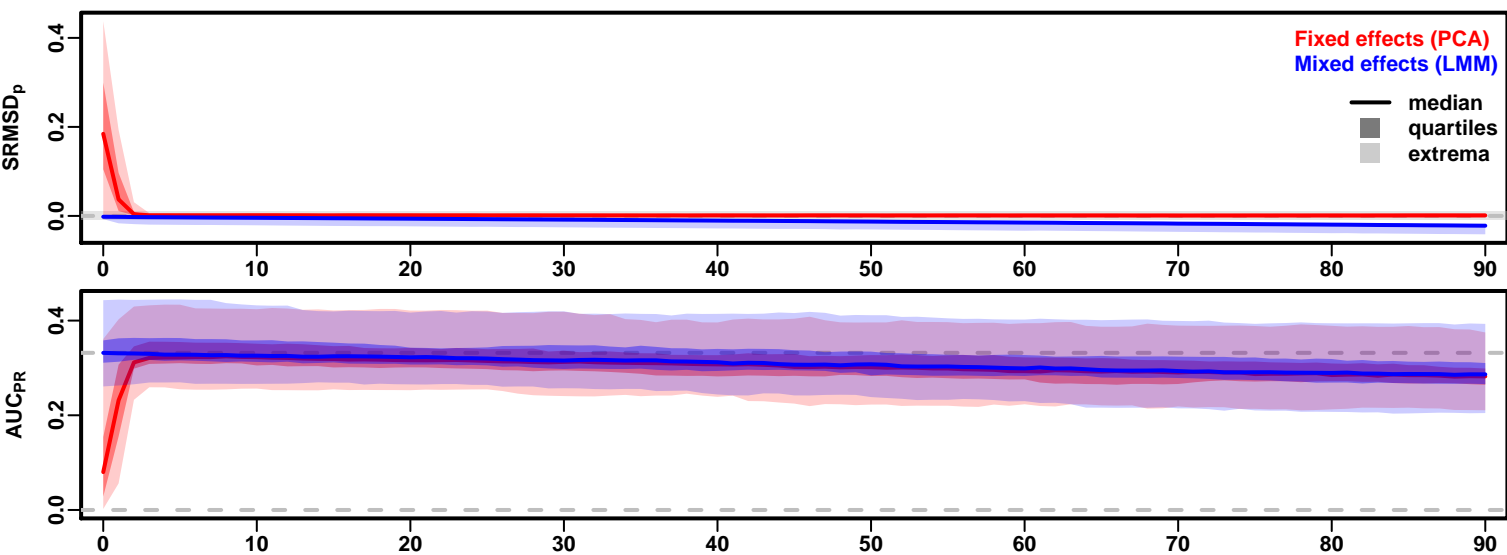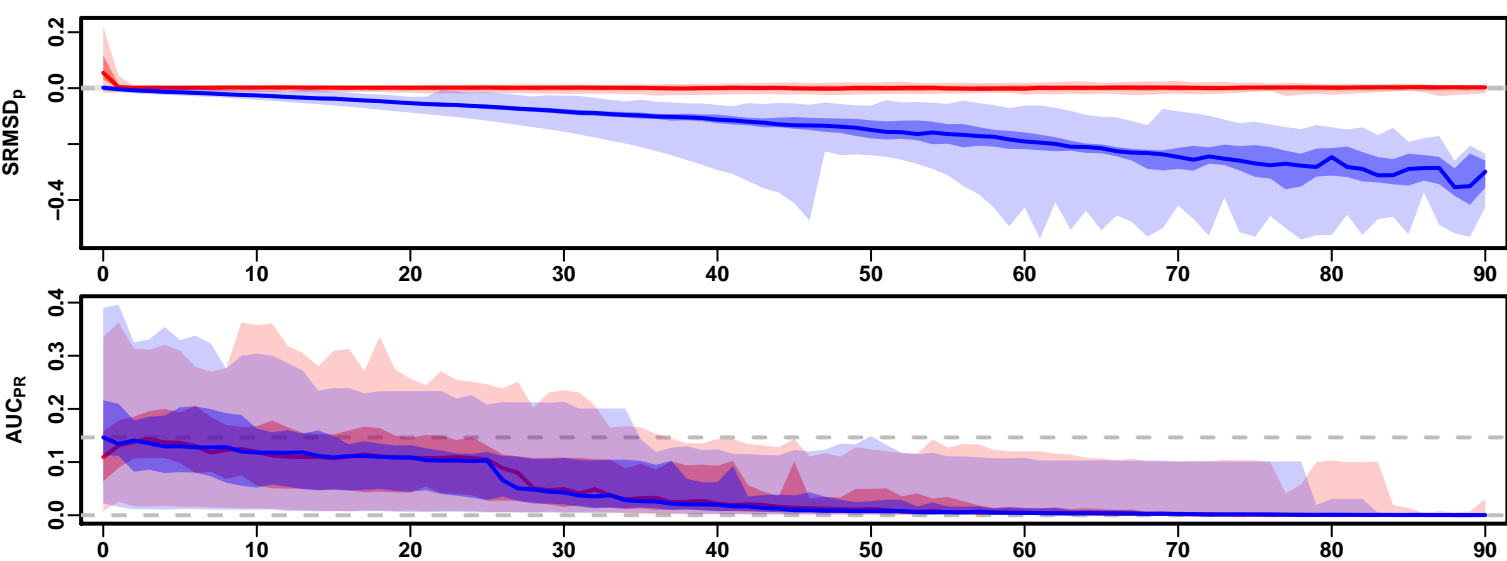**Large sample size sim.**

Small sample size sim.

Family structure sim.

Number of PCs (r)

Fixed effects (PCA)
Mixed effects (LMM)

median
quartiles
extrema