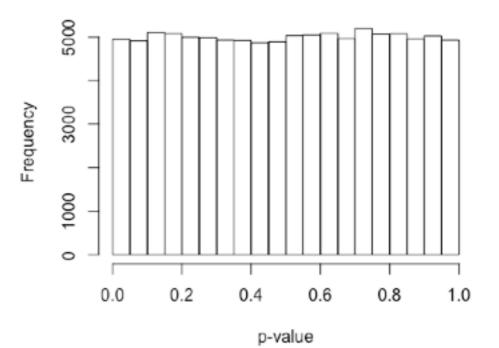
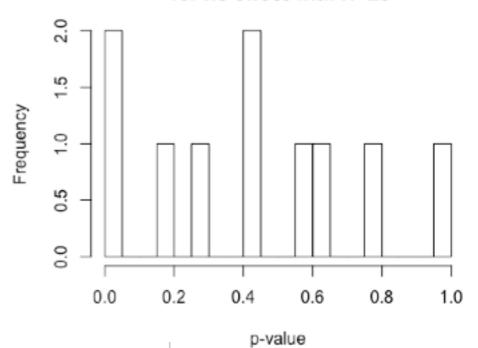
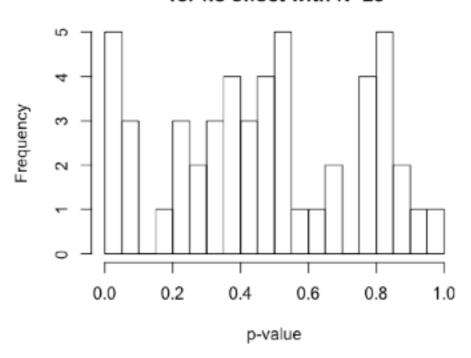
p-values for 100,000 simulations for no effect with N=25



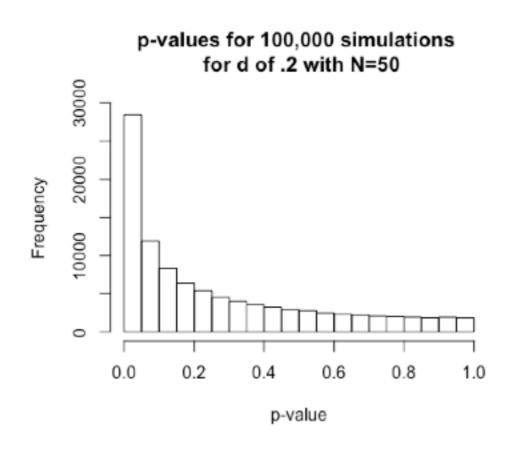
p-values for 10 simulations for no effect with N=25



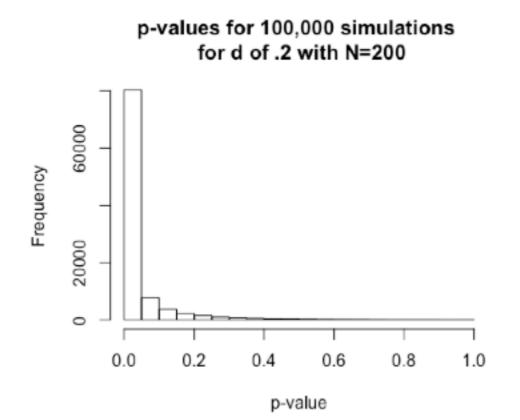
p-values for 50 simulations for no effect with N=25



Real effects will not always replicate.



Assuming p < .05 alpha, N=50 gives us around 30% power, which means that 70% of the time we'll miss the effect (even though it is present).



N=200 gives us around 80% power, which means that 20% of the time we'll miss finding the effect (even though it is present).