

MD cotwin																					
GAD cotwin																					
(VI) Personality								(VI) Personality						(VI) Personality							
Neuroticism	1.01							1.01	1.01	1.01			1.01								
Extraversion													1.02	1.02							
(VII) Early adverse life events								(VII) Early adverse life events						(VII) Early adverse life events							
Parental warmth													0.99	0.99	0.99	0.99	0.99	0.99	0.99		
Parental loss childhood/adolescence													1.03	1.01							
Childhood sexual abuse	1.19	1.19	1.20	1.20	1.21	1.21	1.22	1.19	1.17	1.13	1.12	1.08	1.04	1.16	1.16	1.17	1.16	1.15	1.15	1.14	
Traumas 1-2								1.04	1.01												
Traumas 3-4																					
Traumas ≥5	1.14	1.13	1.11	1.10	1.10	1.09	1.09							1.21	1.19	1.14	1.10	1.07	1.02		
(VII) Recent adverse life events								(VII) Recent adverse life events						(VII) Recent adverse life events							
Divorced													1.10	1.10	1.08	1.05	1.03				
Number of stressful life events in past year	1.01	1.01											1.03	1.03	1.03	1.03	1.03	1.03	1.03		
(VIII) Social and economic environment								(VIII) Social and economic environment						(VIII) Social and economic environment							
Separated, divorced, widowed (ref: married)													1.02								
Never married (ref: married)	0.97							0.97					0.91	0.93	0.97						
No partner (ref: normal marital satisfaction)	1.06	1.03						1.06	1.03												
Low marital satisfaction (ref: normal marital satisf.)	1.14	1.13	1.11	1.10	1.11	1.10	1.11	1.09	1.07	1.04	1.02		1.09	1.08	1.06	1.01					
Number of confidants	0.99												0.96	0.96	0.97	0.99	0.99				
Support from friends																					
Problems with friends													1.03	1.02	1.02	1.01					
Support from relatives	0.98	0.99	0.99										0.96	0.96	0.96	0.96	0.96	0.96	0.97		
Problems with relatives	1.03	1.03	1.03	1.03	1.03	1.03	1.03						1.01	1.01	1.00						
General socialization								0.98													
Financial problems	1.02												1.07	1.05	1.01						
Education level																					
Number of included predictors	34	24	17	14	13	12	12	30	21	13	13	9	9	8	35	25	16	12	9	7	6
Partial likelihood deviance ^e	13.56	13.56	13.56	13.56	13.56	13.56	13.56	11.87	11.85	11.84	11.84	11.84	11.84	11.84	11.39	11.40	11.41	11.40	11.40	11.39	11.38

GAD, generalized anxiety disorder; HR, hazard ratio; MD, major depression; ref, reference class; SCL, Symptom Checklist

^a Penalized hazard ratios of all predictors for recurrence of MD with effect sizes ≤ 0.99 or ≥ 1.01 based on elastic net regression for different values of alpha including all 70 (dummy) variables. Sex was included as an extra predictor in the model for all participants (n=653) but not selected in the prediction model. Depressed mood was excluded as a predictor for the females due to too little variation.

^b Characteristics of episode in the year prior to baseline interview (MF1).

^c First principal component of depression and anxiety scales of the Symptom Checklist past 30 days.

^d Lifetime: prior to last year (≥ 1 year ago).

^e Average prediction error for each model in terms of partial likelihood deviance in 100 runs of 10-fold cross-validation on different random folds.

^f We performed some sensitivity analyses to check for the potential influence of concordant monozygotic twins on the prediction model for males. We randomly excluded one member of each of the 6 concordant monozygotic twin pairs from the male training sample - i.e. dropping a total of six subjects - resulting in a training set of n=271 males. We then reran the elastic net regression analyses on this sample to obtain the selected set of predictors and their estimates. The prediction models were very similar in the types of predictors and directions of effects compared to the original results. Penalized effect sizes were slightly attenuated in the sample of n=271. Out of the four indicators of genetic risk for internalizing disorders included in n=277 males (MD father, MD mother, GAD father, GAD mother), the latter three were again retained in the model for the reduced n=271 male sample (alpha = 0.1). This result suggests that the importance of genetic risk factors in males as compared to females is unlikely to be impacted by the inclusion of this relatively small number of concordant monozygotic males.