**March 24th, 2019**

Dear Editors of Nature Human Behavior,

I am submitting to you a review article for consideration. This article addresses a cross-cutting issue in the social sciences: whether or not research should be de-valued because it does not fit with one of the reigning causal inference paradigms. I argue instead that causality is a latent concept which is very difficult to define, and as a result we should be more charitable in our employment of the label “causal” when evaluating research designs. To illustrate this point, I employ the statistical concept of entropy to show that a non-identified observational analysis can yield as much or more information about a causal graph as an identified experimental manipulation.

I believe this article to be a good fit for Nature Human Behavior because of the journal’s participation in debates raging in the academy concerning p-values (Benjamin et al. 2017) and the importance of theory in guiding research (Muthukrishna and Henrich 2019). Causality is a cross-cutting issue across the social sciences, and in this piece I draw on research from psychology, economics, political science, statistics and sociology to make my point.

Thank you for considering my submission, and I look forward to hearing from you all.

Robert Kubinec

rmk7@nyu.edu

Postdoctoral Research Associate

Princeton University