

Table S6. Confirmation bias

The Bailey paper (Nysetvold et al.) contains analyses that investigate correlations unrelated to our study and did not correct past misinformation because our study, despite limitations, did not violate the scientific method. Ironically, the Bailey paper, not our study, is problematic and appears to be perpetuating scientific misinformation with a selective presentation of data to support a predetermined goal to debunk our study at any cost because it is "in the top 5% of all research outputs" and challenges scientific consensus. But collective agreement by a majority of researchers is often replaced by new understandings. In principle, scientists are presumed to be impartial, making observations and conducting analyses with indisputable objectivity. In practice, however, scientists are subject to ordinary human predilections such as confirmation bias, the inclination to search for, interpret, and favor information in a way that confirms or supports their prior beliefs and values. Confirmation bias is insidious and proponents of the existing scientific consensus in a given field are not immune to its influence. For example, Bailey and her students concluded "there is virtually no relationship between increasing vaccination schedules and infant mortality," yet did not consider the fact that mixing developed and Third World nations (with varying vaccination rates and heterogeneity of socioeconomic factors) completely obscured the trend and invalidated any quantitative results. And when the numerous data points in the Bailey graphs revealed that some countries with low vaccination rates have low IMRs while other countries with high vaccination rates have high IMRs, why did Bailey and her students neglect to report that high vaccination rates are neither necessary nor sufficient to cause low IMR? We must also question why the Bailey team unjustly criticized us for "data exclusion" and failing to analyze the "full dataset" of 185 nations, yet when the Bailey team investigated the effect of HDI on IMR, they themselves failed to analyze the full dataset of 185 nations. They excluded 70% of the full dataset from analysis and provided those results instead. These are classic examples of confirmation bias (or outcome reporting bias*). Yet, science often advances the most when presented with controversial or contradictory findings that must be resolved. If scientists routinely dismiss research findings simply because they differ from prior research, don't adhere to prevailing scientific consensus, or fail to support predetermined goals, scientific progress will stagnate and public health will suffer.

*Goldman GS. Examples of outcome reporting bias in vaccine studies: illustrating how perpetuating medical consensus can impede progress in public health. *Cureus* 2022 Sept 21. 14(9):e29399. [10.7759/cureus.29399](https://doi.org/10.7759/cureus.29399)