

Model	ICC ₀ Mean	ICC ₁ Mean	ICC ₀ rMSE	ICC ₁ rMSE	P.P Mean	P.P SD
Ind Comp	0.465	0.466	0.080	0.078	0.504	0.299
IW	0.462	0.464	0.082	0.079	0.504	0.303
Unpaired	0.444	0.445	0.086	0.084	0.503	0.256
Numeric	0.426	0.429	0.095	0.092	0.510	0.305

Table 1: The simulated performance of estimated ICCs and $P(\text{ICC}_1 > \text{ICC}_0 \mid \mathbf{Y})$ based on $\text{ICC}_0 = \text{ICC}_1 = 0.5$

Model	ICC ₀ C.I	ICC ₁ C.I	ICC ₁ - ICC ₀ C.I
Ind Comp	[0.282, 0.635]	[0.436, 0.790]	[-0.006, 0.347]
IW	[0.275, 0.637]	[0.433, 0.791]	[-0.008, 0.356]
Unpaired	[0.268, 0.612]	[0.416, 0.776]	[-0.007, 0.352]
Numeric	[0.244, 0.595]	[0.407, 0.761]	[-0.021, 0.347]

Table 2: Credible intervals for Table 1, based on correlated data

Model	ICC ₀ C.I	ICC ₁ C.I	ICC ₁ - ICC ₀ C.I
Ind Comp	[0.385, 0.615]	[0.575, 0.778]	[0.060, 0.306]
IW	[0.385, 0.623]	[0.582, 0.791]	[0.059, 0.320]
Unpaired	[0.397, 0.618]	[0.585, 0.783]	[0.066, 0.305]
Numeric	[0.334, 0.564]	[0.519, 0.741]	[0.053, 0.326]

Table 3: Credible intervals for Table 2, based on reversed sample sizes

Model	ICC ₀ C.I	ICC ₁ C.I	ICC ₁ - ICC ₀ C.I
Ind Comp	[0.281, 0.629]	[0.467, 0.785]	[-0.042, 0.415]
IW	[0.274, 0.638]	[0.472, 0.795]	[-0.049, 0.424]
Unpaired	[0.267, 0.614]	[0.450, 0.776]	[-0.043, 0.418]
Numeric	[0.262, 0.606]	[0.428, 0.765]	[-0.075, 0.413]

Table 4: Credible intervals for Table 3, based on independent case