

S3 Table. Complete list of additional simulation settings.

Modification	Number of potential mediators (p)	Sample Size (n)	Sparsity of signals	Degree of correlation	PVE _A	PVE _{IE}	PVE _{DE}
Non-negative Effects	2000	2500	Sparse	Baseline	0.20	0.10	0.10
Non-negative Effects	2000	2500	Sparse	Baseline	0.20	0.05	0.10
Non-negative Effects	2000	2500	Sparse	Baseline	0.10	0.10	0.10
Non-negative Effects	2000	2500	Sparse	Baseline	0.20	0.10	0.05
Unmeasured Confounding (Variance of confounder = 1)	2000	2500	Sparse	Baseline	0.20	0.10	0.10
Unmeasured Confounding (Variance of confounder = 2)	2000	2500	Sparse	Baseline	0.20	0.10	0.10
Unmeasured Confounding (Variance of confounder = 3)	2000	2500	Sparse	Baseline	0.20	0.10	0.10

PVE_A: Percent of variance in Y explained by the exposure. PVE_{IE}: Percent of variance in Y explained by the indirect effect. PVE_{DE}: Percent of variance in Y explained by the direct effect.