population in the UK said that they always wore a mask outside the home in the last seven days, and only 3 percent did so in Sweden.⁷ This is again in stark contrast to people's voluntary mask wearing in Asia. For instance, the same survey shows that in Singapore 93% of the population said they always wore masks. African countries' attitudes toward mask-wearing do not seem reluctant either. Mask-wearing practices were quickly introduced and uptake among the general public is high at 85 percent in a similar survey done in August, 2020.⁸

We call the above phenomena *reluctant mask adoption*. Plausible causes and explanations of the phenomena have been identified, including political polarization (Bruine de Bruin, et al., 2020), skepticism about media reports and the authority of public health agencies (Bramble, 2020), concerns over liberty (Zagury-Orly, 2020), amongst others. In this paper, we propose additional (and potentially complementary) explanations by appealing to a hitherto overlooked concept: epistemic injustice, as introduced by Miranda Fricker (2007), which refers to a wrong done to someone as a knower. We will, in the last section, briefly discuss implications of our analysis.

2. Sound vs. Precautionary Science Framework

Before examining the phenomena of reluctant mask adoption through the lens of epistemic injustice, we will first consider an explanation based on the *sound science*

⁴ By Asian countries, we specifically refer to East and Southeast Asian countries.

⁵ <https://focustaiwan.tw/society/202002130012>, <https://focustaiwan.tw/society/202002030019>, <https://www.taiwannews.com.tw/en/news/3908366>

⁶ <https://masks4all.co/what-countries-require-masks-in-public/>

⁷ <https://www.cfr.org/in-brief/which-countries-are-requiring-face-masks>

⁸ <https://www.bbc.com/news/world-africa-54418613>

vs. *precautionary science* framework (Pielke 2007), because much initial discussion on the adoption of mask-wearing centered on whether sound scientific evidence in favour exists (Howard et al., 2021). Since mask adoption has been characterized as a scientific preventive measure, examining this framework's interpretative potentials and limitations will also help highlight problematic aspects of the phenomena that need to be explained.

Briefly put, the sound science approach demands that science-based measures are to be adopted only when strong evidence is established. That is, if one aims to avoid or decrease anticipated harm (caused by the COVID-19 pandemic, for example) by a certain measure (mask-wearing), the connection between the harm and the measure should be established on the basis of sound scientific evidence prior to implementation. By contrast, the precautionary science approach prioritizes the principle of harm prevention. A precautionary measure aims to avoid or decrease potential harm until one has good reasons *against* its implementation.

One may see this distinction at work in debates on genetically modified organisms (GMOs) (Pielke 2007; Jasanoff 2005). To avoid the potential harms of GMOs to the environment and human health, some European countries adopt a precautionary approach and ban the use of GMOs. In contrast, the US has declared that such an intervention can be made only when there is sound scientific evidence as to the harms of GMOs. Applying this distinction to mask-wearing practice, the precautionary science approach suggests that, to decrease the harm of COVID-19 infection or transmission, mask-wearing should be adopted until one has good reasons not to, whereas the sound science approach suggests that mask-wearing should not be adopted until the connection between the harm-prevention and mask-wearing is demonstrated by sound scientific evidence.

It might seem that this distinction can account for the differential mask adoption between Asian and Western countries. Asian countries like Taiwan, Vietnam and Japan adopted mask-wearing practice as a precautionary measure in the early phase of the pandemic, while most Western countries did not. The initial reluctance of Western countries to adopt mask-wearing could be due to their endorsement of the sound science approach. This explanation seems plausible insofar as the initial concern among these late adopters has often focused on the lack of sound evidence for the effectiveness of masks (Howard et al., 2021).

This explanation, however, raises three questions. First, it posits that these European countries, most prominently Germany, together with the US, take the sound science approach in their public health policy toward masks. Yet, it is widely known that many European countries have a long tradition of adopting the precautionary science approach, e.g., on issues ranging from GMOs, climate change, to regulations on biotechnology and stem cell research (Pielke 2007; Jasanoff, 2005). Why, when it comes to COVID-19 and mask-wearing, do European countries suddenly switch to the sound science approach? This apparent inconsistency would require explanation.

Second, even if adopting the sound science approach partly explains Western countries' initial reluctance to recommend, or mandate, mask-wearing, an important question remains: what counts as good evidence in the context of a pandemic?

Crucially, Asian countries coped with the SARS epidemic successfully in the past; they had some initial success dealing with the COVID-19 outbreak by adopting mask-wearing practices. *Why are these facts not considered good enough evidence given the emergency of pandemics?*

Finally, there has been a strong negative reaction to mask-wearing in the public that cannot be explained by the reference to a lack of good evidence. For instance, many populations in the West have hesitated to use masks even when strong evidence linking mask-wearing and harm-prevention became available and hence, mask-wearing was recommended, sometimes even required, by the relevant authorities.

In short, the contrast between precautionary science and sound science leaves several key aspects of the phenomenon unexplained, and does not satisfactorily account for the reluctant mask adoption.

3. Epistemic Injustice Framework

We propose and briefly motivate two alternative, plausible, explanations of the phenomena of reluctant mask adoption, drawing from the conceptual resources developed by Fricker and others for understanding *testimonial* and *hermeneutic injustice*.⁹ We do not, however, attempt to provide conclusive arguments (which would require further theoretical and empirical research) in this short perspective.

3.1 Testimonial Injustice

Testimonial injustice occurs when a speakers' words are given insufficient credibility due to *negative identity-prejudicial stereotypes* (Fricker 2007). This stereotype associates members of a social group with some disparaging attributes, and causes the hearer, explicitly or implicitly, to underestimate their competency as knowers. As a result, the speakers' capacity to act as informants is unfairly impaired. Take the example from "The Talented Mr. Ripley," where Herbert Greenleaf dismisses Marge Sherwood's testimony by saying "Marge, there's female intuition, and then there are facts." Greenleaf draws on the negative stereotype that women are more emotional than rational, and attributes insufficient credibility to her testimony as a result (Fricker 2012, 9-10).

The key conceptual resource we draw from testimonial injustice is the *prejudicial credibility deficit*: an unwarranted credibility deficit of speakers due to their social identity. That is, we propose that a prejudicial credibility deficit targeted at Asians may partly explain the reluctant mask adoption at both the societal and individual levels in some (Western) countries. At the societal level, these countries may have a negative stereotype of Asians that are associated with certain inferior cognitive practices.¹⁰ As a

⁹ Jose Medina (2013) and Rebecca Mason (2011), for example, have provided alternative interpretations of hermeneutical injustice. Gaile Pohlhaus (2012) and Kristie Dotson (2012, 2014) have also identified new kinds of epistemic exclusions, and oppressions, such as *willful hermeneutical ignorance* and *contributory injustice*.

¹⁰ Here, we borrow the lens developed by Charles Mills in the *Racial Contract* (Mills, 1997): an oppressive system maintains problematic cognitive attitudes (as observed in various Western philosophers' writings), such as explicit or implicit biases that some social groups are sub-knowers incapable of intellectual achievements in contrast to those (purportedly) ideal knowers collectively on the path toward knowing the worlds. Stereotypes associated with East Asians are complex and can have both positive and negative

result, they discount the credibility of information on the effectiveness of masks as conveyed by public health policies or social practices in Taiwan and other Asian countries. This explains why they are reluctant to adopt mask-wearing practices. A similar explanation may apply to the individual-level phenomenon.

A hypothetical scenario may help motivate this hypothesis. Imagine that it was Europe that suffered and survived the SARS outbreak nearly two decades ago and also had an initial outbreak of COVID-19. In addition, Europe adopted mask practices as a key measure against SARS and COVID-19. Would the rest of the world take this as *prima facie* good evidence that masks are effective and follow Europe to adopt the mask-wearing practice quickly and with less reluctance (rather than trying to explain its success away with other often negatively-valenced factors, such as an authoritarian government in the Asian context)? We think the answer is plausibly yes, and it is because there is less (or no) prejudicial credibility deficit toward Europeans. In short, it is plausible that the prejudicial credibility deficit toward Asians partly explains the reluctant mask adoption.¹¹

3.2 Hermeneutical Injustice

Hermeneutical injustice occurs when there is a gap in the collective interpretive repertoire, such that marginalized social groups are at an unfair disadvantage in making sense of or communicating their socially important experiences. A case in point is sexual harassment. The phenomenon has long existed but could not be properly identified or dealt with until the concept was in place (Fricker 2007, 149-151). When there were no concepts or words with which to properly understand or communicate experiences of sexual harassment and the wrong they inflicted, these experiences remained unintelligible even to those who encountered them and to society as a whole.

Another telling example is postpartum depression. This condition was once believed by many as resulting from a character flaw in individual women, but feminist activists in the late sixties already had the necessary interpretive resources to understand postpartum depression as a medical condition. Because of feminists' hermeneutical marginalization *qua* women, however, the general public remained unaware (ibid, 148-149). As a result, the condition was ill-understood collectively, causing further difficulties for those who experienced it.

The phenomena of reluctant mask adoption may be due to a difference in the interpretive resources for mask-wearing. This difference in hermeneutic resources is well-documented. In Taiwan and other East Asian countries, people are well aware of, and understand, mask-wearing as a positive and responsible practice;¹² such hermeneutic traditions are missing in Western societies. For example, past experience from handling SARS in 2002 is critical in shaping Taiwanese people's understanding of protective masking. Since then, they have been receptive to mask-wearing as an

components. We remain open as to what these negative epistemic attributes associated with the stereotype may be. For a relevant example, see (Moosavi, 2020) for a review of works that argue, suggest, or assume that East Asian students are deficient in critical thinking skills, and that East Asian cultures are the source of such deficiency.

¹¹ Other types of testimonial injustice have been formulated and may provide additional resources for formulating alternative explanations (see Hookway, 2010 for some examples).

¹² <https://news.mit.edu/2020/meanings-face-masks-emma-teng-0819>

effective measure to protect not just oneself but others.¹³ It is telling that in the early phase of the COVID-19 outbreak, even before the government made it mandatory, those who did not practice protective masking in public transportation faced tremendous social pressure in Taiwan. By contrast, Western societies remained largely unaffected by the SARS outbreak and the 2006 bird flu and therefore lacked the hermeneutic resources to see the benefits of mask-wearing. Moreover, the meanings of masks in these societies are further complicated by anti-Muslim attitudes and resultant restrictions on facial covering in France and in Germany, for instance. Whether mask mandates are in tension with individual liberty has become a new marker of political divisions in the U.S.

The interpretive lacuna in the dominant community may also explain the difficulty many Asians living in Western societies face in being understood. Recall the anecdote described at the very beginning. It was not easy for a Taiwanese person to make their response in favour of mask-wearing intelligible to American colleagues, who were dismissive of the Taiwanese experience. This is because even though the Taiwanese person has “fully functioning” hermeneutical practices of the meaning of masks, it is “localised” and not widely shared in the dominant community (Fricker 2016, 166-167).

In short, societies operating under different interpretative schemes, due to their distinct historical, cultural and social backgrounds and experiences, are likely to attribute distinct meanings to mask-wearing. Plausibly, this in turn contributes to the reluctance towards mask adoption for many in the West.

4. Concluding Remarks

Reluctant mask adoption remains an on-going phenomenon with severe, wide-ranging and deadly ramifications. We have looked into one potential explanation based on the framework of sound vs. precautionary science and showed that it exposes some salient, yet problematic aspects of the phenomenon. The alternative we propose can identify and shed light on fundamental issues which are hitherto unnoticed: testimonial and hermeneutical injustice may be at work and partially explain reluctant mask adoption at both the societal and individual levels in some western countries.

The instances of testimonial injustice and hermeneutical injustice we discussed, if real, constitute part of a broader pattern of epistemic injustice towards minority groups: that is, minorities are more likely to be mistreated as epistemic agents in the social practice of information pooling.¹⁴ That is, minorities typically need to put in a larger portion of epistemic labor for their words to be heard, understood, and taken seriously in meaning-making and knowledge-sharing activities. Crucially, epistemic injustice in mask adoption amid the COVID-19 pandemic has grievous negative effects that impact not just the epistemically-wronged victims: everyone suffers in ways far beyond just the epistemic.

¹³ <https://www.bbc.com/news/world-52015486>; also

<https://qz.com/299003/a-quick-history-of-why-asians-wear-surgical-masks-in-public/>

¹⁴ While our paper focuses on epistemic injustice towards minority groups during the outbreak of the COVID-19, there are closely related studies that address other aspects of social injustice confronting racialized minorities during the pandemic. See, for example, Kahn and Money (2021) and Olson and Simpson (forthcoming). We thank an anonymous reviewer for this important reminder.

Let us conclude by returning to the outlier of early adoption of masks in Europe as a further support of our main theses. Czechia mandated mask-wearing practice early on March 18, 2020. The mayor of Prague, a former exchange medical student in Taiwan, who had good experience with the Taiwanese public health system, proactively initiated contact with and consulted the Taiwanese public health authority.¹⁵ His experiences with Taiwan may have ameliorated his prejudicial credibility deficit toward the Taiwanese, as well as opened him up to the more positive meaning of mask-wearing.

As testimonial and hermeneutical injustice can intertwine in ways that reinforce each other (Fricker 2007; Lagewaard 2020), we should tackle them in tandem. Overcoming these epistemic injustices will do good for the global community in general. As COVID-19 presents us with unusually trying circumstances, it is imperative that we be sensitive to our identity prejudice and exercise a reflexive awareness of the reduced intelligibility of “the other.” This will help us share our distinct and valuable social experiences such that we make the most optimal decisions possible.

Acknowledgements

We thank Anson Fehross, Shen-Yi Liao, Yin-Tung Lin, Robin Zheng, Jennifer Saul, and the audience at IEAS workshop on COVID-19 for helpful discussions and feedback on earlier versions of this work.

References

- Bramble, Ben. 2020. *Pandemic Ethics: 8 Big Questions of COVID-19*. Chevy Chase: Bartleby Books.
- Bruine de Bruin, Wändi, Htay-Wah Saw, and Dana P. Goldman. 2020. “Political Polarization in US Residents’ COVID-19 Risk Perceptions, Policy Preferences, and Protective Behaviors.” *J Risk Uncertain* 61: 177–94. <https://doi.org/10.1007/s11166-020-09336-3>
- Dotson, Kristie. 2012. “A Cautionary Tale: On Limiting Epistemic Oppression.” *Frontiers: A Journal of Women’s Studies* 33(1): 24–47.
- Dotson, Kristie. 2014. “Conceptualizing Epistemic Oppression.” *Social Epistemology* 28(2): 115–38.
- Fricker, Miranda. 2007. *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press.
- Fricker, Miranda. 2016. “Epistemic Injustice and the Preservation of Ignorance.” In *The Epistemic Dimensions of Ignorance*, ed. Martijn Blaauw and Rik Peels, 160–77. Cambridge: Cambridge University Press.
- Goetze, Trystan S. 2018. “Hermeneutical Dissent and the Species of Hermeneutical Injustice.” *Hypatia* 30(1): 73–90.
- Haslanger, Sally. 2012. *Resisting Reality*. Oxford: Oxford University Press.
- Howard, et al. 2021. “An Evidence Review of Face Masks against COVID-19.” *PNAS* 118(4): e2014564118. <https://doi.org/10.1073/pnas.2014564118>
- Jasanoff, S. 2005. *Designs on Nature: Science and Democracy in Europe and the United States*. Princeton University Press.
- Kahn, Kimberly Barsamian, and Money, Emma E. L. (2021). “(Un)masking Threat: Racial Minorities Experience Race-based Social Identity Threat Wearing Face Masks During COVID-19.” *Group Processes & Intergroup Relations*. <https://doi.org/10.1177/1368430221998781>
- Kidd, Ian James, José Medina, and Gaile Pohlhaus, Jr., ed. 2017. *The Routledge Handbook of Epistemic Injustice*. New York: Routledge.
- Lagewaard, T. J. 2020. “Epistemic Injustice and Deepened Disagreement.” *Philosophical Studies*. <https://doi.org/10.1007/s11098-020-01496-x>
- Mason, Rebecca. 2011. “Two Kinds of Unknowing.” *Hypatia* 26(2): 294–307.

¹⁵ https://www.roc-taiwan.org/cz_cs/post/4117.html

- Medina, José. 2012. "Hermeneutical Injustice and Polyphonic Contextualism: Social Silences and Shared Hermeneutical Responsibilities." *Social Epistemology* 26(2): 201–20.
- Medina, José. 2013. *The Epistemology of Ignorance: Gender and Racial Oppression, Epistemic Injustice, and Resistant Imaginations*. Oxford: Oxford University Press.
- Mills, Charles. 1997. *The Racial Contract*. Ithaca: Cornell University Press.
- Moosavi, Leon. 2020. "Can East Asian Students Think?": Orientalism, Critical Thinking, and the Decolonial Project." *Education Sciences* 10(10): 286. <https://doi.org/10.3390/educsci10100286>
- Olson, Cora and Simpson, Claire. Forthcoming. "Race: the American Trajectory of an Aimless Disease." *Techné: Research in Philosophy and Technology, Special Section on Technology & Pandemic*.
- Pielke, Roger A. 2007. *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge University Press
- Pohlhaus, Jr., Gaile. 2012. "Relational Knowing and Epistemic Injustice: Toward a Theory of Willful Hermeneutical Ignorance." *Hypatia* 27(4): 715–35.
- Zagury-Orly, Ivry. 2020. "Unmasking Reasons for Face Mask Resistance." *Global Biosecurity* 1(4). <http://doi.org/10.31646/gbio.80>