Supplemental Material S8: Simulation results based on other conditions in testing γ_3.

(ρ_2=.05, ρ_1=.10, Δ_2=0.2 and Δ_3=0.5)

φ *	φ	I	J	K	η_2^{*2}	η_3^{*2}	ρ_2	ρ_1
.21	.49	15	15	5	.20	.20	.05	.10
.63	.78	15	15	10	.20	.20	.05	.10
.86	.92	15	15	15	.20	.20	.05	.10
.95	.97	15	15	20	.20	.20	.05	.10
.98	.99	15	15	25	.20	.20	.05	.10
.16	.37	15	15	5	.05	.20	.05	.10
.56	.64	15	15	10	.05	.20	.05	.10
.78	.81	15	15	15	.05	.20	.05	.10
.89	.90	15	15	20	.05	.20	.05	.10
.96	.95	15	15	25	.05	.20	.05	.10
.11	.18	15	15	5	.20	.05	.05	.10
.28	.31	15	15	10	.20	.05	.05	.10
.35	.43	15	15	15	.20	.05	.05	.10
.59	.54	15	15	20	.20	.05	.05	.10
.64	.63	15	15	25	.20	.05	.05	.10
.05	.25	5	5	5	.20	.20	.05	.10
.40	.44	5	5	10	.20	.20	.05	.10
.60	.60	5	5	15	.20	.20	.05	.10
.72	.72	5	5	20	.20	.20	.05	.10
.87	.81	5	5	25	.20	.20	.05	.10
.08	.21	15	15	5	.05	.20	.15	.20
.23	.37	15	15	10	.05	.20	.15	.20
.44	.51	15	15	15	.05	.20	.15	.20
.59	.63	15	15	20	.05	.20	.15	.20
.68	.72	15	15	25	.05	.20	.15	.20
.09	.09	15	15	5	.20	.05	.15	.20
.15	.14	15	15	10	.20	.05	.15	.20
.26	.19	15	15	15	.20	.05	.15	.20
.25	.24	15	15	20	.20	.05	.15	.20
.34	.29	15	15	25	.20	.05	.15	.20
.06	.17	5	5	5	.20	.20	.15	.20
.26	.30	5	5	10	.20	.20	.15	.20
.42	.42	5	5	15	.20	.20	.15	.20
.57	.52	5	5	20	.20	.20	.15	.20
.69	.62	5	5	25	.20	.20	.15	.20

I,J,K …the number of level 1,2 and 3 units.

η_2^{*2} …population proportion of the within level-3 unts sum of squares explained by the difference of level-2 units.

η_3^{*2} …population proportion of variance in predictor explained by the difference of level-3 units.

φ*,φ …simulated and theoretical statistical power.

Δ_2(Δ_3) …effect size from level-2 (level-3) context.

ρ_1, ρ_2…correlation of predictor-adjusted outcomes between level-1 and level-2 units.