

## Review of: "Evolution of Perceived Vulnerability to Infection in Japan During the COVID-19 Pandemic"

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Potential competing interests: No potential competing interests to declare.

Manuscript: Evolution of Perceived Vulnerability to Infection in Japan During the COVID-19 Pandemic (Preprint v2). Summary: The manuscript (MS) provides additional evidence for PVD values before, during, and after the pandemic of Covid-19. The authors included one main study with more than 2,000 participants. The MS has the potential to be an interesting contribution to the literature on this topic. However, a number of points need to be addressed to improve the document's clarity.

I really appreciated the straight-to-the-point introduction. However, the behavioral immune system framework is too briefly presented considering the close links between the PVD and the BIS.

I have some concerns about the methods section. Standard deviations of the populations need to be added considering an average age of 50. Díaz et al. (2020) observed differences in the Germ Aversion and Perceived Infectability according to age and gender. For instance, GA tends to increase throughout life for both men and women, while PI is very high in young women and decreases with age. Several studies have shown that females are more easily disgusted than males and more concerned about pathogens (especially young women). I guess that it is not the purpose of the paper to compare males and females, but it would be interesting to investigate possible links between PVD and gender. At least, I strongly recommend considering the factor of gender in the main results.

Was the sample determined by reference to the number of participants reported in previous studies, or was the sample size calculated?

What was the "attention check calculation question" reported in the methods?

The reported results are clear (figure and text). The message is generally clear and concise. Investigating the PVD during three periods in an ecological situation related to the COVID-19 pandemic is an interesting and ecological idea. The data from the study are clear but not new, and deserve to be published. I also recommend comparing the data from Thiebaut et al. (2020) study, where the PVD was measured before and during the pandemic of Covid-19 among young adults.

## References

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