Properties of Methods for Assessing Replication

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We first consider the case in which original and replication studies are equally powered but differ in terms of the true effect sizes. [Include more thorough description of table.]

	0.2/0.5	0.5/0.8	0.2/0.8
40% Power			
McNemar's	.0570(.0059)	.0537(.0072)	.0524(.0071)
T Test	.0522(.0066)	.0645(.0077)	.0727(.0081)
60% Power			
McNemar's	.0564(.0071)	.0584(.0067)	.0549(.0067)
T Test	.0516(.0069)	.0525(.0068)	.0575(.0074)
80% Power			
McNemar's	.0708(.0086)	.0712(.0095)	.0705(.0080)
T Test	.0479(.0061)	.0498(.0064)	.0489(.0063)

Table 1: Probability of rejecting the null hypothesis of the T test or McNemar's Test given...

We then consider the case in which original and replication studies have the same true effect sizes but differ in terms of power. [Include more thorough description of table.]

	40/60	60/80	40/80
$\theta = 0.2$			
McNemar's	.9989(.0011)	.9995(.0006)	1(0)
T Test	.8523(.0117)	.8151(.0128)	.9999(.0003)
$\theta = 0.5$			
McNemar's	.9990(.0009)	.9992(.0008)	1(0)
T Test	.8298(.0117)	.8191(.0125)	.9999(.0003)
$\theta = 0.8$			
McNemar's	.9986(.0011)	.9991(.0008)	1(0)
T Test	.8162(.0130)	.7645(.0155)	.9998(.0004)

Table 2: Probability of rejecting the null hypothesis of the T test or McNemar's Test given...