

Referee report on PeerJ 105988

Thank you to the authors for the precise and concise responses to all my comments. I apologize for the delay in providing this follow-up. I believe the manuscript has improved substantially, both in clarity and technical depth.

I would like to raise one final point of clarification regarding the terminology used to describe estimator properties. For example, the sentence:

“In statistical terms, when an estimator is both unbiased, and yields the narrowest sampling distribution possible, it is often said to be BLUE – Best Linear Unbiased Estimator. For the purposes of this paper, we’ll use the terms unbiased and optimal when referring to such scenario.”

suggests that “unbiased” and “optimal” jointly refer to the BLUE property, which is theoretically sound. However, I recommend to explicit say in the last sentence that the two proprieties must be satisfied **simultaneously** to be BLUE.

Additionally, I appreciated the new section explaining terms such as “bias”, “optimality”, and “accuracy”. Nevertheless, I would like to note that the term “accuracy” appears to be used with somewhat different meanings in different parts of the manuscript, which could confuse the reader.

For example:

- Around line 708, the term “more accuracy” is used to describe estimates that better represent a “typical individual” from a particular population.

These usages are not necessarily inconsistent, but the concept of “accuracy” shifts across sections.

Finally, I would suggest considering a brief mention of the classical decomposition of the mean squared error (into variance and squared bias) as a unifying perspective on estimator performance. While the manuscript already explains these components, referring to the MSE concept—even qualitatively—could help tie together the discussions of bias, variance, and accuracy.

These are minor suggestions for refinement. Overall, I find the revised manuscript to be much improved and informative, and I support it moving forward.