

Supplementary Information

Table 1

Significant Sidak Pairwise Comparisons With p-values and 95% CIs Following Up Significant ANOVAs for Demographic Clinical Measures Across Groups

Measure	Groups compared	p value	95% Confidence Intervals	
			Lower bound	Upper bound
Age	Controls and TE	<.001	2.52	8.76
	Controls and PTSD	.001	2.26	10.20
BMI	Controls and TE	.031	.12	3.12
	Controls and PTSD	.009	.63	5.24
DASS				
- depression	PTSD and TE	< .001	3.42	7.28
	PTSD and controls	< .001	4.12	7.95
- anxiety	PTSD and TE	< .001	3.77	7.15
	PTSD and controls	< .001	4.15	7.63
- stress	PTSD and TE	< .001	4.74	8.46
	PTSD and controls	< .001	6.33	10.05
	TE and controls	.004	.42	2.75
PCL	PTSD and TE	< .001	24.50	34.08
	PTSD and controls	< .001	31.62	41.53
AUDIT	PTSD and TE	< .001	.67	5.54
	PTSD and controls	.001	1.52	6.40

Table 2a.

Mean Negative D-Prime Scores across Group, Sex and Genotype

Group	Genotype	Sex	Mean	SE	n
Control	Val/Val	Male	2.2253	.15161	23
		Female	2.0236	.15161	23
	Val/Met	Male	1.6400	.19432	14
		Female	1.7910	.14542	25
TE	Val/Val	Male	1.7174	.14542	25
		Female	1.9985	.11795	38
	Val/Met	Male	1.9436	.19432	14
		Female	1.8422	.13741	28
PTSD	Val/Val	Male	1.6975	.25706	8
		Female	1.8102	.15502	22
	Val/Met	Male	1.0585	.29683	6
		Female	1.2064	.25706	8

Note: SE= standard error, n =number of participants

Table 2b.

Mean Negative D-Prime Scores across Groups

Group	Mean	Standard Error	<i>n</i>
Control	1.9200	.08096	85
TE	1.8754	.07571	105
PTSD	1.4432	.12357	44

Table 2c.

Mean Negative D-Prime Scores across BDNF Genotype

Genotype	Mean	Standard Error	<i>n</i>
Val/Val	1.9121	.06895	139
Val/Met	1.5803	.08656	95

Table 2d.

Mean Negative D-Prime Scores across Sex

Sex	Mean	Standard Error	<i>n</i>
Male	1.7137	.08722	90
Female	1.7786	.06812	144

Table 3a.

Mean Negative D-Prime Scores across Groups with Child/Adult trauma

Group	Mean	Standard Error	<i>n</i>
TE	1.8806	.07795	101
PTSD	1.4941	.09487	44

Table 3b.

Mean Negative D-Prime Scores across BDNF Genotype with Child/Adult Trauma

Genotype	Mean	Standard Error	<i>n</i>
Val/Val	1.7956	.08498	92
Val/Met	1.5912	.08662	53

Table 3c.

Mean Negative D-Prime Scores across Sex with Child/Adult Trauma

Sex	Mean	Standard Error	<i>n</i>
Male	1.6702	.10682	52
Female	1.7265	.06505	93

Table 3d.

Mean Negative D-Prime Scores across Child/Adult Trauma

Genotype	Mean	Standard Error	<i>n</i>
Child (<18yrs)	1.6069	.08935	79
Adult (18 and above)	1.7265	.08068	66

Table 3e
Significant Main and Interaction Effects for Negative D-Prime Scores with Child/Adult Trauma Included as a Factor

Significant Effect	N	df	χ^2	p
Group	145	1	9.11	.00
Genotype	145	1	4.25	.04
Group x Genotype	145	1	8.73	.00
Group x Child/Adult	145	1	3.87	.05
Group x Child/Adult x Sex	145	1	4.24	.04

Table 4a.
Mean Negative Hit Rate Scores across Group, Sex and Genotype

Group	Genotype	Sex	Mean	SE	n
Control	Val/Val	Male	.9000	.02174	23
		Female	.8957	.02360	23
	Val/Met	Male	.8536	.02049	14
		Female	.8480	.02735	25
TE	Val/Val	Male	.8340	.03865	25
		Female	.8697	.01893	38
	Val/Met	Male	.8393	.03202	14
		Female	.8107	.02850	28
PTSD	Val/Val	Male	.8250	.04760	8
		Female	.8636	.03086	22
	Val/Met	Male	.8167	.04953	6
		Female	.7312	.06246	8

Table 4b.
Mean Negative Hit Rate Scores across Groups

Group	Mean	S.E.	n
Control	.8743	.08096	85
TE	.8384	.07571	105
PTSD	.8091	.12357	44

Table 4c.
Mean Negative Hit Rate Scores across BDNF Genotype

Genotype	Mean	SE	n
Val/Val	.8647	.01302	139
Val/Met	.8166	.01612	95

Table 4d.
Mean Negative Hit Rate Scores across Sex

Sex	Mean	SE	n
Male	.8448	.01503	90
Female	.8365	.01427	144

Table 5a.

Mean Negative False Alarm Scores across Group, Sex and Genotype

Group	Genotype	Sex	Mean	SE	n
Control	Val/Val	Male	.2283	.03102	23
		Female	.2848	.04491	23
	Val/Met	Male	.3214	.04187	14
		Female	.2920	.04115	25
TE	Val/Val	Male	.3200	.03394	25
		Female	.2513	.02957	38
	Val/Met	Male	.2250	.02846	14
		Female	.2196	.02235	28
PTSD	Val/Val	Male	.2750	.03423	8
		Female	.3023	.03317	22
	Val/Met	Male	.4833	.06736	6
		Female	.3250	.05796	8

Table 5b.

Mean Negative False Alarm Scores across Groups

Group	Mean	S.E.	n
Control	.2816	.02004	85
TE	.2540	.01444	105
PTSD	.3464	.02521	44

Table 5c.

Mean Negative False Alarm Scores across BDNF Genotype

Genotype	Mean	SE	n
Val/Val	.2769	.01422	139
Val/Met	.3111	.01875	95

Table 5d.

Mean Negative False Alarm Scores across Sex

Sex	Mean	SE	n
Male	.8448	.01503	90
Female	.8365	.01427	144

Table 6a.

Mean Negative Bias Scores across Group, Sex and Genotype

Group	Genotype	Sex	Mean	SE	n
Control	Val/Val	Male	.2978	.04637	23
		Female	.1696	.03582	23
	Val/Met	Male	.2679	.04274	14
		Female	.2420	.04342	25
TE	Val/Val	Male	.1720	.04900	25
		Female	.1974	.03511	38
	Val/Met	Male	.2750	.04482	14
		Female	.1643	.03588	28
PTSD	Val/Val	Male	.2063	.03897	8
		Female	.1955	.03549	22
	Val/Met	Male	.3250	.11472	6
		Female	.2313	.06308	8

Table 6b.

Mean Negative Bias Scores across Groups

Group	Mean	S.E.	<i>n</i>
Control	.2443	.02113	85
TE	.2022	.02081	105
PTSD	.2395	.03528	44

Table 6c.

Mean Negative Bias Scores across BDNF Genotype

Genotype	Mean	SE	<i>n</i>
Val/Val	.2064	.01654	139
Val/Met	.2509	.02590	95

Table 6d.

Mean Negative Bias Scores across Sex

Sex	Mean	SE	<i>n</i>
Male	.2573	.02531	90
Female	.2000	.01742	144

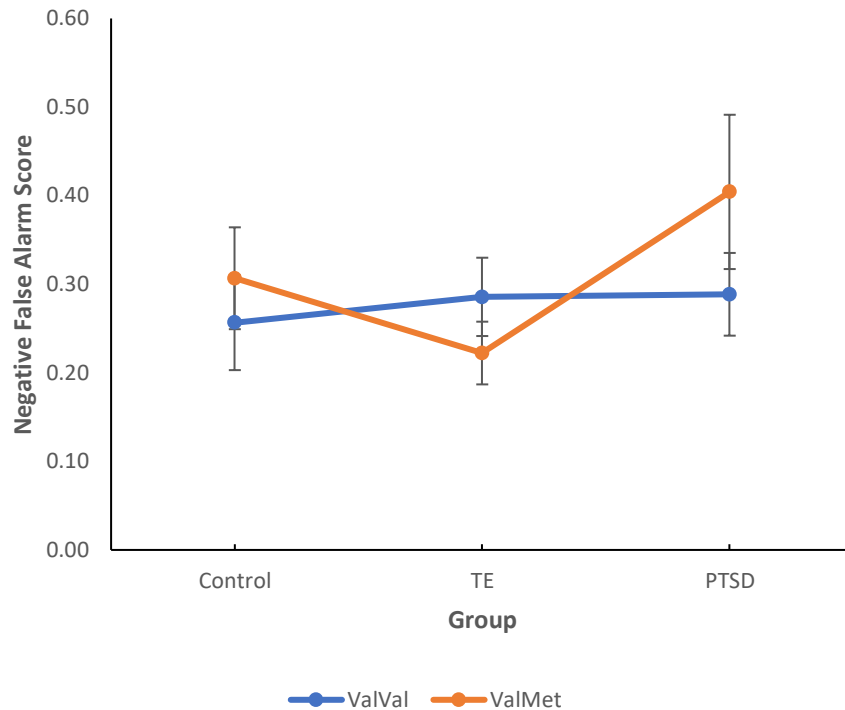
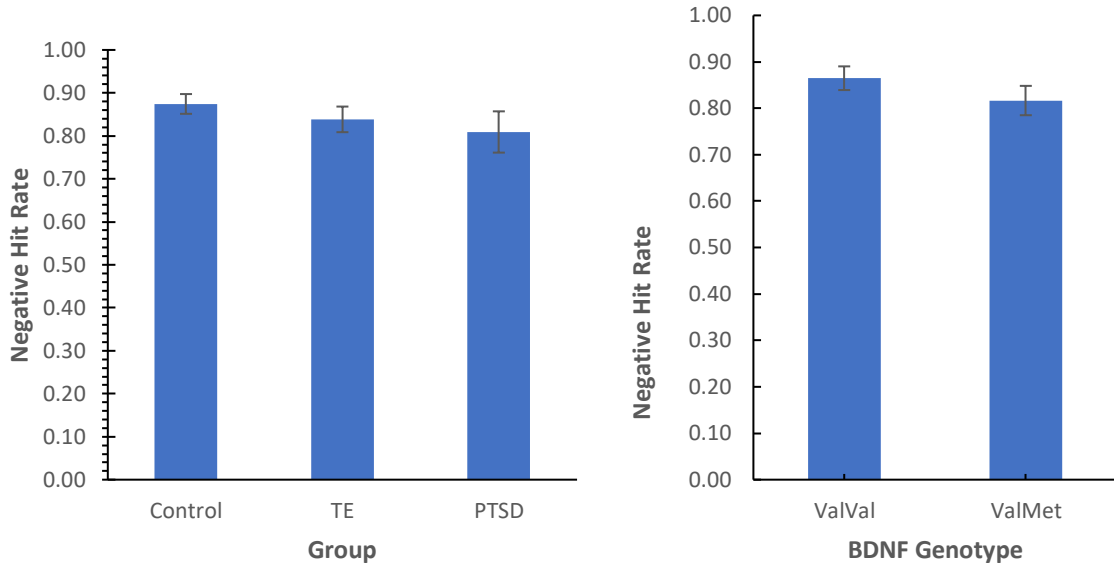


Figure 1. Mean false alarm scores for BDNF genotype across the PTSD, TE and control groups. There was a significant group [$\chi^2(2, N=234) = 7.62, p=.02$] and group x genotype [$\chi^2(2, N=234) = 8.94, p=.01$] but no other significant main or interaction effects (all $p > .12$). Follow up simple interaction effects indicated the TE group differences in genotype were the opposite to the differences in the control and PTSD groups with a significant group x genotype interaction effect between the TE/PTSD [$\chi^2(2, N=149) = 8.91, p=.01$] and TE/Control [$\chi^2(2, N=190) = 4.72, p=.03$] groups, but no significant interaction effect between the Control and PTSD groups ($p=.36$). In the TE group, Val/Met participants had a lower false alarm rate than Val/Vals. However, in the Control and PTSD groups, both had a higher false alarm rate for Val/Met than Val/Val. There was a main effect of genotype between the Control/PTSD groups in that Val/Mets had significantly higher false alarm rates than Val/Vals [$\chi^2(2, N=129) = 5.30, p=.02, d=.50$] but no significant group effect ($p=.07$).



Figures 3a & b: Mean negative Hit rate scores for the Control, TE and PTSD groups and for the Val/Val and Val/Met Genotype groups. There was a significant main effect of group [$\chi^2 (2, N=234) = 6.21, p=.05$] and genotype [$\chi^2 (1, N=234) = 5.34, p=.02$], but no significant sex or interaction effects (all $p > .69$). PTSD participants had a significantly lower hit rate for negative images than Controls ($p=.05$, 95% CI [.00, .13]) with no significant hit rate differences between the PTSD and TE ($p=.31$, 95% CI [-.09, .03]) or TE and control groups ($p=.12$, 95% CI [-.08, .01]). Val/Val genotypes had a significantly higher hit rate ($m=.86, SD=.11$) than Val/Met participants ($M=.82, SD=.12$).

Note: Error bars: 95% CI

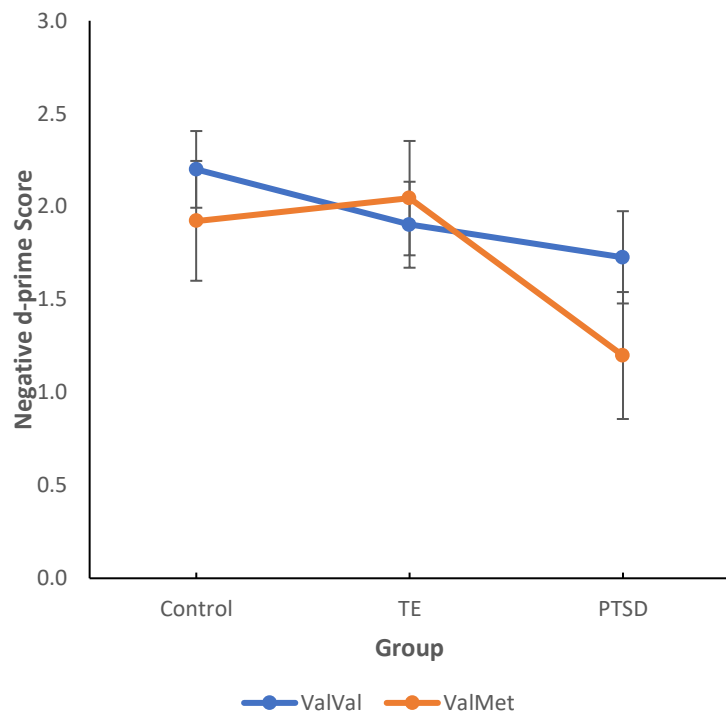


Figure 2. Mean d-prime scores for BDNF genotype across the PTSD, TE and control groups in Caucasian only participants

Note: Error bars: 95% CI

