

Supplementary Material

Table SM 1 Descriptive statistics of the two samples

	HRS women	HRS men		WLS women	WLS men
N	6,165	4,576	N	4,625	4,218
Childless (%)	10.8	12.5	prop childless	6.6	6.3
Birth year (quartiles)			Birth year(quartiles)		
Q1	1932	1932	Q1	1939	1938
mean	1940	1939	mean	1939	1939
Q3	1949	1949	Q3	1939	1939
Education (%)			Education years (%)		
<High school	16.6	15.6			
High school	38.9	32.3	High school	58.3	48.6
Some college	24.4	22.8	Some college	16.9	16.7
>College	19.9	29.3	BSc	13.8	15.3
			>BSc	11.0	19.5
Age first marriage (%)			Age first marriage (%)		
<21	30.6	13.3	<21	37.8	11.6
21-25	24.3	36.2	21-25	47.4	57.3
26-30	7.3	14.5	26-30	7.6	19.9
31-35	3.9	5.9	31-35	1.7	4.3
36-40	3.3	3.1	36-40	0.5	1.1
41+	4.4	7.3	41+	0.8	1.3
never married	3.1	4.2	never married	3.5	3.6
unknown age	23.9	15.5	unknown age	0.7	0.9
First occupation (%)			First occupation (%)		
clerks	22.9	4.8	clerks	44.5	6.2
sales	9.2	8.9	sales	3.3	4.9
services	13.1	5.1	service	11.9	2.4
manager	9.5	16.9	administrators, managers	2.0	6.5
farming	0.9	2.8	farming	0.9	7.7
professionals	16.1	15.6	professional, technical	22.6	26.4
mechanics, production	20.8	27.7	manufacturing, construction	9.5	42.3
operators	7.5	16.2	no job	5.4	3.6
army	0.1	2.0			
Religion (%)			Religion (%)		
not religious	6.5	10.9	not religious	7.7	11.5
Other	1.0	1.0	Other	15.3	13.7
Protestant	61.6	57.1	Protestant	37.5	36.2
Roman Catholic	28.8	28.7	Roman Catholic	39.6	38.5
Jewish	2.1	2.4			

Note: for birth year we report the mean and the first and third quartile. In the WLS there is little variation in birth year due to the sampling design.

Table SM 2

Logistic regression results on childlessness in the female HRS sample.

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
Intercept	0.024	(0.004-0.098)	0.000	0.023	(0.004-0.096)	0.000	0.043	(0.028-0.065)	0.000	0.006	(0.001-0.036)	0.000
PGS (standardized)												
NEB	0.861	(0.748-0.992)	0.038							0.869	(0.741-1.019)	0.082
AFB	1.127	(1.017-1.249)	0.028							1.026	(0.912-1.155)	0.748
PCOS				1.095	(0.91-1.317)	0.367				1.134	(0.918-1.4)	0.285
Endometriosis				1.499	(0.799-2.814)	0.223				1.478	(0.724-3.021)	0.312
Menarche				1.081	(0.981-1.192)	0.110				1.072	(0.96-1.196)	0.200
Menopause				1.032	(0.94-1.132)	0.520				1.078	(0.970-1.199)	0.162
Socio-demographic												
Birth year (standardized)							1.34	(1.205-1.49)	0.000	1.36	(1.221-1.515)	0.000
Education years (standardized)							1.244	(1.082-1.432)	0.002	1.203	(1.043-1.389)	0.011
Age first marriage (reference is before 21)												
21-25							1.47	(1.081-2.009)	0.012	1.429	(1.048-1.955)	0.019
26-30							3.091	(2.158-4.417)	0.000	3.047	(2.121-4.366)	0.000
31-35							6.319	(4.288-9.279)	0.000	6.363	(4.302-9.377)	0.000
36-40							4.598	(2.794-7.386)	0.000	4.662	(2.818-7.531)	0.000
41+							5.663	(3.845-8.293)	0.000	5.69	(3.847-8.368)	0.000
never married							120.26	(74.901-200.1)	0.000	122.4	(75.96-204.70)	0.000
unknown age							3.432	(2.518-4.707)	0.000	3.479	(2.548-4.779)	0.000

Table SM 2

Continued

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
First occupation (reference are clerks)												
army							1.44	(0.073-9.574)	0.755	1.231	(0.061-8.561)	0.866
farming							1.633	(0.57-3.937)	0.325	1.569	(0.541-3.83)	0.380
manager							1.391	(1.016-1.895)	0.051	1.415	(1.03-1.933)	0.042
mechanics, production							1.016	(0.753-1.369)	0.960	1.028	(0.76-1.387)	0.916
operators							0.541	(0.316-0.884)	0.018	0.554	(0.322-0.91)	0.024
professionals							1.337	(1.005-1.778)	0.066	1.377	(1.034-1.835)	0.044
sales							1.008	(0.702-1.429)	0.901	1.023	(0.711-1.453)	0.956
services							0.714	(0.496-1.013)	0.065	0.729	(0.506-1.038)	0.085
Religion (reference is not religious)												
Other							1.215	(0.501-2.705)	0.741	1.231	(0.509-2.741)	0.995
Protestant							0.923	(0.668-1.297)	0.976	0.982	(0.704-1.39)	0.982
Roman Catholic							0.977	(0.686-1.407)	0.774	0.96	(0.667-1.397)	0.391
Jewish							0.879	(0.448-1.639)	0.593	0.589	(0.184-1.869)	0.571
McFadden R2	0.001/-0.001+			0.000/-0.003+			0.182			0.178		
adj												
N	6165			6165			6133			6133		

Notes: In model 1,2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model without and with PCs. The models with PCs have negative r2 because of the large number of coefficients and the poor fit. Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome.

Table SM 3

Multilevel logistic regression results on childlessness in the female WLS sample.

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
Intercept	0.066	(0.059-0.075)	0.000	0.067	(0.06-0.076)	0.000	0.053	(0.028-0.099)	0.000	0.051	(0.027-0.098)	0.000
PGS (standardized)												
NEB	1.002	(0.876-1.147)	0.976							1.057	(0.877-1.274)	0.559
AFB	1.226	(1.074-1.339)	0.000							1.147	(0.962-1.367)	0.127
PCOS				1.007	(0.832-1.220)	0.893				0.949	(0.736-1.222)	0.684
Endometriosis				1.045	(0.758-1.440)	0.655				1.035	(0.68-1.577)	0.871
Menarche				1.086	(0.953-1.237)	0.114				1.087	(0.911-1.297)	0.355
Menopause				0.945	(0.813-1.099)	0.316				0.768	(0.619-0.954)	0.018
Socio-demographic												
Birth year (standardized)							0.972	(0.82-1.153)	0.749	0.986	(0.829-1.173)	0.874
Education years (standardized)							1.525	(1.212-1.92)	0.000	1.527	(1.204-1.936)	0.000
Age at first marriage (reference is before 21)												
21-25							2.202	(1.36-3.564)	0.001	2.199	(1.353-3.575)	0.001
26-30							5.61	(3.109-10.121)	0.000	5.394	(2.956-9.842)	0.000
31-35							13.047	(6.182-27.535)	0.000	12.63	(5.844-27.314)	0.000
36-40							10.833	(2.836-41.384)	0.000	10.85	(2.712-43.475)	0.001
41+							59.403	(25.389-138.9)	0.000	73.84	(30.13-180.95)	0.000
never married							471.38	(234.80-946.3)	0.000	560.8	(272.8-1152.8)	0.000
unknown age							9.351	(0.981-89.151)	0.052	12.05	(1.22-119.117)	0.033

Table SM 3

Continued

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
First occupation (reference are clerks)												
administrators, managers							1.309	(0.526-3.256)	0.563	1.351	(0.535-3.412)	0.524
farming							1.067	(0.142-8.032)	0.949	0.986	(0.128-7.575)	0.989
manufacturing, construction							1.124	(0.61-2.071)	0.709	1.172	(0.633-2.168)	0.614
no job							0.394	(0.167-0.932)	0.034	0.377	(0.156-0.912)	0.030
professional, technical							0.554	(0.336-0.915)	0.021	0.554	(0.331-0.928)	0.025
sales							0.554	(0.176-1.749)	0.314	0.502	(0.154-1.638)	0.254
service							0.58	(0.296-1.137)	0.113	0.505	(0.248-1.031)	0.061
Religion (reference is not religious)												
Other							0.443	(0.25-0.786)	0.005	0.414	(0.229-0.748)	0.004
Protestant							0.376	(0.217-0.652)	0.001	0.334	(0.188-0.595)	0.000
Roman Catholic							0.286	(0.163-0.502)	0.000	0.277	(0.155-0.495)	0.000
N individuals	4625			4625			4327			4327		
N households	3999			3999			3775			3775		
Household level variance	0.000			0.000			0.000			0.000		
VPC ($\sigma^2_{\mu 0}/(\sigma^2_{\mu 0} + 3.29)$)	0.000			0.000			0.000			0.000		
McFadden R2 adj	0.005/0.000+			-0.001/-0.007+			0.424			0.418		

Notes: In model 1,2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model without and with PCs. The models with PCs have negative r2 because of the large number of coefficients and the poor fit. Abbreviations: OR,

odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome; VPC, variance partitioning coefficient.

Table SM 4

Logistic regression results on childlessness in the male HRS sample.

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
Intercept	0.103	(0.038-0.173)	0.000	0.099	(0.036-0.168)	0.000	0.029	(0.014-0.056)	0.000	0.012	(0.003-0.034)	0.000
PGS (standardized)												
NEB	0.873	(0.749-1.018)	0.067							0.847	(0.706-1.018)	0.071
AFB	1.078	(0.962-1.209)	0.232							1.105	(0.962-1.27)	0.198
TDS				1.157	(0.901-1.488)	0.218				1.021	(0.761-1.37)	0.831
Azoospermia				1.030	(0.941-1.127)	0.525				1.014	(0.911-1.128)	0.800
TGCC				0.787	(0.61-1.015)	0.063				0.825	(0.61-1.115)	0.230
Infertility (low sperm count)				1.086	(0.798-1.478)	0.669				1.213	(0.844-1.741)	0.319
Cryptorchidism				0.848	(0.67-1.074)	0.157				0.783	(0.592-1.035)	0.071
Hypospadias				0.974	(0.86-1.104)	0.559				1.008	(0.869-1.171)	0.908
Socio-demographic												
Birth year (standardized)							1.709	(1.519-1.926)	0.000	1.744	(1.546-1.97)	0.000
Education years (standardized)							1.06	(0.909-1.24)	0.290	1.018	(0.87-1.194)	0.570
Age first marriage (reference is before 21)												
21-25							2.018	(1.24-3.454)	0.009	2.000	(1.227-3.431)	0.010
26-30							3.93	(2.361-6.847)	0.000	3.814	(2.283-6.665)	0.000
31-35							6.839	(3.949-12.288)	0.000	6.856	(3.936-12.381)	0.000
36-40							8.784	(4.713-16.701)	0.000	9.324	(4.961-17.867)	0.000
41+							8.741	(5.103-15.578)	0.000	8.76	(5.09-15.68)	0.000
never married							229.77	(123.04-454.0)	0.000	256.5	(135.99-511.8)	0.000
unknown age							8.906	(5.337-15.576)	0.000	9.159	(5.462-16.086)	0.000

Table SM 4

Continued

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
First occupation (reference are clerks)												
army							1.114	(0.461-2.534)	0.908	1.186	(0.488-2.717)	0.995
farming							0.699	(0.233-1.824)	0.477	0.755	(0.25-1.988)	0.591
manager							0.924	(0.543-1.625)	0.686	0.92	(0.538-1.621)	0.670
mechanics, production							1.152	(0.699-1.972)	0.645	1.197	(0.723-2.056)	0.542
operators							1.294	(0.763-2.27)	0.351	1.341	(0.786-2.365)	0.289
professionals							1.245	(0.736-2.179)	0.505	1.303	(0.765-2.291)	0.402
sales							0.751	(0.409-1.398)	0.288	0.758	(0.411-1.418)	0.311
services							1.063	(0.545-2.08)	0.883	1.149	(0.584-2.263)	0.703
Religion (reference is not religious)												
Other							1.912	(0.829-4.152)	0.245	2.017	(0.858-4.481)	0.320
Protestant							0.842	(0.624-1.149)	0.305	0.865	(0.633-1.195)	0.292
Roman Catholic							0.854	(0.605-1.211)	0.071	0.833	(0.576-1.209)	0.157
Jewish							0.466	(0.192-1.012)	0.106	0.416	(0.125-1.354)	0.082
McFadden R2	-0.001/-0.003+			-0.003/-0.005+			0.236			0.232		
adj												
N	4576			4576			4551			4551		

Notes: In model 1,2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model without and with PCs. The models with PCs have negative r2 because of the large number of coefficients and the poor fit. Abbreviations: OR,

odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors

Table SM 5

Multilevel logistic regression results on childlessness in the male WLS sample.

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
Intercept	0.064	(0.056-0.074)	0.000	0.063	(0.055-0.073)	0.000	0.009	(0.002-0.045)	0.000	0.007	(0.001-0.035)	0.000
PGS (standardized)												
NEB	0.911	(0.787-1.055)	0.213							0.899	(0.726-1.113)	0.329
AFB	1.127	(0.987-1.286)	0.078							0.977	(0.806-1.183)	0.809
TDS				0.855	(0.618-1.182)	0.342				0.885	(0.559-1.403)	0.605
Azoospermia				0.918	(0.809-1.043)	0.188				0.808	(0.669-0.975)	0.026
TGCC				1.156	(0.922-1.449)	0.209				1.092	(0.791-1.506)	0.593
Infertility (low sperm count)				1.266	(1.036-1.548)	0.021				0.983	(0.739-1.308)	0.908
Cryptorchidism				0.99	(0.811-1.207)	0.919				1.054	(0.798-1.392)	0.712
Hypospadias				1.000	(0.872-1.147)	0.999				1.06	(0.869-1.292)	0.567
Socio-demographic												
Birth year (standardized)							1.058	(0.889-1.258)	0.528	1.054	(0.883-1.257)	0.561
Education years (standardized)							0.996	(0.783-1.265)	0.971	1.026	(0.803-1.311)	0.836
Age first marriage (reference is before 21)												
21-25							4.179	(1.004-17.384)	0.049	4.204	(1.006-17.57)	0.049
26-30							10.98	(2.623-45.952)	0.001	10.96	(2.60-46.18)	0.001
31-35							27.195	(6.228-118.74)	0.000	26.64	(6.04-117.46)	0.000
36-40							44.831	(8.782-228.86)	0.000	55.62	(10.69-289.11)	0.000
41+							90.207	(19.24-422.91)	0.000	92.13	(19.28-440.23)	0.000
never married							1896.8	(421.03-8545)	0.000	2529	(547.8-1167.)	0.000
unknown age							58.994	(8.62-403.716)	0.000	59.95	(8.428-426.53)	0.000

Table SM 5

Continued

	Model 1			Model 2			Model 3			Model 4		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
First occupation (reference are clerks)												
administrators, managers							0.981	(0.381-2.526)	0.968	1.091	(0.415-2.87)	0.860
farming							0.856	(0.337-2.175)	0.744	0.989	(0.384-2.546)	0.981
manufacturing, construction							0.745	(0.355-1.563)	0.436	0.837	(0.393-1.784)	0.646
no job							0.682	(0.205-2.273)	0.533	0.726	(0.216-2.442)	0.605
professional, technical							1.024	(0.461-2.272)	0.954	1.121	(0.5-2.516)	0.781
sales							0.52	(0.159-1.696)	0.278	0.518	(0.151-1.774)	0.295
service							0.331	(0.059-1.856)	0.209	0.381	(0.067-2.176)	0.278
Religion (reference is not religious)												
Other							0.635	(0.358-1.126)	0.120	0.678	(0.376-1.223)	0.197
Protestant							0.535	(0.311-0.922)	0.024	0.537	(0.304-0.947)	0.032
Roman Catholic							0.504	(0.296-0.857)	0.011	0.496	(0.286-0.861)	0.013
N individuals	4218			4218			3957			3957		
N households	3742			3742			3537			3537		
Household level variance	0.231			0.221			0.114			0.107		
VPC ($\sigma^2_{\mu 0}/(\sigma^2_{\mu 0}+3.29)$)	0.066			0.063			0.034			0.032		
McFadden R2 adj	0.002/-0.011+			-0.002/-0.013+			0.449			0.438		

Notes: In model 1,2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model with and without PCs. The models with PCs have negative r2 because of the large number of coefficients and the poor fit. Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors; VPC, variance partitioning coefficient.

Table SM 6

Sample size and effect of the PGSs

Women								
PGS	N GWAS	nr SNPs GWAS	SNPs HRS	SNPs WLS	bHRS	pHRS	bWLS	pWLS
AFB	251,151	2,470,767	223,702	204,518	0.144	0.004	0.203	0.001
NEB	343,072	2,474,038	223,874	205,336	-0.187	0.008	-0.057	0.421
PCOS	3,930	965,435	91,618	88,052	0.093	0.322	0.005	0.943
Endometriosis	10,254	7,531,796	219,436	196,652	0.415	0.320	0.036	0.839
EndometriosisB+	8,424	7,528,702	218,924	196,378	0.099	0.636	-0.097	0.448
Menarche	329,345	10,562,209	218,050	195,429	0.078	0.114	0.081	0.220
Menopause	69,360	2,383,153	179,138	191,400	0.033	0.483	-0.053	0.491
Men								
PGS	N GWAS	nr SNPs GWAS	SNPs HRS	SNPs WLS	bHRS	pHRS	bWLS	pWLS
AFB	251,151	2,470,767	223,702	204,518	0.099	0.077	0.164	0.018
NEB	343,072	2,474,038	223,874	205,336	-0.16	0.035	-0.150	0.050
TDS	927	626,955	134,084	125,454	-0.010	0.899	0.057	0.415
Azoospermia	132	324,453	133,216	121,922	0.028	0.529	-0.106	0.122
Azoospermia++	172	324,471	133,100	121,761	0.037	0.503	-0.085	0.219
TGCC	651	626,955	134,366	125,754	-0.105	0.158	0.077	0.290
Infertility	546	626,955	134,072	125,242	0.145	0.189	0.138	0.084
Cryptorchidism	577	629,955	134,110	125,522	-0.073	0.369	0.010	0.897
Hypospadias	470	626,955	130,344	121,046	-0.009	0.878	0.010	0.883

Notes: N GWAS are the number of participants in the GWAS study, nr SNPs GWAS are the number of SNPs reported in the result file from the original GWAS. SNPs HRS are the number of SNPs included in the PGS with p-value ≤ 1 in HRS, SNPs WLS are the number of SNPs included in the PGS with p-value ≤ 1 in WLS. bHRS and pHRS are the b-value and p-value of the effect in the HRS sample, including only 1 PGS and 20 principal components, bWLS and pWLS are the b-value and p-value of the effect in the WLS sample, including only 1 PGS and 20 principal components. +EndometriosisB reflects the more severe form of the disease. ++The normal azoospermia GWAS used compares individuals with azoospermia with those with normal sperm count, the second azoospermia compares them to men with normal sperm count and those with oligozoospermia. Abbreviations: PGS, polygenic risk scores; NEB, number of ever born children, AFB, age at first birth; PCOS, polycystic ovary syndrome; TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors. Significant p-values ($p < 0.05$) are shown in bold.

Table SM 7

Multilevel models on childlessness on individuals clustered in households, with interactions by gender

	HRS			WLS		
	OR	95%CI	p	OR	95%CI	p
Intercept	0.009	(0.002-0.035)	0.000	0.008	(0.002-0.039)	0.000
PGS (standardized)						
NEB	0.889	(0.724-1.093)	0.268	0.91	(0.74-1.119)	0.383
AFB	1.116	(0.953-1.307)	0.202	0.975	(0.806-1.179)	0.803
PCOS	1.026	(0.805-1.309)	0.858	0.804	(0.636-1.017)	0.071
Endometriosis	1.74	(0.842-3.598)	0.107	0.997	(0.673-1.478)	0.949
Menarche	1.009	(0.871-1.168)	0.911	0.855	(0.71-1.031)	0.099
Menopause	1.02	(0.873-1.191)	0.861	1.057	(0.862-1.295)	0.595
TDS	1.025	(0.737-1.425)	0.851	0.864	(0.588-1.269)	0.555
Azoospermia	1.006	(0.89-1.136)	0.937	0.821	(0.681-0.989)	0.036
TGCC	0.837	(0.596-1.174)	0.343	1.087	(0.805-1.468)	0.602
Infertility	1.248	(0.831-1.875)	0.286	1.003	(0.769-1.31)	1.000
Cryptorchidism	0.755	(0.551-1.036)	0.067	1.075	(0.889-1.301)	0.554
Hypospadias	1.006	(0.847-1.195)	0.920	1.141	(1.001-1.3)	0.518
Socio-demographic						
Birth year (standardized)	1.786	(1.555-2.051)	0.000	1.062	(0.891-1.265)	0.485
Gender (reference is male)	1.43	(0.495-4.134)	0.613	6.207	(1.118-34.457)	0.037
Education years (standardized)	1.016	(0.849-1.217)	0.624	1.023	(0.803-1.304)	0.859
Age first marriage (reference is before 21)						
21-25	1.949	(1.125-3.377)	0.020	4.026	(0.966-16.779)	0.055
26-30	3.836	(2.147-6.851)	0.000	10.989	(2.619-46.104)	0.001
31-35	6.757	(3.583-12.745)	0.000	27.634	(6.307-121.074)	0.000
36-40	9.221	(4.486-18.954)	0.000	50.18	(9.72-259.067)	0.000
41+	9.056	(4.894-16.759)	0.000	88.417	(18.672-418.674)	0.000
never married	305.777	(148.668-628.917)	0.000	2270.972	(498.53-10345.0)	0.000
unknown age	9.659	(5.357-17.415)	0.000	55.422	(8.046-381.738)	0.000

Table SM 7

Continued

	HRS			WLS		
	OR	95%CI	p	OR	95%CI	p
First occupation (reference are clerks)						
administrators, managers				1067.000	(0.414-2.755)	0.886
farming	0.776	(0.25-2.405)	0.659	0.978	(0.384-2.495)	0.981
manufacturing, construction				0.828	(0.395-1.737)	0.622
no job				0.731	(0.217-2.463)	0.615
professional, technical	1.3	(0.695-2.431)	0.474	1.087	(0.492-2.401)	0.824
sales	0.778	(0.387-1.565)	0.410	0.539	(0.16-1.813)	0.316
service	1.106	(0.513-2.388)	0.814	0.347	(0.059-2.048)	0.243
army	1.271	(0.479-3.375)	0.911			
mechanics, production	1.172	(0.646-2.125)	0.637			
operators	1.366	(0.73-2.559)	0.321			
managers	0.912	(0.486-1.713)	0.706			
Religion (reference is not religious)						
Other	2.272	(0.845-6.106)	0.097	0.65	(0.363-1.164)	0.138
Protestant	0.871	(0.605-1.253)	0.413	0.515	(0.296-0.899)	0.019
Roman Catholic	0.822	(0.54-1.251)	0.317	0.511	(0.297-0.877)	0.015
Jewish	0.427	(0.124-1.477)	0.188			
Interaction with gender (reference is male)						
PGS * gender						
NEB	0.961	(0.734-1.258)	0.763	1.141	(0.869-1.499)	0.342
AFB	0.929	(0.756-1.142)	0.492	1.2	(0.928-1.552)	0.164
PCOS	1.133	(0.858-1.496)	0.380	1.212	(0.926-1.587)	0.162
Endometriosis	0.895	(0.415-1.931)	0.729	1.125	(0.72-1.758)	0.604
Menarche	1.065	(0.879-1.291)	0.506	1.253	(0.972-1.616)	0.082
Menopause	1.057	(0.875-1.276)	0.511	0.78	(0.597-1.02)	0.070
TDS	0.899	(0.582-1.391)	0.589	1.31	(0.731-2.347)	0.364
Azoospermia	0.998	(0.851-1.17)	0.997	1.165	(0.909-1.492)	0.228
TGCC	1.223	(0.776-1.925)	0.410	0.919	(0.601-1.405)	0.697
Infertility	0.761	(0.439-1.319)	0.354	0.752	(0.522-1.085)	0.128
Cryptorchidism	1.347	(0.883-2.054)	0.134	0.985	(0.685-1.416)	0.933
Hypospadias	1.048	(0.833-1.32)	0.607	1.13	(0.871-1.465)	0.356
Socio-demographic						
Birth year * gender	0.768	(0.641-0.919)	0.005	0.934	(0.73-1.195)	0.578
Education years * gender	1.164	(0.917-1.477)	0.307	1.504	(1.073-2.11)	0.018

Table SM 7

Continued

	HRS			WLS		
	OR	95%CI	p	OR	95%CI	p
Age first marriage (reference is before 21) * gender						
21-25	0.756	(0.397-1.441)	0.445	0.533	(0.118-2.405)	0.410
26-30	0.835	(0.412-1.69)	0.635	0.492	(0.104-2.329)	0.371
31-35	0.963	(0.443-2.091)	0.951	0.458	(0.086-2.428)	0.368
36-40	0.505	(0.203-1.258)	0.177	0.236	(0.028-2.002)	0.195
41+	0.619	(0.294-1.302)	0.184	0.674	(0.113-4.031)	0.652
never married	0.519	(0.209-1.29)	0.182	0.235	(0.044-1.256)	0.095
unknown age	0.381	(0.193-0.752)	0.010	0.199	(0.01-3.938)	0.288
First occupation (reference are clerks) * gender						
administrators, managers				1.281	(0.34-4.833)	0.725
farming	1.855	(0.385-8.923)	0.448	1.149	(0.123-10.745)	0.899
manufacturing, construction				1.446	(0.555-3.764)	0.445
no job				0.548	(0.123-2.437)	0.428
professional, technical	1.065	(0.525-2.161)	0.837	0.522	(0.203-1.342)	0.174
sales	1.315	(0.585-2.955)	0.484	0.916	(0.169-4.951)	0.933
service	0.672	(0.282-1.601)	0.378	1.554	(0.23-10.524)	0.645
army	0.929	(0.048-18.011)	0.971			
mechanics, production	0.85	(0.428-1.687)	0.651			
operators	0.413	(0.178-0.959)	0.037			
managers	1577.000	(0.763-3.257)	0.209			
Religion (reference is not religious) * gender						
Other	0.565	(0.142-2.244)	0.564	0.67	(0.293-1.53)	0.346
Protestant	1.132	(0.671-1.911)	0.515	0.71	(0.323-1.561)	0.392
Roman Catholic	1.154	(0.647-2.058)	0.668	0.531	(0.242-1.165)	0.112
Jewish	1.367	(0.322-5.811)	0.426			
N	10686			8284		
N households	7568			6423		
Household level variance	2.016			0.033		
VPC ($\sigma^2_{\mu 0}/(\sigma^2_{\mu 0}+3.29)$)	0.379			0.01		
McFadden R2 adj+	0.207			0.431		

Notes: We control for the first 20 genetic principal components. Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS,

polygenic risk scores; NEB, number ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome; TDS, testicular dysgenesis syndrome;

TGCC, testicular germ cell tumors; VPC, variance partitioning coefficient.

Table SM 8

Logistic regression results on childlessness in the black female HRS sample

	Model 1			Model 2			Model 3			Model 4			Diff white sample p
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	
Intercept	0.111	(0.036-0.311)	0.000	0.105	(0.037-0.326)	0.000	0.047	(0.016-0.139)	0.000	0.057	(0.011-0.298)	0.000	
PGS (standardized)													
NEB	0.802	(0.538-1.194)	0.352							0.863	(0.565-1.319)	0.604	0.973
AFB	1.206	(0.907-1.602)	0.172							1.16	(0.855-1.575)	0.313	0.268
PCOS				1.214	(0.832-1.771)	0.274				1.162	(0.777-1.74)	0.432	0.850
Endometriosis				1.041	(0.246-4.397)	0.733				1.167	(0.258-5.277)	0.626	0.587
Menarche				0.85	(0.633-1.141)	0.585				0.833	(0.611-1.136)	0.747	0.526
Menopause				0.859	(0.643-1.147)	0.306				0.840	(0.650-1.200)	0.430	0.497
Socio-demographic													
Birth year (standardized)							0.703	(0.564-0.876)	0.003	0.716	(0.572-0.896)	0.007	0.000
Education years (standardized)							1.491	(1.169-1.902)	0.003	1.44	(1.122-1.849)	0.011	0.211

Table SM 8

Continued

Model 1			Model 2			Model 3			Model 4			Diff white sample
OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	p
Age first marriage (reference is before 21)												
21-25						1.715	(0.761-3.871)	0.183	1.673	(0.734-3.815)	0.213	0.587
26-30						4.228	(1.796-9.953)	0.001	3.876	(1.606-9.358)	0.001	0.364
31-35						3.645	(1.443-9.209)	0.012	3.751	(1.455-9.669)	0.000	0.407
36-40						7.573	(3.001-19.11)	0.000	8.633	(3.352-22.234)	0.000	0.192
41+						7.599	(3.027-19.08)	0.000	8.557	(3.314-22.094)	0.000	0.241
never married						8.546	(4.067-17.957)	0.000	9.395	(4.405-20.038)	0.000	0.000
unknown age						1.823	(0.825-4.028)	0.120	1.889	(0.846-4.214)	0.096	0.383
First occupation (reference are clerks)												
army						6.377	(0.336-120.978)	0.188	7.587	(0.327-176.109)	0.223	0.356
farming						1.68	(0.176-16.035)	0.649	1.321	(0.129-13.539)	0.807	0.877
manager						0.866	(0.361-2.084)	0.830	0.775	(0.31-1.935)	0.680	0.234
mechanics, production						0.757	(0.392-1.467)	0.465	0.803	(0.408-1.58)	0.488	0.502
operators						0.623	(0.302-1.287)	0.227	0.62	(0.295-1.306)	0.182	0.997
professionals						0.731	(0.397-1.346)	0.337	0.731	(0.388-1.376)	0.374	0.073
sales						0.925	(0.374-2.285)	0.953	0.983	(0.389-2.485)	0.971	0.708
services						0.557	(0.311-1.003)	0.052	0.542	(0.297-0.988)	0.040	0.444

Table SM 8

Continued

	Model 1			Model 2			Model 3			Model 4			Diff white sample p
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	
Religion (reference is not religious)													
Protestant							0.852	(0.362- 2.002)	0.696	0.899	(0.367- 2.207)	0.780	0.876
Roman Catholic							0.596	(0.195- 1.818)	0.261	0.534	(0.164- 1.741)	0.218	0.323
Jewish							0.000	(0-100)	0.983	0.000	(0-100)	0.983	0.964
Other							1.511	(0.385- 5.931)	0.529	1.525	(0.368- 6.316)	0.491	0.940
McFadden R2	-0.020/-0.004+			-0.025/ -0.009+			0.045			0.019			
adj													
N	1539			1539			1532			1532			

Notes: In model 1,2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model with and without PCs. Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome. The difference with the white sample is estimated by testing interactions with ethnicity in the full sample.

Table SM 9

Logistic regression results on childlessness in the black male HRS sample

	Model 1			Model 2			Model 3			Model 4			Diff white sample p
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	
Intercept	0.023	(0.004-0.143)	0.000	0.022	(0.003-0.146)	0.000	0.047	(0.011-0.211)	0.000	0.014	(0.001-0.178)	0.000	
PGS (standardized)													
NEB	1.117	(0.702-1.778)	0.632							1.033	(0.613-1.742)	0.895	0.715
AFB	1.108	(0.766-1.603)	0.568							0.954	(0.629-1.446)	0.844	0.430
TDS				0.816	(0.495-1.343)	0.414				0.803	(0.466-1.384)	0.362	0.895
Azoospermia				1.198	(0.941-1.525)	0.152				1.244	(0.958-1.615)	0.089	0.232
TGCC				1.056	(0.594-1.876)	0.841				1.045	(0.567-1.927)	0.864	0.958
Infertility				1.813	(0.919-3.574)	0.095				2.005	(0.958-4.194)	0.065	0.645
Hypospadias				1.015	(0.712-1.450)	0.858				1.150	(0.783-1.693)	0.823	0.984
Cryptorchidism				0.942	(0.565-1.572)	0.933				0.915	(0.516-1.624)	0.476	0.932
Socio-demographic													
Birth year (standardized)							1.013	(0.767-1.338)	0.878	1.009	(0.753-1.352)	0.890	0.000
Education years (standardized)							1.196	(0.871-1.642)	0.305	1.157	(0.833-1.607)	0.427	0.621

Table SM 9

Continued

Model 1			Model 2			Model 3			Model 4			Diff white sample p
OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	
Age first marriage (reference is before 21)												
21-25						1.635	(0.512- 5.221)	0.391	1.629	(0.496- 5.347)	0.435	0.810
26-30						1.575	(0.443- 5.597)	0.491	1.844	(0.505- 6.74)	0.356	0.272
31-35						2.298	(0.591- 8.941)	0.197	2.491	(0.62- 10.004)	0.161	0.137
36-40						3.741	(0.951- 14.725)	0.061	4.222	(1.03- 17.299)	0.042	0.158
41+						4.88	(1.453- 16.394)	0.011	5.513	(1.583- 19.191)	0.007	0.466
never married						18.207	(6.009- 55.167)	0.000	21.608	(6.892- 67.74)	0.000	0.000
unknown age						2.274	(0.671- 7.705)	0.178	2.31	(0.667- 7.993)	0.176	0.046
First occupation (reference are clerks)												
army						2.332	(0.447- 12.175)	0.312	2.046	(0.393- 10.648)	0.354	0.463
farming						0.778	(0.122- 4.962)	0.789	0.62	(0.092- 4.193)	0.625	0.489
manager						0.924	(0.222- 3.848)	0.938	0.889	(0.206- 3.83)	0.930	0.940
mechanics, production						1.144	(0.377- 3.465)	0.794	1.058	(0.343- 3.271)	0.893	0.853
operators						1.233	(0.407- 3.735)	0.708	1.11	(0.362- 3.406)	0.825	0.841
professionals						0.992	(0.241- 4.081)	0.980	0.934	(0.223- 3.91)	0.990	0.435
sales						0.684	(0.139- 3.356)	0.656	0.592	(0.11- 3.171)	0.570	0.646
services						0.722	(0.204- 2.552)	0.639	0.634	(0.175- 2.298)	0.530	0.550

Table SM 9

Continued

Religion (reference is not religious)													
Model 1			Model 2			Model 3			Model 4			Diff white sample	
OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p	p	
Protestant						0.633	(0.295-1.359)	0.213	0.54	(0.24-1.211)	0.119	0.363	
Roman Catholic						0.542	(0.175-1.678)	0.330	0.52	(0.156-1.73)	0.247	0.284	
Jewish						0.000	(0-100)	0.985	0.000	(0-100)	0.983	0.966	
Other						0.563	(0.096-3.306)	0.530	0.595	(0.086-4.13)	0.578	0.156	
McFadden R2	-0.054/-0.014+		-0.059/-0.020+			0.046			-0.008				
adj N	901		901			896			896				

Notes: In model 1, 2 and 4 we control for the first 20 genetic principal components (PCs). + R2 for model with and without PCs.

Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome;

TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors. The difference with the white sample is estimated by testing interactions with ethnicity in the full sample.

Table SM 10 Interaction between AFB genetic risk scores and age at marriage in the female HRS sample

	Model 1: regular controls			Model 2: interaction controls		
	OR	95% CI	p	OR	95% CI	p
Intercept	0.007	(0.001-0.036)	0.000	0.008	(0-0.184)	0.073
PGS						
NEB	0.879	(0.749-1.031)	0.112	0.854	(0.723-1.008)	0.069
AFB	0.791	(0.595-1.052)	0.095	4.654	(0.405-67.927)	0.271
PCOS	1.143	(0.924-1.413)	0.259	1.163	(0.935-1.448)	0.216
Endo	1.427	(0.697-2.925)	0.370	1.566	(0.744-3.299)	0.248
Mena	1.067	(0.955-1.192)	0.227	1.057	(0.943-1.185)	0.298
Meno	1.079	(0.97-1.199)	0.159	1.073	(0.961-1.197)	0.198
Socio-demographic						
Birth year	1.352	(1.213-1.506)	0.000	1.572	(1.17-2.124)	0.003
Education years	1.191	(1.032-1.376)	0.015	1.197	(0.819-1.754)	0.325
Age first marriage (reference is before 21)						
21-25	1.474	(1.064-2.043)	0.015	0.187	(0-577.923)	0.748
26-30	2.988	(2.007-4.407)	0.000	0.569	(0-1820)	0.870
31-35	5.807	(3.785-8.809)	0.000	32.12	(0.004-125000)	0.408
36-40	2.947	(1.499-5.354)	0.001	0.582	(0-35000)	0.974
41+	4.809	(3.097-7.33)	0.000	0.000	(0-17.833)	0.271
never married	102.313	(61.936-175.352)	0.000	2901.27	(0.166-262000000)	0.126
unknown age	3.409	(2.475-4.718)	0.000	1.322	(0.005-1440)	0.859
First occupation (reference are clerks)						
army	1.201	(0.059-8.354)	0.884	0.967	(0.047-6.967)	0.985
farming	1.575	(0.543-3.845)	0.379	1.356	(0.464-3.386)	0.573
manager	1.43	(1.04-1.959)	0.037	1.374	(0.984-1.909)	0.079
mechanics, production operators	1.024	(0.757-1.385)	0.932	1.022	(0.748-1.395)	0.929
operators	0.563	(0.327-0.924)	0.027	0.582	(0.337-0.961)	0.039
professionals	1.39	(1.043-1.856)	0.039	1.353	(0.998-1.836)	0.063
sales	1.03	(0.714-1.466)	0.981	1.018	(0.697-1.466)	0.956
services	0.738	(0.512-1.05)	0.097	0.721	(0.497-1.034)	0.082
Religion (reference is not religious)						
Other	1.207	(0.491-2.717)	0.975	0.612	(0.03-4.093)	0.490
Protestant	0.973	(0.696-1.38)	0.962	0.677	(0.326-1.558)	0.248
Roman Catholic	0.971	(0.673-1.415)	0.573	0.494	(0.196-1.29)	0.745
Jewish	0.702	(0.209-2.289)	0.604	0.57	(0.015-10.669)	0.733

Table SM 10 Continued

	Model 1: regular controls			Model 2: interaction controls		
	OR	95% CI	p	OR	95% CI	p
Interaction PGS AFB * Age marriage (reference is before 21)						
21-25	1.119	(0.772-1.622)	0.526	1.217	(0.812-1.825)	0.347
26-30	1.276	(0.849-1.92)	0.245	1.548	(0.973-2.469)	0.082
31-35	1.492	(0.929-2.406)	0.084	1.766	(1.036-3.041)	0.035
36-40	2.732	(1.512-5.209)	0.001	3.471	(1.669-7.634)	0.001
41+	1.763	(1.111-2.824)	0.028	1.534	(0.898-2.628)	0.164
never married	1.934	(1.074-3.563)	0.028	1.633	(0.763-3.52)	0.210
unknown age	1.233	(0.875-1.74)	0.211	1.194	(0.801-1.781)	0.401
Interactions birth year * marriage (reference is before 21)						
21-25				0.84	(0.572-1.229)	0.353
26-30				1.316	(0.828-2.111)	0.261
31-35				0.719	(0.428-1.206)	0.221
36-40				1.119	(0.516-2.448)	0.787
41+				3.025	(1.468-6.518)	0.001
never married				0.235	(0.106-0.476)	0.000
unknown age				0.906	(0.637-1.284)	0.582
Interactions years of education * marriage (reference is before 21)						
21-25				1.011	(0.628-1.633)	0.999
26-30				0.934	(0.543-1.623)	0.724
31-35				1.21	(0.666-2.218)	0.580
36-40				0.774	(0.357-1.691)	0.518
41+				1.477	(0.804-2.747)	0.318
never married				1.89	(0.952-3.947)	0.083
unknown age				0.778	(0.503-1.201)	0.276
Interactions religion (ref is not religious) * marriage (reference is before 21)						
21-25 * protestant				1.01	(0.351-2.841)	0.851
26-30 * protestant				1.505	(0.483-4.599)	0.628
31-35 * protestant				2.281	(0.633-8.203)	0.269
36-40 * protestant				2.162	(0.301-22.819)	0.541
41+ * protestant				2.682	(0.476-16.919)	0.354
never married * protestant				6.462	(1.171-35.742)	0.043
unknown age * protestant				2.601	(0.81-8.875)	0.162
21-25 * catholic				1.3	(0.393-4.291)	0.830
26-30 * catholic				1.614	(0.442-5.843)	0.577
31-35 * catholic				2.362	(0.576-9.665)	0.285
36-40 * catholic				5.311	(0.59-64.044)	0.191
41+ * catholic				5.321	(0.808-38.556)	0.119
never married * catholic				14.994	(2.076-118.41)	0.012
unknown age * catholic				2.942	(0.8-11.498)	0.157

Table SM 10 Continued

	Model 1: regular controls			Model 2: interaction controls		
	OR	95% CI	p	OR	95% CI	p
21-25 * jewish				1.483	(0.044-70.823)	0.858
26-30 * jewish				0.874	(0.027-41.019)	0.926
31-35 * jewish				0.000	(0-Inf)	0.986
36-40 * jewish				22.696	(0.205-4340.408)	0.215
41+ * jewish				0.000	(0-Inf)	0.994
never married * jewish				Inf	(0-Inf)	0.978
unknown age * jewish				3.88	(0.159-154.571)	0.456
21-25 * other				1.208	(0.035-43.334)	0.963
26-30 * other				0.000	(0-Inf)	0.988
31-35 * other				6.543	(0.118-467.12)	0.377
36-40 * other				0.000	(0-Inf)	0.993
41+ * other				Inf	(0-Inf)	0.986
never married * other				Inf	(0-Inf)	0.973
unknown age * other				4.79	(0.273-147.428)	0.316
Interactions pc1 * marriage (reference is before 21)						
21-25				Inf	(0-Inf)	0.392
26-30				Inf	(0-Inf)	0.470
31-35				0.000	(0-Inf)	0.710
36-40				Inf	(0-Inf)	0.758
41+				Inf.	(0-Inf)	0.137
never married				0.000	(0-Inf)	0.742
unknown age				Inf	(0-Inf)	0.903
Interactions pc2 * marriage (reference is before 21)						
21-25				0.000	(0-Inf)	0.189
26-30				0.000	(0-Inf)	0.108
31-35				0.000	(0-Inf)	0.655
36-40				0.000	(0-Inf)	0.216
41+				0.000	(0-Inf)	0.160
never married				0.000	(0-Inf)	0.225
unknown age				0.000	(0-Inf)	0.736
Interactions pc3 * marriage (reference is before 21)						
21-25				0.000	(0-Inf)	0.757
26-30				0.29	(0-Inf)	0.950
31-35				0.000	(0-Inf)	0.121
36-40				0.000	(0-Inf)	0.837
41+				0.000	(0-Inf)	0.134
never married				Inf.	(0-Inf)	0.085
unknown age				Inf.	(0-Inf)	0.871

Table SM 10 Continued

	Model 1: regular controls			Model 2: interaction controls		
	OR	95% CI	p	OR	95% CI	p
Interactions pc4 * marriage (reference is before 21)						
21-25				Inf.	(0-Inf)	0.683
26-30				0.14	(0-Inf)	0.951
31-35				0.000	(0-Inf)	0.579
36-40				Inf.	(0-Inf)	0.498
41+				0.000	(0-0)	0.062
never married				0.000	(0-Inf)	0.887
unknown age				0.008	(0-Inf)	0.976
Interactions pc5 * marriage (reference is before 21)						
21-25				0.000	(0-Inf)	0.203
26-30				0.000	(0-Inf)	0.450
31-35				14366.000	(0-Inf)	0.741
36-40				0.000	(0-Inf)	0.576
41+				0.000	(0-Inf)	0.820
never married				18.96	(0-Inf)	0.854
unknown age				0.000	(0-Inf)	0.424
Interaction birth year * AFB PGS				0.913	(0.8-1.042)	0.175
Interaction education years * AFB PGS				0.961	(0.821-1.122)	0.573
Interaction religion (ref is not religious) * AFB PGS						
Protestant				0.692	(0.455-1.043)	0.093
Roman Catholic				0.822	(0.52-1.294)	0.415
Jewish				0.856	(0.293-2.634)	0.748
Other				0.274	(0.04-1.453)	0.152
Interaction pc1 * AFB PGS				0.000	(0-Inf)	0.299
Interaction pc2 * AFB PGS				121.821	(0-Inf)	0.986
Interaction pc3 * AFB PGS				0.000	(0-Inf)	0.425
Interaction pc4 * AFB PGS				Inf.	(0-Inf)	0.045
Interaction pc5 * AFB PGS				0.055	(0-124000)	0.749
McFadden R2adj	0.179			0.163		
N	6133			6133		

Notes: We control for the first 20 genetic principal components (PCs). Abbreviations: OR, odds ratio; CI: confidence interval; p, p-value; PGS, polygenic risk score; NEB, number of children ever born, AFB; age at first birth; PCOS, polycystic ovary syndrome. Due to perfect separation the estimates for the interaction between some of the religious categories and age at marriage, and the principal components with age at marriage, the effects of these interactions could not be estimated.

Table SM 11 The relationship between AFB genetic risk scores and age at marriage and childlessness in the female HRS sample, descriptively

		Age at first marriage							
		<21	21-25	26-30	31-35	36-40	41+	never married	unknown age
N		1879	1526	450	234	146	280	178	1476
N	with child	1801	1413	381	175	119	227	26	1326
N	childless	78	111	69	58	27	53	152	150
%	with child	0.958	0.927	0.847	0.751	0.815	0.811	0.146	0.898
%	childless	0.042	0.073	0.153	0.249	0.185	0.189	0.854	0.102
Mean AFB PGS	with child	0.176	0.443	0.461	0.272	0.207	0.186	0.206	0.387
Mean AFB PGS	childless	0.080	0.374	0.551	0.480	0.901	0.566	0.530	0.393

Abbreviations: PGS, polygenic risk score; AFB, age at first birth; NEB, number of children ever born

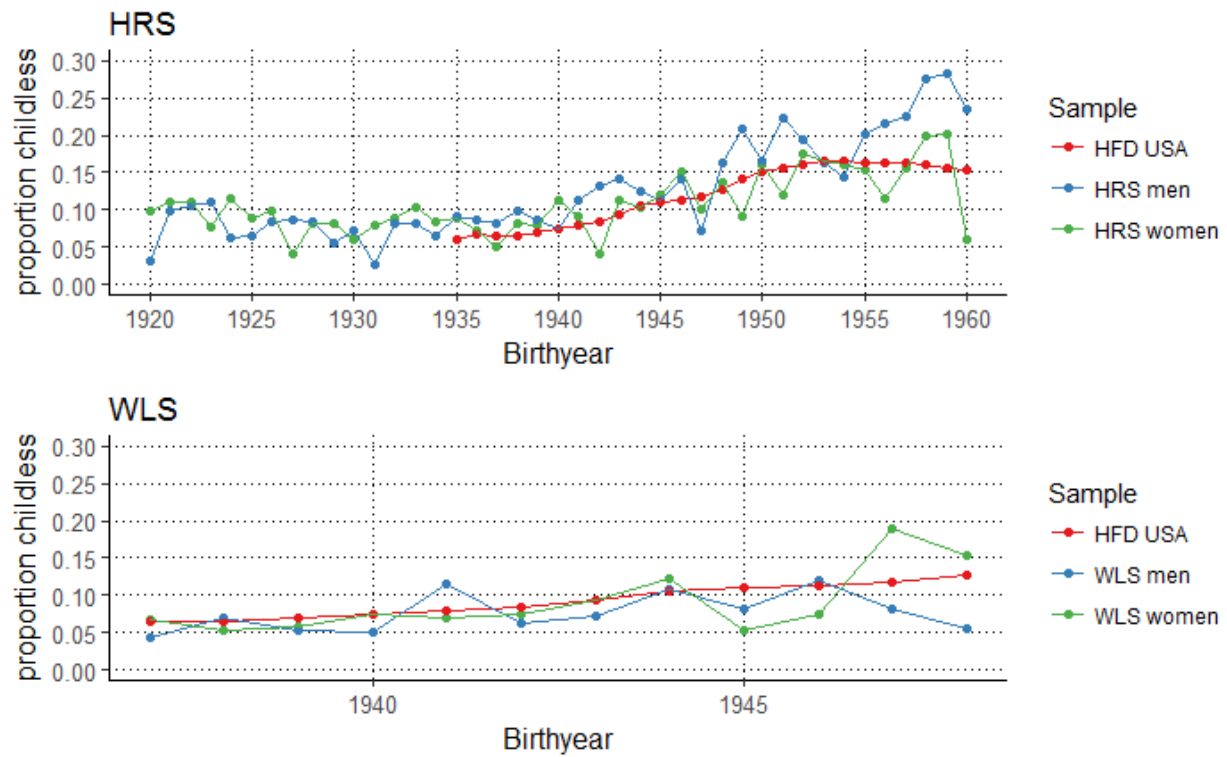


Figure SM1 Childlessness levels in our data and as reported in the human fertility database (HFD) for the USA. For the HRS we show the estimates for the white sample.

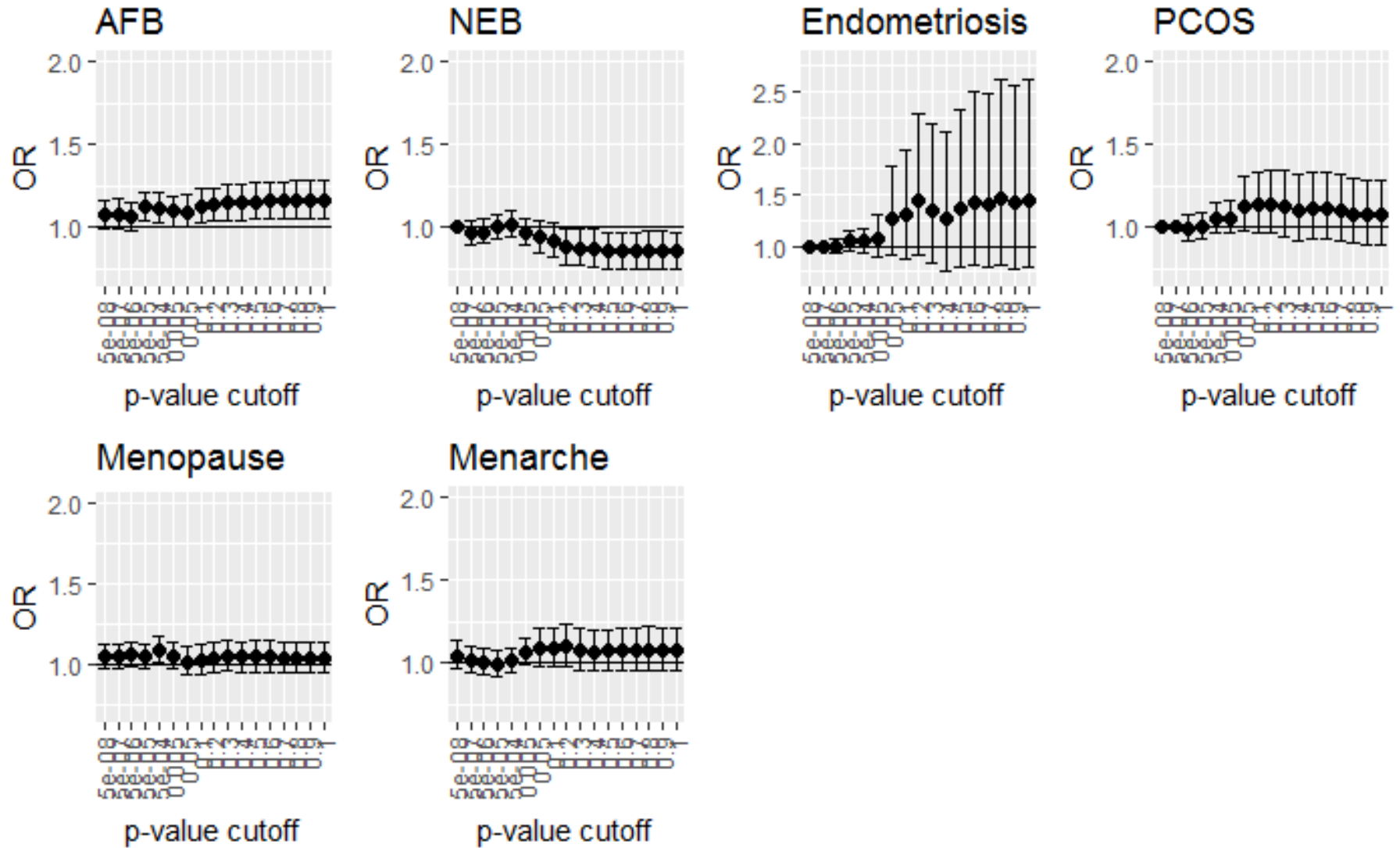


Figure SM2 PGS effects on childlessness using different p-value cutoffs for women in the HRS sample, univariate models with 20 principal components as control variables included. OR and 95% CI displayed. Abbreviations: OR, odds ratio; AFB, age at first birth; NEB, number of children ever born; PCOS, polycystic ovary syndrome

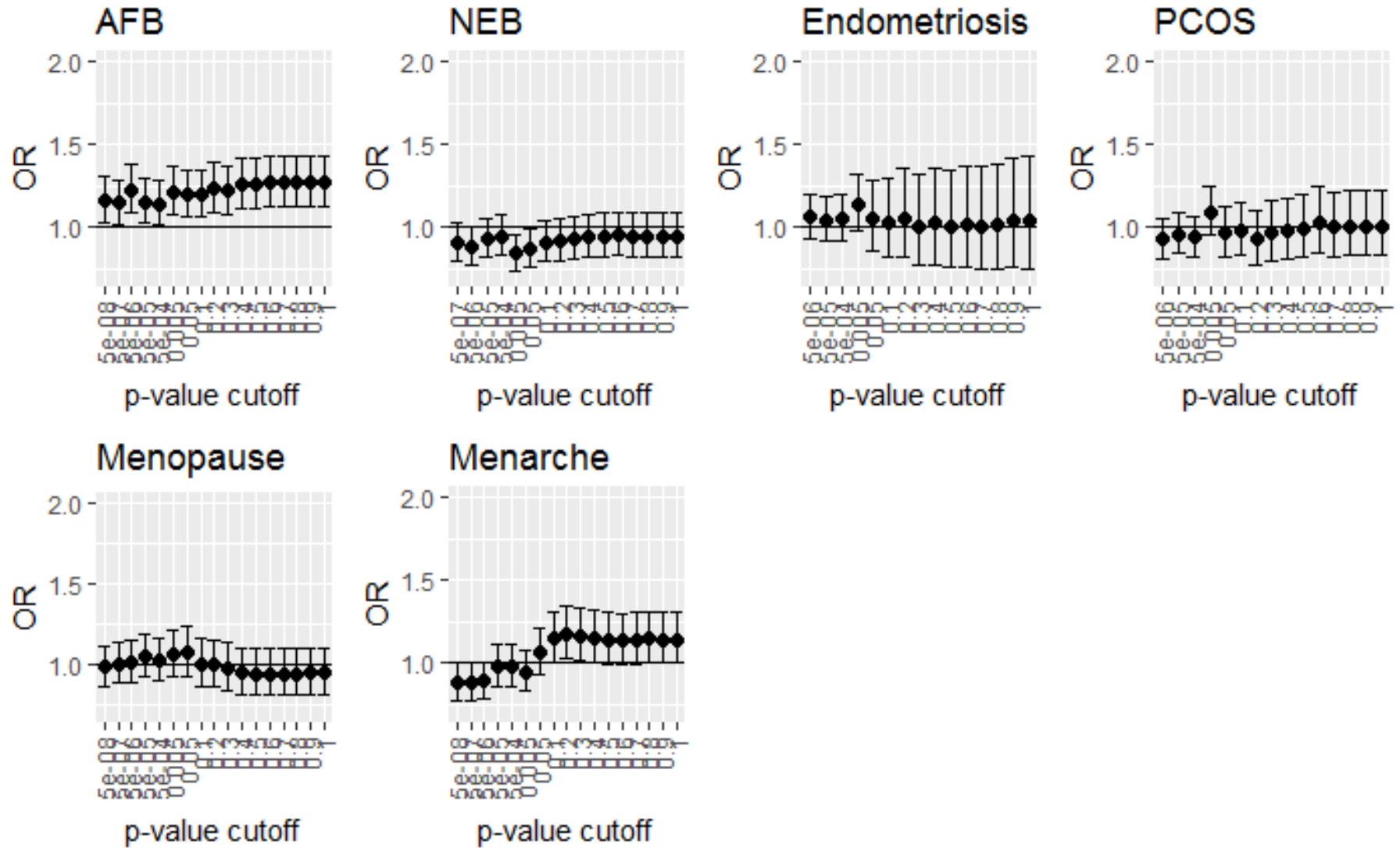


Figure SM3 PGS effects on childlessness using different p-value cutoffs for women in the WLS sample, univariate models with 20 principal components as control variables included. OR and 95% CI displayed. Abbreviations: OR, odds ratio; AFB, age at first birth; NEB, number of children ever born; PCOS, polycystic ovary syndrome

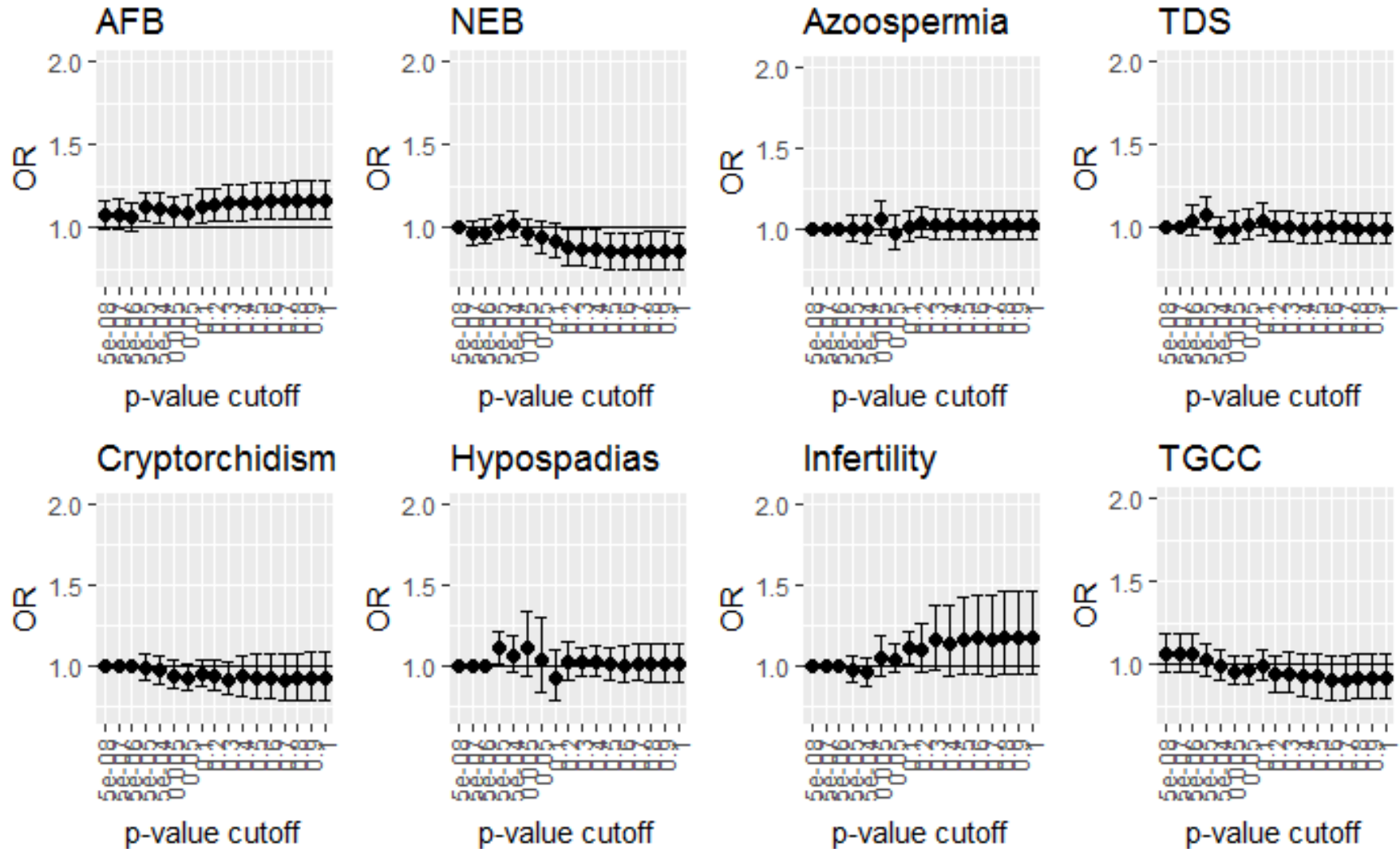


Figure SM4 PGS effects on childlessness using different p-value cutoffs for men in the HRS sample, univariate models with 20 principal components as control variables included. OR and 95% CI displayed. Abbreviations: OR, odds ratio; AFB, age at first birth; NEB, number of children ever born; TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors.

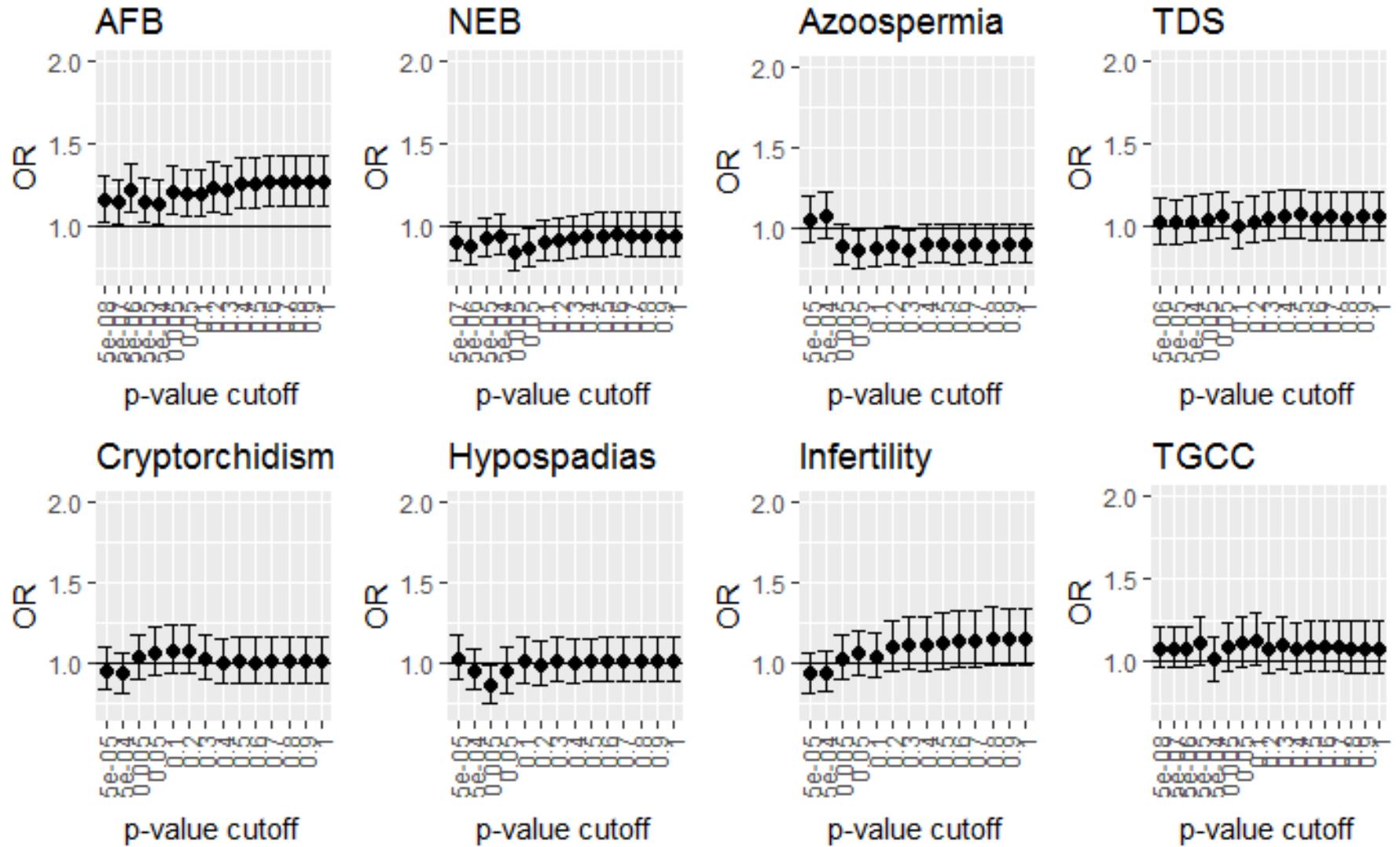


Figure SM5 PGS effects on childlessness using different p-value cutoffs for women in the HRS sample, univariate models with 20 principal components as control variables included. OR and 95% CI displayed. Abbreviations: OR, odds ratio; AFB, age at first birth; NEB, number of children ever born; TDS, testicular dysgenesis syndrome; TGCC, testicular germ cell tumors.

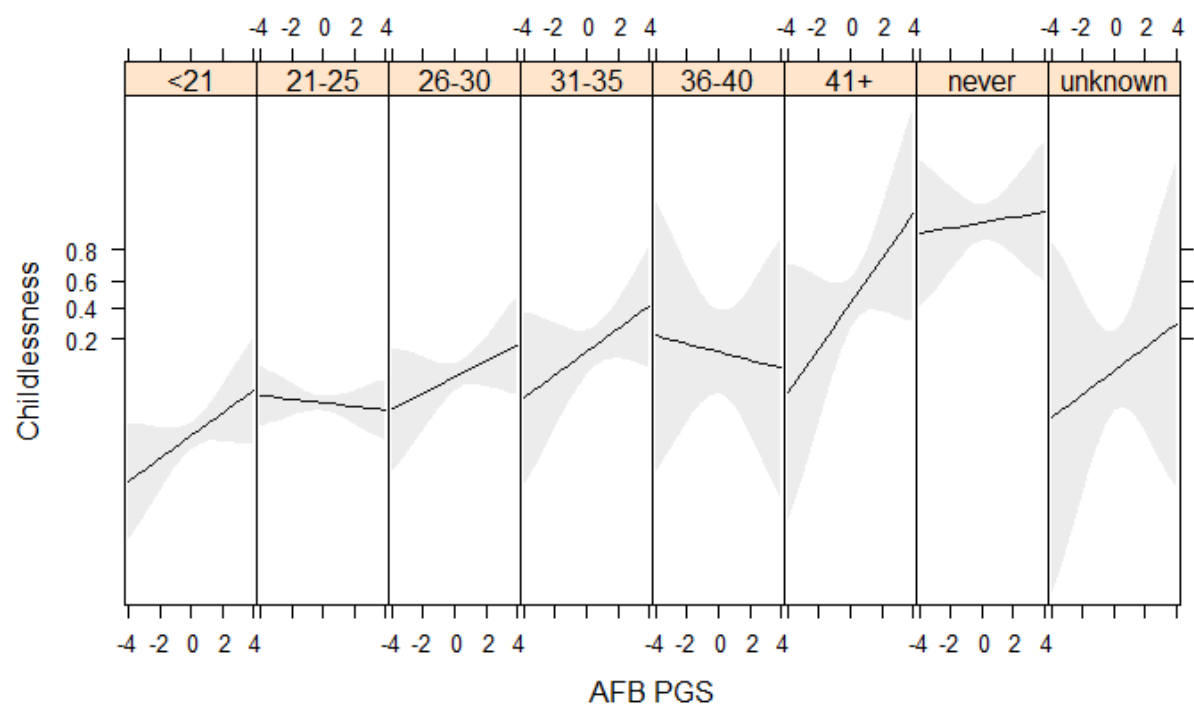


Figure SM6 AFB genes and their interaction with age at marriage in the female WLS sample