Vaccine Refusal Is Still Not Free Riding: A Reply

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Abstract: In a recent article, “Can One Both Contribute to and Benefit from Herd Immunity?”, Lucie White (2021) argues that vaccine refusal is more like free riding than we have claimed that it is. Here, we critically reply to White’s arguments.

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In a recent paper in this journal (Bradley and Navin 2021), we argued that it is generally inaccurate to claim that vaccine refusers free ride on community protection (sometimes called ‘herd immunity’).¹ We agree that vaccine refusal is often unethical—because it risks harming others and shirks a responsibility to contribute to just institutions—but we think it is not usually an instance of free riding. First, vaccine refusers are not usually *objectively* free riders. By definition, free riders rationally promote their interests by refusing to pay costs associated with supporting a public good. But vaccination is almost always good for people, such that refusal does not promote a refuser’s interests. That is, free riding is individually rational, while vaccine refusal is not. So, the problem of vaccine refusal is not about self-interest, but it is about a refuser’s false beliefs or idiosyncratic values. Also, by definition, a free rider could continue to benefit from the public good they currently enjoy if they contributed to that good. In contrast, someone who decides to get vaccinated will no longer benefit from herd immunity because they will

¹ See Bradley and Navin (2021) for references.

rely on their individual immunity for protection against disease. So, vaccine refusers could become *contributors* to herd immunity by getting vaccinated, but they would not continue to be *beneficiaries* of herd immunity. Second, vaccine refusers do not usually hold the *subjective* beliefs one might expect of a free rider. Free riders acknowledge that they are benefitting from a public good, but they refuse to incur moderate costs to contribute to it. Vaccine refusers, however, often believe that vaccination causes serious harms and that herd immunity does not exist, or at least that it is not very valuable.

Lucie White (2021) has published a response to our article. White argues, contrary to our view, that it is possible to both contribute to herd immunity and benefit from it. White's argument hinges on the identification of three secondary benefits of herd immunity: (1) a functioning healthcare system, (2) a lack of pandemic social restrictions, and (3) a reduced likelihood that new variants will arise for which vaccines may not provide good protection. In each case, someone who is vaccinated can *contribute* to these benefits—that is, they can contribute to herd immunity, which, in turn, contributes to these further goods. Vaccinated people can also *enjoy benefits* from functioning healthcare systems, from social freedom, and from the maintenance of current vaccines' protection against serious disease. In contrast, the vaccine refuser enjoys the benefits of these goods without contributing to them. Therefore, in light of the existence of these secondary goods, White concludes that there is a tighter connection between free riding and vaccine refusal than we have claimed.

We are grateful for White's generous and thoughtful engagement with our work. We agree with her that herd immunity provides both the *immediate* good of community protection from outbreaks and that it contributes to various *secondary* goods, including those White identifies. Indeed, herd immunity can also contribute to economic growth, education, and social trust and stability, among many other goods. White is surely correct to note that vaccinated people both contribute to herd immunity and can enjoy some of these kinds of secondary benefits.

While we largely agree with White's arguments, we think they have less upshot for our position than they may appear to. It may help to recall how appeals to free riding are supposed to illuminate discussions about vaccine refusal. First, if vaccine refusal were free riding, then we could *explain* the problem of vaccine refusal in terms of a conflict between collective rationality (the maintenance of herd immunity) and in-

dividual rationality (refusal to contribute to herd immunity).² And we could resolve this conflict by shifting incentives so as to make it individually rational to vaccinate. But, if, as we have argued, it is already individually rational to vaccinate, even in the absence of further incentives or sanctions, then ‘free riding’ is an inaccurate description of the causes of vaccine refusal. Second, if vaccine refusal were free riding, then we could appeal to moral arguments against free riding to *criticize* vaccine refusal. Free riding is sometimes thought to be wrongfully selfish and to demonstrate insufficient commitment to reciprocity. But, if vaccination promotes a vaccinated person’s interests, then it is not selfish to refuse vaccines. And, if, as we have again argued, someone can either contribute to herd immunity *or* benefit from it, *but not both*, then the failure to contribute to herd immunity is not a failure of reciprocity. It may instead be a failure of beneficence or of some other duty to support the creation of institutions that provide *benefits to others*. But it is not a moral failure grounded in a practice of free riding.

White’s critical commentary focuses on our point about reciprocity. If vaccination contributes to some public goods that *even vaccinated people* can benefit from, then perhaps we should characterize vaccine refusal as a kind of free riding, and perhaps we should morally condemn it for failing to demonstrate sufficient commitment to reciprocity. We are not so sure.

Many of the indirect benefits of herd immunity do not appear to be *public goods*. And, inasmuch as they are *not* public, that fact undermines the claim that vaccine refusers free ride on these goods. White notes that mass vaccination against Covid-19 reduces burdens on healthcare providers and increases access to functioning healthcare systems. But this is an *excludable* good, as unvaccinated people *can* be denied access to healthcare to preserve system capacity. (We agree with White that this kind of exclusion would be unethical.) White also notes that mass vaccination can prevent pandemic-related restrictions on movement and gatherings. This good is also often excludable, for example, via vaccine passports, though White is surely correct that some such exclusion efforts—such as checking the vaccination status of every unmasked individual in a country—would be infeasible. White further argues that mass vaccination reduces the likelihood of new SARS-CoV-2 variants. The

² We note, however, that vaccination does not guarantee individual immunity. This complicates the relationship between vaccination and herd immunity, which is why the focus should not be on vaccination per se but on the immunity that vaccination typically provides.

primary beneficiaries of a decreased likelihood of new variants are people who are already vaccinated, because new variants are more likely to result in breakthrough infections and therefore undermine the protection that vaccines grant. This good is therefore excludable because anyone who is not vaccinated will not enjoy it—unvaccinated people remain vulnerable to all variants of SARS-CoV-2. Vaccine refusers cannot free ride on a good they cannot enjoy. However, if new variants are more transmissible or more aggressive than existing variants, then unvaccinated people may also benefit from a decreased likelihood of new variants. In contrast, if new variants are less severe (as, for example, the Omicron variant appears to be), then unvaccinated people may actually benefit from the emergence of new variants, such that the prevention of new variants is not a good that they enjoy.³

The three secondary goods that White discusses are all *excludable*, which means they are not public goods, and that vaccine refusers do not *free ride* on them. However, as White notes (and as we have agreed), there are ethical and pragmatic limits to *excluding* vaccine refusers from some of these goods (for example, preventing unvaccinated persons from accessing healthcare). Therefore, some of these goods may function as public goods in societies whose institutional limitations or ethical commitments prevent them from excluding vaccine refusers. Accordingly, it may seem as if vaccine refusers may be free riders on these goods.

However, there may be other ways to *contribute* to the goods that herd immunity indirectly promotes, such that vaccine refusers may not be free riders even if those goods are *public*. Unless a non-immune person emigrates or otherwise removes themselves from society, there is only *one way* they can contribute to herd immunity: acquire individual immunity. Accordingly, someone who does not cultivate individual immunity does not contribute to herd immunity. But there are often *many ways* to contribute to the various goods that herd immunity indirectly promotes. For example, practices of social distancing, correctly using effective masks, and regular testing can reduce outbreaks and therefore reduce strains on the healthcare system, promote social freedom, and reduce the likelihood of new variants. We acknowledge that vaccination is likely to be the most efficient and effective way to contribute to these goods. But the fact that there are other ways to contribute means that someone who has refused vaccination has not thereby made use of a

³ We are grateful to an editor of this journal for suggesting this point.

public good without contributing to it. This person may be a ‘cheap rider’, if they did *less* to contribute to these goods than did vaccinated people, but they would not be a free rider if they had made some meaningful contribution.

In practice, we suspect that many vaccine refusers *also* refuse to make alternative contributions to the secondary goods that herd immunity promotes. Accordingly, it may be accurate to say that they free ride on those goods and that they have failed to do their fair share to support them. But that conclusion rests on *empirical* claims about background conditions and the behavior of vaccine refusers. When vaccine refusal is a kind of free riding, it is so only in this contingent and indirect way.

REFERENCES

- Bradley, Ethan, and Mark Navin. 2021. “Vaccine Refusal Is Not Free Riding.” *Erasmus Journal of Philosophy and Economics* 14 (1): 167–181.
- White, Lucie. 2021. “Can One Both Contribute to and Benefit from Herd Immunity?” *Erasmus Journal of Philosophy and Economics* 14 (2): 157–164.

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