

## Supplementary Method

### Cohort genotyping, imputation and QC

	GLAD-EDGI-COPING	UK Biobank
<i>Genotyping Array</i>	UK Biobank Axiom	UK Biobank Axiom
<i>Subject level QC</i>		
Subject call rate	>0.95	>0.98
Sex check	$F_{\text{male}} < 0.8, F_{\text{female}} > 0.5$	$F_{\text{male}} < 0.9, F_{\text{female}} > 0.5$
Heterozygosity	$F > -0.2, F < 0.2$	See note
<i>Genotype level QC</i>		
Genotyping call rate	>0.95	>0.98
MAF	>0.01	>0.01
HWE	$p < 1e-10$	$p < 1e-8$
<i>Imputation</i>		
Phasing software	EAGLE2	SHAPEIT3
Imputation software	Minimac4	IMPUTE4
Imputation panel	TOPMed r2	HRC + 1000G P3
<i>Post-imputation QC</i>		
INFO	>0.8	>0.8
MAF	>0.01	>0.01

*Note.* For information regarding heterozygosity outliers in the UK Biobank, see <https://doi.org/10.1038/s41586-018-0579-z>.

### PRScs parameters

These were the same for GLAD-EDGI-COPING and UK Biobank. --phi was not manually specified and was therefore learned from the data.

```
--a=1
--b=0.5
--n_iter=1000
--n_burnin=500
--thin=5
--beta_std=False
--write_psi=False
--write_pst=False
```

## PRSet parameters

These were the same for GLAD-EDGI-COPING and UK Biobank.

--clump-kb 1000kb  
--clump-p 1  
--clump-r2 0.3  
--full-back  
--proxy 0.8  
--set-perm 10000

## PCL-6 items with response options and UKB field IDs

*Next is a list of problems and complaints that people sometimes have in response to such extremely stressful experiences. Please indicate how much you have been bothered by that problem in the past month:*

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing memories, thoughts, or images of a stressful experience [UKB 20497]					
Feeling very upset when something reminded you of a stressful experience [UKB 20498]					
Avoiding activities or situations because they reminded you of a stressful experience [UKB 20495]					
Feeling distant or cut off from other people [UKB 20496]*					
Feeling irritable or having angry outbursts [UKB 20494]*					
<b>GLAD-EDGI-COPING only</b>					
Difficulty concentrating					
<b>UK Biobank only</b>					
Trouble concentrating on things, such as reading the newspaper or watching television [UKB 20508]**					

*Note.* An asterisk \* indicates an item was only shown in the UK Biobank if participants responded “a little bit” or greater to any of the first three items. \*\* The response options for this item were “not at all”, “several days”, “more than half the days”, and “nearly every day”.

## Childhood Trauma Screener items with exposure cutoffs and UKB field IDs

*When I was growing up...*

	Never	Rarely	Sometimes	Often	Very Often
<b>Emotional neglect</b> I felt loved [UKB 20489]	Exposed				
<b>Physical abuse</b> People in my family hit me so hard that it left me with bruises or marks [UKB 20488]			Exposed		
<b>Emotional abuse</b> I felt that someone in my family hated me [UKB 20487]				Exposed	
<b>Sexual abuse</b> Someone molested me (sexually) [UKB 20490]			Exposed		
<b>Physical neglect</b> There was someone to take me to the doctor if I needed it [UKB 20491]	Exposed				

*Note.* Participants were flagged as trauma exposed if their response to a given item fell within the ranges displayed above. For example, a participant was exposed to emotional abuse if their responses to that item were “sometimes”, “often”, or “very often”.

## Protein coding genes for which PRSet did not produce risk scores

<i>AP001350.1</i>	<i>HIST1H2BI</i>	<i>HIST1H4L</i>	<i>NDUFAF3</i>
<i>CNKS2</i>	<i>HIST1H2BM</i>	<i>IGSF1</i>	<i>OR5B21</i>
<i>HIST1H2AE</i>	<i>HIST1H2BO</i>	<i>LRRC37A</i>	<i>PCYT1B</i>
<i>HIST1H2AI</i>	<i>HIST1H3E</i>	<i>LRRC37A2</i>	<i>POLA1</i>
<i>HIST1H2AK</i>	<i>HIST1H3F</i>	<i>MAMLD1</i>	<i>UCN</i>
<i>HIST1H2AM</i>	<i>HIST1H4D</i>	<i>MTM1</i>	
<i>HIST1H2BH</i>	<i>HIST1H4K</i>	<i>MTMRI</i>	

*Note.* These 28 genes were among the 415 taken from Supplementary Table 9 of the 2024 PGC PTSD GWAS paper. The remaining 387 genes were included in the analyses.