

Review of “**Replication to assess statistical adequacy**”

by P. Dorian Owen

The main aim of the paper as described by the author is provide a focus for the current interest in replication across different disciplines by revealing what its primary objective should be. The author is spot on when he argues that the current interdisciplinary discussion on replication (replicability, reproducibility, etc.) implicitly or explicitly aim to separate *trustworthy* from *untrustworthy evidence*. With that in mind, evaluating the statistical adequacy of published empirical papers is the only fixed point in such an endeavor. The author does a great job in making a case for statistical adequacy and trenchant misspecification testing to take center stage in this replicability movement. His choice of the paper to replicate is excellent because of its high profile and influence in the growth and development literatures.

I have a suggestion on how the paper can make its case even stronger. The paper needs to make clearer the fact that, in a community of researchers that share the same paradigm, *untrustworthy* evidence is easy to replicate in cases where the statistical adequacy is ignored. For instance, the Efficient Market Hypothesis (EMH) and the Capital Asset Pricing Model (CAPM) has been replicated and confirmed millions of times and continue to be confirmed every day by MBA students around the world, even though a closer look at the evidence confirms that they are totally untrustworthy. This happens because the community of researchers follow the same curve-fitting procedures that give rise to very similar empirical "evidence". Hence, just because one can replicate or reproduce similar numbers and the inference results by repeating the same or similar estimation and testing procedures, does not mean that the resulting evidence are trustworthy. What makes replicability a worth-while endeavor is the emphasis on the trustworthiness of the evidence, and not on being able to get the same or very similar empirical results.