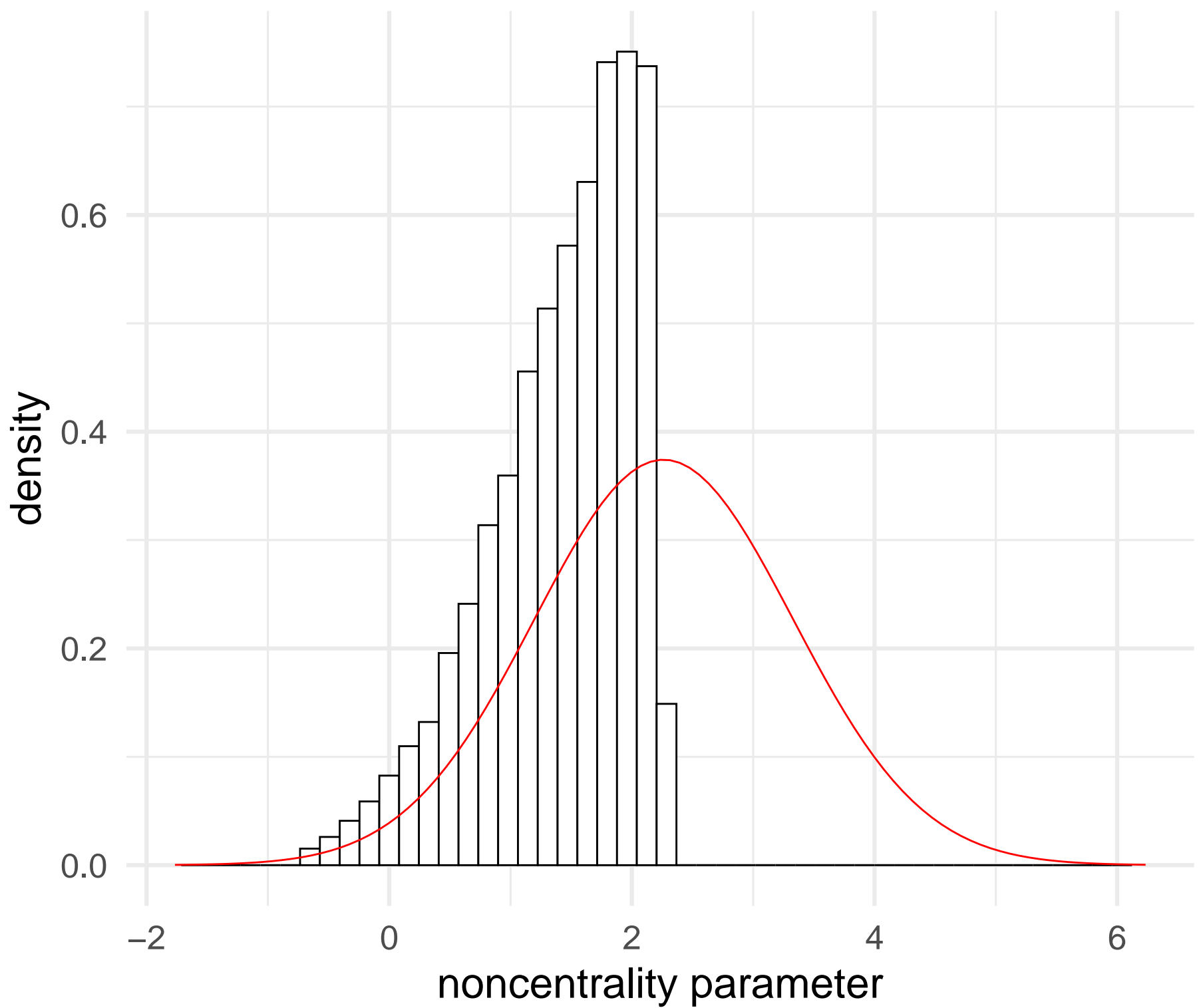histogram of 16457 noncentrality parameters