Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Summary of Twin Recruitment *

Recruitment Status	N	%
Interviewed	1567	61.2
Consented to interview, but refused family contact (ineligible)	8	0.3
Ineligible due to refusal of family members	233	9.1
Ineligible due to not enough family members to qualify	160	6.2
Deceased	34	1.3
Incapable due to illness or disability	14	0.5
Lost to contact	55	2.1
Overseas	17	0.7
Unable to participate – miscellaneous reasons	5	0.2
Prior non-contact request for future studies	41	1.6
Refused	427	16.7

* Does not include individuals in progress when data collection was closed

	Females (n=1621)	Males (n= 970)
eTable 2. Demographic Characteristics and Prevalence of Psychiatric Disorders		
Age, mean (SD)	38.6 (4.5)	38.7 (5.0)
Educational attainment		
College degree or higher	28.1 %	28.4 %
Some post-secondary	29.0 %	29.3 %
Secondary school degree	30.3 %	33.0 %
No secondary school degree	12.5 %	9.4 %
Marital status		
Married	64.6 %	58.6 %
Separated	4.6 %	4.4 %
Divorced or widowed	9.8 %	8.2 %
Never married	21.0 %	28.8 %
Psychiatric disorders		
Conduct disorder	4.8 %	14.8 %
Major depressive disorder	37.9 %	27.3 %
Post-traumatic stress disorder *	23.9 %	10.0 %
Panic disorder	4.4 %	2.5 %
Alcohol dependence	16.7 %	30.8 %
Nicotine dependence	30.0 %	33.5 %
Illicit drug dependence	6.0 %	12.3 %

* Limited to trauma exposed (Females N=934; Males N=709)

	Low-risk Trauma	**High-risk Trauma**	**PTSD**	**MDD**
eTable 3. Twin and Sibling Tetrachoric Correlations (and 95% Confidence Intervals) for Low-risk Trauma, High-risk Trauma, PTSD, and MDD				
MZ Twins (N=141-341)	0.49 (0.42-0.56)	0.62 (0.56-0.69)	0.31 (0.18-0.45)	0.40 (0.32-0.47)
DZ Twins (N=161-313)	0.12 (0.03-0.21)	0.24 (0.15-0.33)	0.07 (-0.06-0.21)	0.19 (0.10-0.28)
Twin-Sib (N=712-1765)	0.23 (0.20-0.27)	0.20 (0.16-0.24)	0.14 (0.10-0.18)	0.14 (0.07-0.22)
Sib-Sib (N =236-577)	0.12 (0.05-0.18)	0.24 (0.17-0.31)	0.15 (0.01-0.30)	0.09 (0.03-0.16)

eTable 4~~1~~. Prevalence of Traumatic Events (Cohort II)		
Event	**Females (n=3429)**	**Males (n=2773)**
High-risk		
Rape	8.4	1.5
Sexual molestation	13.9	4.9
Physical attack or assault	5.9	14.7
Childhood physical abuse	4.2	2.9
Serious childhood neglect	1.9	1.3
Any high-risk trauma	23.6	20.5
Low-risk		
Combat exposure	0.1	0.4
Life-threatening accident	12.8	26.8
Fire, flood, or natural disaster	11.3	17.1
Witnessed injury or killing	16.2	32.3
Threatened with weapon/ held captive	5.1	11.6
Any low-risk trauma	35.4	57.1

eTable 52. Magnitude of Additive Genetic (A) and Non-shared Environmental (E) Influences (95% confidence intervals also shown) on Low-risk Trauma, High-risk Trauma, and MDD (Cohort II) N=6219
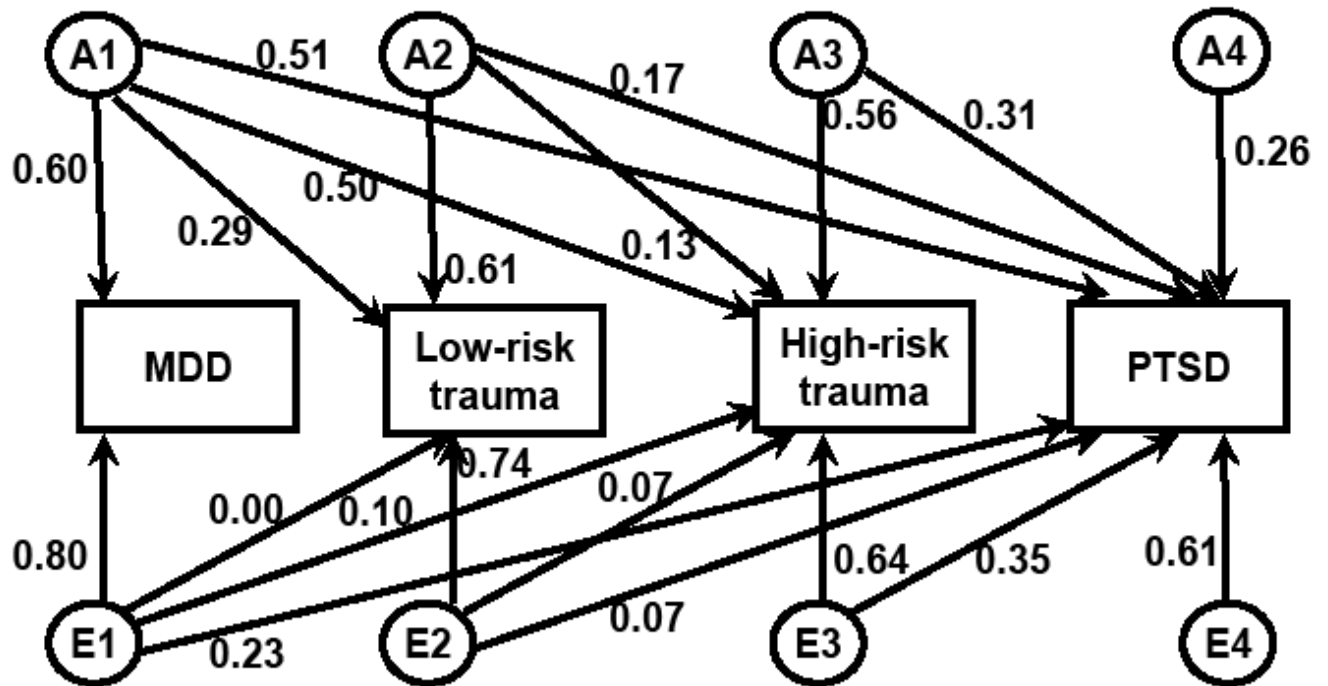
	Additive genetic	Non-shared environmental
Low-risk Trauma	0.40 (0.33 – 0.47)	0.60 (0.53 – 0.67)
High-risk Trauma	0.61 (0.54 – 0.67)	0.39 (0.33 – 0.46)
MDD	0.37 (0.29 – 0.44)	0.63 (0.56 – 0.71)

eTable 63. Correlations Between Genetic and Non-shared Environmental Contributions to Low-risk Trauma, High-risk Trauma, and MDD (Cohort II) N=6219*

	Low-Risk Trauma	High-Risk Trauma	MDD
Low-risk Trauma		0.56 (0.47-0.64)	0.46 (0.36-0.59)
High-risk Trauma	--------		0.72 (0.62-0.81)
MDD	--------	--------	

* Genetic correlations shown above the diagonal, non-shared environmental correlations shown below

Supplementary Figure 1. Saturated quadrivariate AE model of liability to MDD, trauma, and PTSD*

* Standardized parameter estimates are shown. A1-A4 denote genetic factors; E1-E4 are the non-shared environmental factors.

Supplementary Figure 2. Trivariate model of liability to MDD and trauma in the Cohort II sample*
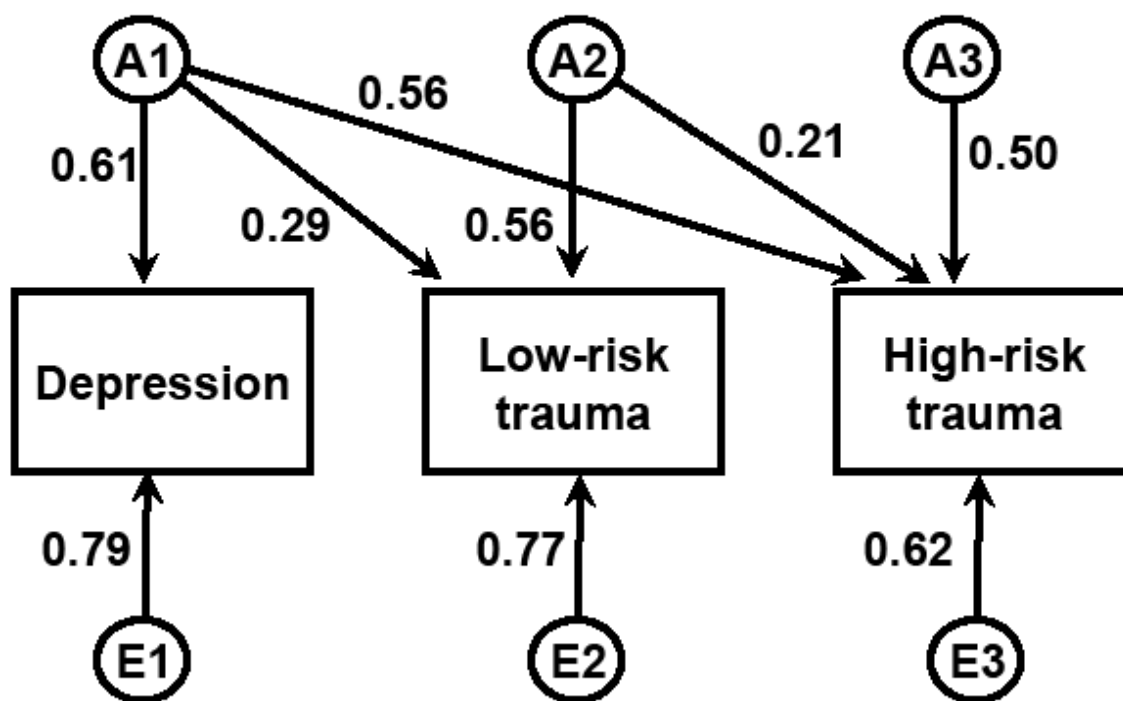
* Standardized parameter estimates are shown. A1-A3 denote genetic factors; E1-E3 are the non-shared environmental factors.