

Comparison of SAD variance among methods to adjust for population structure

Number of significant PC-wise
SAD components in first 20 PCs

None	GWAS sample PCs	Target sample PCs	Both sets of PCs	Linear Mixed Model (LMM)	LMM with GWAS sample PCs
1.5	1.2	1.6	1.6	2.2	1.7

Median across traits

Isotropic inflation

None	GWAS sample PCs	Target sample PCs	Both sets of PCs	Linear Mixed Model (LMM)	LMM with GWAS sample PCs
3.5	3.4	3.3	2.6	1.7	1.9

2	0	2	2	4	0
0	1	0	0	0	1
2	1	1	1	1	1
2	0	2	0	1	1
4	3	4	5	7	7
0	0	1	0	0	0
2	1	2	1	1	0
1	0	0	0	3	2
1	1	2	4	2	1
2	0	1	1	4	3
4	5	5	5	8	8
1	1	1	2	2	2
1	1	1	1	0	0
1	1	1	1	0	1
0	0	0	0	1	1
1	2	1	2	2	1
2	3	3	3	2	0

Diastolic blood pressure

Pulse rate

Years of schooling

Body mass index

Skin color

Pack years of smoking

Household income

Overall health rating

Neuroticism score

Height

Hair color

Birth weight

Hand grip strength

Waist circumference

Alcohol intake frequency

Hip circumference

Forced vital capacity

1.30	11.72	1.28	1.97	0.85	0.91
1.48	5.06	1.54	1.51	1.24	1.39
2.52	4.61	5.65	3.29	4.29	2.51
1.99	4.34	3.07	4.53	1.13	1.11
2.25	4.01	2.63	2.15	0.90	0.89
7.13	3.42	7.29	3.54	4.68	5.81
15.55	3.30	10.76	5.05	2.70	3.43
4.90	3.04	3.33	3.33	1.60	1.81
4.71	2.87	2.71	3.50	2.74	4.46
1.88	2.81	3.77	1.86	1.26	1.26
1.49	2.69	1.49	2.26	0.97	0.96
2.50	2.46	2.18	2.76	1.17	1.47
1.99	1.87	1.86	1.77	1.14	1.19
1.78	1.82	1.78	2.31	1.10	1.09
3.93	1.71	2.74	1.62	1.13	1.13
1.49	1.45	1.73	1.45	1.29	1.11
2.64	1.42	1.49	1.48	1.11	1.11