

FIGURE S2. Latent factor heritabilities were accurately recovered. Distributions of factor  $h^2$  estimates by simulation scenario. Each simulated factor was matched to the estimated factor with the most similar trait-loadings as in Figure 3. Thin horizontal lines in each column show the simulated  $h^2$  values. Red boxes show the distribution of factor  $h^2$  estimates across 10 simulations for all factors with  $h^2=0.5$  or 1.0. Black boxes show the distribution of factor  $h^2$  estimates across the same 10 simulations for all factors with  $h^2=0.0$ . Scenarios differed by: (A) Increasing numbers of simulated factors. (B) Different types of  $\mathbf R$  matrices. (C) Different numbers of traits.