

A screenshot of the 'Output parameters' window from the G*Power software. It displays five rows of data: 'Noncentrality parameter δ' with value 2.848001, 'Critical t' with value 1.993464, 'Df' with value 72, 'Total sample size' with value 73, and 'Actual power' with value 0.802299. The 'Total sample size' value '73' is highlighted with a light blue background, and a red arrow points from the text on the right to this value.

Noncentrality parameter δ	2.848001
Critical t	1.993464
Df	72
Total sample size	73
Actual power	0.802299

So according to G*Power, we need a sample size of 73 for a Power of just greater than 0.8

When we calculated sample size manually, we worked it out to be 72. Why the difference? This is because of rounding error. In G*Power, if we select the Power level to be 0.795 (which we would round up to 0.8), it calculates our sample size as 72.

Let's plot N
as a function
of Power.

