**Supplementary Methods**

*Multiple imputation*

Overall, 86% of subjects (n = 2,543) had complete data on all variables used in analysis. Across analysis variables, a maximum of 5% of observations were missing. We generated m=5 multiple imputations by chained equations using predictive mean matching. For each imputation model, we pruned the variables included in the imputation model using the methods described by van Buuren et al. (1999). Inference for regression point estimates was based on Rubin’s Rules (Little et. al, 2014).

*Resampling-based multiple testing procedures*

For the two resampling-based multiple testing procedures (Romano and Wolf, 2007; Mathur and VanderWeele, 2018a), we used the algorithm described by Mathur and VanderWeele (2018a) to generate 400 parametric bootstraps under the global null from each of the m=5 imputed datasets. We then concatenated the results into a pooled set of 2,000 resamples for use with the multiple testing procedures (Schomaker and Heumann, 2018).

**References**

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