

Review of: "On Mask Wearing in Environments With and Without a Mask Mandate"

Iain Moyles¹

¹ York University

Potential competing interests: No potential competing interests to declare.

This paper takes on the modelling task of compliance in public health restrictions, something that has been increasingly popular and studied since the COVID-19 pandemic. The author presents a utility model (with and without a “tax”) for wearing and not wearing a mask. The utility of both is dependent on the number of hours a person without a mask does not wear a mask.

This paper ignores the wealth of literature on disease modelling including intervention compliance. There is no justification for the coefficients or structure of the model for utility. This paper would benefit from being related to other literature and having a more mechanistic derivation of utility. Because the parameters and structure are not well supported the conclusions do not have much value. In the first result a non-mask wearer should maximize their utility by wearing their mask for 50 hours but that is not substantiated by anything other than the arbitrary model analysis. When both utilities are considered the optimum is for the non-mask wearer to wear a mask. Again, both of these conclusions can be pre-determined just by structuring the model the way the author has.

The conversation of utility in compliance, i.e. masks, vaccines, and other measures, is an important one and the science and modelling surrounding it should be taken seriously and delicately.