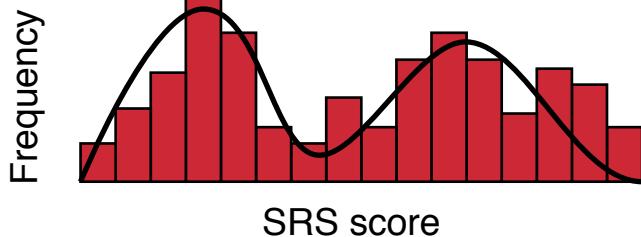
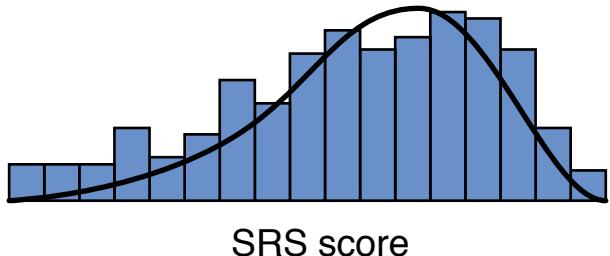
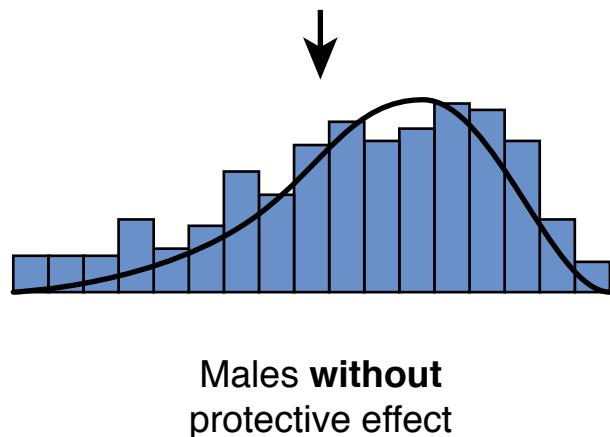
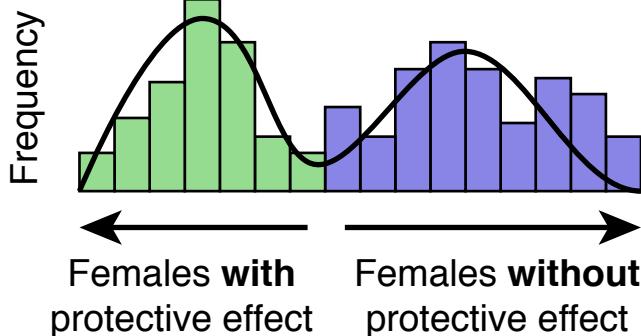


A

Affected females in multiplex families



Affected males in multiplex families

**B**

Hypothesis: Two copies of the protective allele P confers ASD protection and reduces ASD incidence by 10-fold; a P allele with a population frequency of 87%, and a non-protective p allele at 13%, results in a 4:1 male sex bias.

C

	PP	Pp	pP	pp	P	p
Sex	Female				Male	
Protective effect	Present	Absent			Absent	
Population genotype frequency	37.8%	5.7%	5.7%	0.8%	43.5%	6.5%
ASD incidence in genotype	0.16%	1.6%	1.6%	1.6%	1.6%	1.6%
ASD incidence in population	0.006%	0.09%	0.09%	0.01%	0.70%	0.10%
Total ASD incidence	1.00%					
Total ASD incidence by sex	0.20%				0.80%	
Sex ratio of ASD incidence	1.0				4.0	