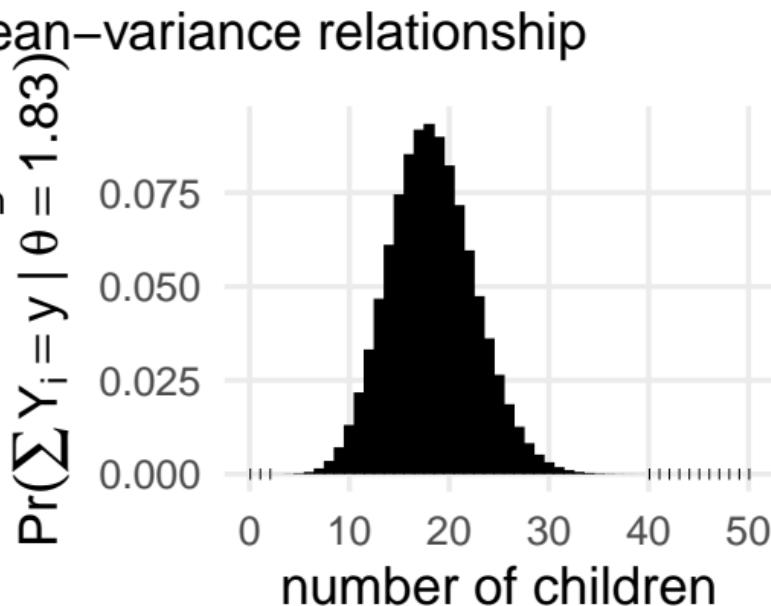
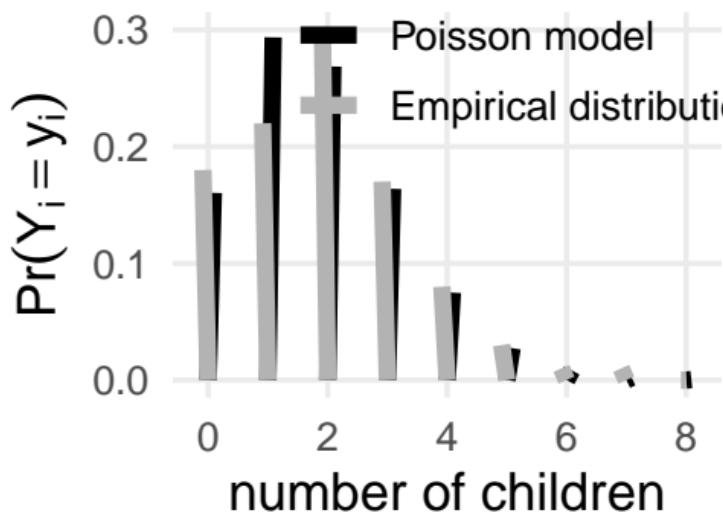


## Poisson distributions and the mean–variance relationship



Left: Poisson pmf with mean  $\lambda = 1.83$  (black) overlaid with an empirical distribution (grey)

Right: Distribution of the sum of 10 i.i.d. Poisson( $\lambda = 1.83$ ) variables; by additivity this is Pois

The increased spread illustrates the Poisson mean–variance relationship: larger means