PROPOSAL

Bayesian Evidence Synthesis

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1 Introduction

The importance of replication in science has been legitimately supported during recent years (e.g., "Estimating the Reproducibility of Psychological Science," 2015; Baker, 2016; Brandt et al., 2014). However, most of the attention has been focused on exact, or close replications, that is, replications concerned with the statistical reliability of the results. The effects estimated in these replications can be pooled, eventually with other studies with a similar design, by means of meta-analysis or Bayesian sequential updating, so that a researcher is able to obtain a more precise estimate of the population parameter of interest. Although the initiative to directly replicate and combine similar studies is commendable,

2 References

Baker, M. (2016). Reproducibility crisis. *Nature*, 533(26), 353–366.

Brandt, M. J., IJzerman, H., Dijksterhuis, A., Farach, F. J., Geller, J., Giner-Sorolla, R., ... Van't Veer, A. (2014). The replication recipe: What makes for a convincing replication? *Journal of Experimental Social Psychology*, 50, 217–224.

Estimating the reproducibility of psychological science. (2015). Science, 349(6251). https://doi.org/10.1126/science.aac4716