

# Review of: "Nutrition and work efficiency as a strategic variable necessary in a mining environment for high productivity: A case of Filabusi mining community"

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Potential competing interests: No potential competing interests to declare.

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## General comments

The posted paper examines an interesting topic, i.e., the relationship between nutrition and work efficiency among miners in Zimbabwe. This topic is not new, as economists have long been talking about the "efficiency wage" hypothesis for decades. But the focus placed on a mining community revives that inquiry. That being said, however, the quality of the study falls short of my expectation. First of all, while the authors claimed that this is a quasi-experimental study, it is hard to see anything experimental in the paper—usually, a quasi-experiment refers to a situation in which something unexpected or something random affects one group of people but not another. This is not something that is exploited in this paper—the authors simply go ahead and ask about two groups of miners' opinions on food....which renders the study design rather superficial. In fact, it's not even clear how "treatment" was defined in this paper, so any treatment effects discovered in the data are hard to interpret. Secondly, the role the COVID-19 setting plays in the paper is mysterious. It seems that the authors would obtain similar results in a non-COVID setting—the study design lacks the power to tease out the influence of the pandemic. Third, a lot of important information is missing in the reported study, as I discussed in more detail below.

## Specific comments

1. More information should be provided in the Introduction. 1) Why examine the case of a mining community? What makes it a good case study to answer your research question? 2) Why focus on the COVID-19 setting? 3) What's the contribution of the study?
2. A lot of work has been devoted to the literature review section, but it seems that the literature review fails to serve its function. It is important to note that the ultimate purpose of summarizing the literature is to position your own study in the literature.
3. A lot of technical details were missing in Section 3. It's unclear: 1) How was the quasi-experiment performed? 2) How did you define "treatment" and "comparison"? 3) How were the respondents selected? Any refusals? Any replacements? Are they representative of an underlying population? 4) Why is N=150 sufficient?

4. The statistical tools employed are not powerful enough to discover interesting patterns. In particular, only some differences between groups are detected. But it would be more interesting to see the direction of the differences.
5. The authors could try some regression analysis, especially to test some hypotheses that have a solid theoretical foundation (e.g., debated in previous studies).
6. English editing is very much needed. Some parts of the paper read like “machine-translated.” Typos, awkward expressions, and incorrect punctuation can be found everywhere.