Button et al. (2013), Nature Reviews Neuroscience, small sample size undermines the reliability of neuroscience. Nord et al., (2017), Journal of Neuroscience, highlight wide heterogeneity in power in neuroscience studies.



Table 2. Median, maximum, and minimum power subdivided by study type

Group	Median power (%)	Minimum power (%)	Maximum power (%)	2.5 th and 97.5 th percentile (based on raw data)	95% HDI (based on GMMs)	Total N
All studies	23	0.05	1	0.05-1.00	0.00 - 0.72, 0.80 - 1.00	730
All studies excluding null	30	0.05	1	0.05-1.00	0.01-0.73, 0.79-1.00	638
Genetic	11	0.05	1	0.05-0.94	0.00 - 0.44, 0.63 - 0.93	234
Treatment	20	0.05	1	0.05-1.00	0.00 - 0.65, 0.91 - 1.00	145
Psychology	50	0.07	1	0.07-1.00	0.02-0.24, 0.28-1.00	198
Imaging	32	0.11	1	0.11-1.00	0.03-0.54, 0.71-1.00	65
Neurochemistry	47	0.07	1	0.07-1.00	0.02-0.79, 0.92-1.00	50
Miscellaneous	57	0.11	1	0.11-1.00	0.09 - 1.00	38

Is there not just "good science" and "bad science"?

Without realising it, good scientists have been engaging in questionable research practices (QRPs)...