

REPLY TO SAFRA ET AL.:

# Lack of theoretical rationale and selective analysis does not imply no strong evidence

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Safra et al. (1) contend that lack of control is not the mechanism for our findings (2); instead, distrust is a better candidate because of its greater explanatory power. There are several issues with their conjecture. First, study 1 was aimed at demonstrating the main effect of economic uncertainty on leader selection based on dominance (Trump) or prestige (Clinton). Therefore, investigating people's voting intention between Trump and not voting for Trump or Clinton is an irrelevant analysis as not voting for either may imply voting for a third candidate, who may be high or low on dominance. Hence, to infer psychological mechanism from this analysis is misguided. Second, their claim of distrust as a mediator is solely based on the statistical power of this variable found in just one study, rather than by theoretical reasoning. This is a problematic approach for scientific advancement as many variables could have a better statistical power without meaningful theoretical rationale—observations guided by theory/axioms hold higher epistemic status (3). Additionally, the authors fail to mention that distrust measure is categorical and highly skewed—about 74% report distrust—together, they present serious limitations for inferring mediation (4). Third, the authors do not describe the posterior distributions and priors of model parameters for the Bayesian factor (BF) analysis, as incorrect specification could bias Bayesian results (5). We performed the same analysis as Safra et al. (1) using Jeffreys' (6) prior and included preference for a dominant leader as the base model (model 1), change in unemployment (model 2), lack of control (model 3), and both together (model 4) as alternate models, respectively. Control

variables were excluded to further demonstrate our model superiority without additional factors. All models differ with each other by a BF score of greater than 10, a strong indicator of model fit (6) (Table 1). Fourth, the authors do not disagree that lack of control mediates the effect of unemployment in preferring a dominant leader. In the service of comprehensive science, after controlling for distrust, we still find the indirect effect to be significant ( $b = 0.0001$ ,  $P = 0.002$ ). In addition, we performed a multilevel Bayesian regression using Gibbs sampling and find that both lack of control [0.0015, 0.006] and unemployment [0.005, 0.014] had significant effects based on 95% credible intervals. Finally, the authors failed to address findings from study S1, where we manipulated lack of control to ascertain the causal effect of lack of control and to account for the small indirect effect in study 3.

In short, the authors' claim of distrust as the mechanism lacks theoretical foundation in comparison to the sound theoretical lineage demonstrating the link between economic uncertainty and lack of control and preference for agency or hierarchy in such situations, which guided our hypotheses (7–11). Moreover, Safra et al. draw on a convenient sample of our studies, while omitting others. As scholars, we are open to the possibility of additional psychological mechanisms contributing to the effect. However, these should be theoretically motivated and not on the statistical power of a variable—the latter is simply an empirical exercise and untenable to scientific advancement.

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**Table 1. Bayesian information criteria**

Model	DIC	Log(ML)	BF	ΔBF
Model 1*	587,158.5	−293,587.5		
Model 2 <sup>†</sup>	587,126.1	−293,575.5	11.97	11.97
Model 3 <sup>‡</sup>	587,069.2	−293,547.6	39.86	27.89
Model 4 <sup>§</sup>	587,039.6	−293,537.4	50.05	10.19

DIC, deviance information criterion; log(ML), log of marginal likelihood.

\*Base model.

<sup>†</sup>Includes change in unemployment.

<sup>‡</sup>Includes lack of control.

<sup>§</sup>Includes both change in unemployment and lack of control.

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