

For the same experiment, how many total Ss would we need to have a design with a Power of 0.8?

Please work this out long hand first of all. Then use G*Power to check your answer.

δ	$\alpha = 0.05$
2.6	0.74
2.7	0.77
2.8	0.8
2.9	0.83
3	0.85
3.1	0.87

References on Experimental Power

Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, 112, 155-159.

Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.

Howell, D.C. (2007). *Statistical Methods for Psychology*, Sixth Edition. Thompson.