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
Median across traits	1	1	1	1	2	1

	None	GWAS sample PCs	Target sample PCs	Both sets of PCs	Linear Mixed Model (LMM)	LMM with GWAS sample PCs
Years of schooling	3	2	3	2	0	1
Height	1	2	2	3	4	3
Body mass index	1	1	1	1	0	1
Overall health rating	1	1	1	0	2	1
Diastolic blood pressure	3	3	3	3	5	5
Hair color	5	7	5	6	7	7
Household income	1	0	1	0	2	2
Hip circumference	1	1	1	1	1	1
Hand grip strength	1	1	1	0	1	0
Neuroticism score	0	1	0	0	2	3
Pack years of smoking	0	1	1	0	0	0
Alcohol intake frequency	1	1	1	0	1	1
Birth weight	1	2	1	1	2	3
Waist circumference	1	0	1	1	1	1
Skin color	6	5	6	4	7	7
Pulse rate	0	0	0	0	1	0
Forced vital capacity	3	3	3	3	2	1

Isotropic inflation

	None	GWAS sample PCs	Target sample PCs	Both sets of PCs	Linear Mixed Model (LMM)	LMM with GWAS sample PCs
Median across traits	2.4	2.5	2.4	2	1.3	1.4

	None	GWAS sample PCs	Target sample PCs	Both sets of PCs	Linear Mixed Model (LMM)	LMM with GWAS sample PCs
Years of schooling	3.49	8.88	3.45	4.24	4.77	2.17
Height	2.28	8.13	3.88	3.70	1.28	1.27
Body mass index	1.96	5.08	5.03	1.99	1.33	6.67
Overall health rating	3.17	5.06	3.08	2.78	2.91	2.43
Diastolic blood pressure	1.34	3.53	1.35	1.32	0.94	0.95
Hair color	9.21	3.07	2.41	3.43	0.98	0.98
Household income	2.99	2.88	5.42	5.99	2.46	2.51
Hip circumference	1.81	2.65	2.00	1.65	1.22	1.45
Hand grip strength	5.42	2.48	2.11	1.84	1.28	1.22
Neuroticism score	2.35	2.36	2.92	2.23	2.40	2.34
Pack years of smoking	2.14	2.29	1.94	1.91	2.09	2.17
Alcohol intake frequency	1.33	2.20	1.34	1.30	1.17	1.14
Birth weight	2.15	2.05	3.03	2.11	1.52	1.67
Waist circumference	1.95	1.96	1.96	1.94	1.29	1.29
Skin color	3.12	1.88	2.39	2.85	0.90	0.90
Pulse rate	2.86	1.82	1.72	1.83	1.35	1.84
Forced vital capacity	4.65	1.57	3.26	1.54	4.40	1.35