Supplementary Table S2. Analysis of FBE with two susceptibility types

A. No polygenic component

Parameters	Environmental no transmission	Mendelian dominant	Mendelian recessive	General (τ_{AA}, τ_{BB})	General (τ_{AA}, τ_{AB}, τ_{BB})
β_{AA} (SE)	-4.58 (0.14)	-1.90 (0.27)	0.07 (0.78)	-2.40 (0.24)	-1.28 (0.36)
β_{AB} (SE)	-4.58 (0.14)	-1.90 (0.27)	-5.27 (0.22)	-6.17 (0.21)	-5.05 (0.19)
β_{BB} (SE)	-4.58 (0.14)	-5.83 (0.38)	-5.27 (0.22)	-6.17 (0.21)	-5.05 (0.19)
ξ_{sex} * (SE)	-1.11 (0.22)	-1.19 (0.24)	-1.29 (0.29)	-1.14 (0.24)	-1.13 (0.24)
$\xi_{founder}$ † (SE)	-1.72 (0.33)	-1.42 (0.35)	-1.43 (0.40)	-4.94 (0.46)	-1.08 (0.38)
q_A		1.93×10^{-3}	4.46×10^{-2}	2.10×10^{-2}	2.33×10^{-2}
τ_{AA}		1	1	1	1
τ_{AB}		0.50	0.5	0	0
τ_{BB}		0	0	1	0.02
-2ln(L)	1359.45	1302.08	1301.83	1299.30	1289.63
d.f.‡	3	5	5	7	8
p-value¶	1.12×10^{-13}	0.003	0.003	0.002	
p-value#	2.70×10^{-12}	0.110	0.126		
AIC	1365.45	1312.08	1311.83	1311.30	1303.63

B. Three polygenic loci

Parameters	Environmental plus polygenic	Mendelian dominant	Mendelian recessive	General (τ_{AA}, τ_{BB})	General (τ_{AA}, τ_{AB}, τ_{BB})
β_{AA} (SE)	75.06 (10.11)	-2.19 (0.30)	0.07 (0.82)	-2.19 (0.29)	-2.46 (0.35)
β_{AB} (SE)	75.06 (10.11)	-2.19 (0.30)	-5.27 (0.22)	-2.19 (0.29)	-2.46 (0.35)
β_{BB} (SE)	-16.38§	-6.71 (0.63)	-5.27 (0.22)	-6.71 (0.63)	-6.68 (0.70)
ξ_{sex} * (SE)	-1.49 (0.33)	-1.30 (0.28)	-1.29 (0.29)	-1.30 (0.28)	-1.27 (0.27)
$\xi_{founder}$ † (SE)	-34.17§	-1.28 (0.39)	-1.43 (0.40)	-1.28 (0.38)	-0.96 (0.47)
σ_3^2 (SE)	0.93 (0.41)	1.17 (0.50)	10^{-5}	1.17 (0.49)	1.14 (0.54)
q_A	1.57×10^{-3}	1.76×10^{-3}	4.46×10^{-2}	1.76×10^{-3}	1.65×10^{-3}
τ_{AA}		1	1	1	1
τ_{AB}		0.50	0.5	0.50	0.64
τ_{BB}		0	0	0	0
-2ln(L)	1077.57	1019.98	1031.58	1019.98	1018.38
d.f.‡	6	6	6	8	9
p-value¶	8.76×10^{-13}	0.441	0.002	0.206	
p-value#	3.11×10^{-13}	0.750	0.001		
AIC	1089.57	1031.98	1041.58	1031.98	1034.38

* Sex value for male is 0 and for female is 1

† Founder value for founder is 1 and for non-founder is 0

‡ Number of functionally independent parameters estimated

¶ Compared with the general model (τ_{AA}, τ_{AB}, τ_{BB})

Compared with the homogeneous general model (τ_{AA}, τ_{BB})

§ Standard errors of the estimates cannot be computed due to a flat likelihood