

Supplemental Table 1.
Sample Descriptive Statistics

Sample Characteristic	<i>n</i>	%
Male	684	50.55%
Race		
White	1,053	77.83%
Black/African American	234	17.29%
American Indian/Alaskan Native	41	3.03%
Asian	29	2.14%
Native Hawaiian/other Pacific Islander	10	0.74%
Ethnicity		
Hispanic/Latino	179	13.23%
Married	665	49.15%
Highest Education		
High school/GED	136	10.05%
Vocational post high school	54	3.99%
Some college	472	34.89%
Associates degree	223	16.48%
College degree	322	23.80%
Masters or Doctorate	139	10.27%
Did not report	7	0.52%
Sexual Orientation		
Heterosexual	1,088	80.41%
Gay, lesbian, bisexual, or other	91	6.73%
Did not report	174	12.86%
Marine Corps veteran	128	9.46%
Multiple Deployments	454	33.56%
VA SCD for PTSD	694	51.29%
Enrolled in mental health treatment before T1	1,208	89.28%
In mental health treatment T2	682	50.41%
In mental health treatment T3	659	48.71%
In mental health treatment T4	597	44.12%
Any TBI	465	34.37%
Moderate/Severe TBI	119	8.80%

Note. Race categories are not mutually exclusive; GED = General Educational Development; PTSD = posttraumatic stress disorder; SCD = service-connected disability; TBI = traumatic brain injury; VA = Department of Veterans Affairs.

Supplemental Table 2.

Sample Trauma Characteristics

Sample Characteristic	<i>n</i>	%
Time of Index Trauma Occurrence		
Before Deployment	49	3.62%
During Deployment	1,287	95.12%
After Deployment	14	1.03%
Index Trauma Category		
Combat	1,165	86.10%
Sexual assault	78	5.76%
Any other very stressful event or experience or multiple categories	28	2.07%
Transportation accident	19	1.40%
Severe human suffering	14	1.03%
Physical assault	13	0.96%
Sudden violent death	9	0.67%
Serious accident at work, home or during recreational activity	7	0.52%
Assault with a weapon	6	0.44%
Other unwanted or uncomfortable sexual experience	5	0.37%
Sudden accidental death	4	0.30%
Life threatening illness or injury	3	0.22%
Serious injury, harm, or death you caused to someone else	2	0.15%
Military Sexual Trauma (VA screen)	254	18.77%
Lifetime Trauma Exposure (directly experienced)		
Combat or exposure to a warzone	1,278	94.46%
Transportation accident	803	59.35%
Physical assault	723	53.44%
Fire or explosion	677	50.04%
Sudden, unexpected death of someone close	664	49.08%
Assault with a weapon	635	46.93%
Natural disaster	501	37.03%
Exposure to a toxic substance	495	36.59%
Other unwanted or uncomfortable sexual experience	490	36.22%
Caused serious injury, harm, or death to others	388	28.68%
Serious accident at work, home, or during recreational activity	378	27.94%
Sexual assault	367	27.12%
Life threatening illness or injury	320	23.65%
Sudden, violent death	191	14.12%
Severe human suffering	178	13.16%
Captivity	31	2.29%

Supplemental Table 3
Descriptive Statistics of Included Variables

	Mean	SD	Min	Max
Age at Index Trauma	31.29	9.81	13	64
Years Since Index Trauma				
T1	5.95	2.24	0.5	18
T2	8.42	2.20	1.59	20.19
T3	9.42	2.21	21.15	21.15
T4	10.59	2.21	4.14	22.22
PCL Total				
T1	44.15	18.42	0	80
T2	41.41	19.76	0	80
T3	41.80	19.89	0	80
T4	37.94	20.41	0	80
PHQ-9 total				
T1	13.44	6.58	0	27
T2	12.08	6.68	0	27
T3	12.28	6.79	0	27
T4	12.17	6.77	0	27
AUDIT total				
T1	7.60	6.62	1	35
T2	7.13	6.81	1	35
T3	7.11	7.05	1	40
T4	6.28	6.36	1	40
PHQ-9 item 9 (SI)				
T1	0.45	0.77	0	3
T2	0.41	0.74	0	3
T3	0.46	0.77	0	3
T4	0.43	0.77	0	3
CTQ Physical Abuse	9.21	4.54	5	25
CTQ Sexual Abuse	8.00	5.44	5	25
LEC Categories Endorsed	6.01	2.86	0	16
DRRI Combat	33.78	12.91	16	80
DRRI Aftermath	33.75	13.03	16	80
DRRI Post-Deployment Social Support	48.99	11.18	15	75

Note. AUDIT = Alcohol Use Disorders Identification Test; CTQ = Childhood Trauma Questionnaire; DRRI = Deployment Risk and Resilience Inventory; LEC = Life Events Checklist; PCL = PTSD Checklist, PHQ-9 = 9-item Patient Health Questionnaire, SI = suicidal ideation.

Supplemental Table 4.

Fit Indices for Growth Curve Models using Different Model Configurations.

Model	# Parameters	Loglikelihood	AIC	BIC
Full Sample – Fixed Effects				
Fixed intercept	3	-23809.08	47624.16	47639.79
Fixed linear	5	-23806.92	47623.84	47649.89
Fixed quadratic	7	-23782.96	47579.93	47616.40
Full Sample – Mixed Effects				
Random intercept	4	-22060.01	44128.03	44148.87
Random linear	8	-21873.67	43763.34	43805.02
Random quadratic	13	-21847.14	43720.29	43788.02
Deployment Trauma – Fixed Effects				
Fixed intercept	3	-22943.60	45893.20	45908.72
Fixed linear	5	-22940.13	45890.26	45916.13
Fixed quadratic	7	-22924.98	45863.96	45900.17
Deployment Trauma – Mixed Effects				
Random intercept	4	-21283.39	42574.77	42595.46
Random linear	8	-21094.68	42205.36	42246.75
Random quadratic	13	-21070.53	42167.07	4223432
First 10 Years – Fixed Effects				
Fixed intercept	3	-23000.03	46006.05	46021.57
Fixed linear	5	-22997.89	46005.79	46031.65
Fixed quadratic	7	-22980.47	45974.94	46011.15
First 10 Years – Mixed Effects				
Random intercept	4	21446.96	42901.93	42922.62
Random linear	8	-21275.05	42556.11	42607.49
Random quadratic	13	-21243.45	42512.91	42580.16
10-20 years – Fixed Effects				
Fixed intercept	5	-22086.26	44182.52	44208.39
Fixed linear	7	-22084.60	44183.19	44219.40
10-20 years – Mixed Effects				
Random intercept	6	-20870.57	41753.15	41784.19
Random linear	10	-20805.36	41630.72	41682.45

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion.

Supplemental Table 5.

Unstandardized Parameter Estimates (and Standard Errors) of Growth Curve Model Predictors in Univariate Models.

	Full Sample (N = 1,353)			Deployment Trauma (N = 1,304)		
	Intercept	Linear Slope	Quadratic Slope	Intercept	Linear Slope	Quadratic Slope
Demographic Variables						
Male Sex	2.30 (3.23)	-0.03 (0.74)	-0.03 (0.04)	-0.28 (3.51)	0.46 (0.83)	-0.06 (0.05)
Racial Minority	6.95 (4.13)	-0.49 (0.91)	0.03 (0.05)	5.00 (4.43)	-0.17 (1.03)	0.01 (0.06)
Hispanic Ethnicity	-12.13 (4.66)*	2.78 (1.10)*	-0.11 (0.07)	-10.45 (4.91)*	2.45 (1.19)*	-0.10 (0.07)
Education	-2.41 (1.11)*	0.02 (0.25)	0.01 (0.02)	-1.97 (1.23)	-0.07 (0.29)	0.01 (0.02)
Military Branch (0=Army)	-	-	-	4.01 (5.81)	-1.98 (1.33)	0.14 (0.08)
Trauma Variables						
Combat	-	-	-	0.68 (0.14)*	-0.04 (0.03)	<0.01 (<0.01)
Battle Aftermath	-	-	-	0.59 (0.14)*	-0.03 (0.03)	<0.01 (<0.01)
Post-Deploy Social Support	-	-	-	-0.93 (0.13)*	0.03 (0.03)	<0.01 (<0.01)
Any TBI	7.34 (3.53)*	-0.85 (0.78)	0.05 (0.05)	6.71 (3.96)	-0.83 (0.95)	0.53 (0.06)
Moderate/Severe TBI	4.94 (5.45)	0.02 (1.21)	<0.01 (0.07)	3.78 (6.21)	0.12 (1.47)	-0.01 (0.09)
MST	3.67 (4.22)	-0.06 (0.90)	0.01 (0.05)	4.68 (4.88)	-0.28 (1.15)	0.02 (0.07)
Trauma Categories	2.45 (0.45)*	-0.18 (0.10)	0.01 (0.01)	2.31 (0.51)*	-0.14 (0.12)	<0.01 (0.01)
Multiple Deployments	-	-	-	6.11 (3.89)	-1.61 (0.93)	0.06 (0.06)
Childhood Physical Abuse	0.87 (0.39)	0.01 (0.09)	<0.01 (0.01)	0.86 (0.43)*	0.03 (0.10)	<0.01 (0.01)
Childhood Sexual Abuse	0.63 (0.29)*	<0.01 (0.06)	<0.01 (<0.01)	0.63 (0.31)*	0.01 (0.08)	<0.01 (0.01)
Peritraumatic Emotions						
Fear	2.47 (3.74)	0.05 (0.89)	<0.01 (0.05)	3.55 (3.78)	-0.17 (0.91)	0.01 (0.06)
Helplessness	6.95 (3.45)*	-1.12 (0.81)	0.09 (0.05)	7.59 (3.55)*	-1.11 (0.85)	0.08 (0.05)
Horror	10.10 (3.16)*	-0.55 (0.72)	0.03 (0.04)	12.07 (3.38)*	-1.07 (0.81)	0.06 (0.05)
Numbing	13.32 (3.28)*	-0.80 (0.73)	0.02 (0.04)	14.90 (3.66)*	-1.15 (0.86)	0.04 (0.05)

Note. All analyses adjusted for age at time of index trauma; Deploy. = deployment; MST = military sexual trauma; TBI = traumatic brain injury; * = $p < .05$.

Supplemental Table 6.

Unstandardized Parameter Estimates (and Standard Errors) of Growth Curve Models Predictors in Multivariable Models among Deployment Subsample.

Model and Predictors	Intercept	Linear Slope	Quadratic Slope
Model 1: Demographics			
Age at Index Trauma	-0.28 (0.16)	0.02 (0.04)	<0.01 (<0.01)
Hispanic Ethnicity	-10.45 (4.91)*	2.45 (1.19)*	-0.10 (0.07)
Model 2: Demographics and Trauma Characteristics			
Age at Index Trauma	-0.23 (0.16)	0.01 (0.04)	<0.01 (<0.01)
Hispanic Ethnicity	-10.44 (4.56)*	2.40 (1.31)*	-0.10 (0.07)
Combat	0.31 (0.21)	-0.02 (0.05)	<0.01 (<0.01)
Battle Aftermath	0.22 (0.19)	-0.01 (0.05)	<0.01 (<0.01)
Post-Deployment Social Support	-0.78 (0.14)*	0.04 (0.03)	<0.01 (<0.01)
Trauma Categories	0.55 (0.57)	-0.01 (0.14)	<0.01 (<0.01)
Childhood Physical Abuse	0.03 (0.43)	0.06 (0.11)	<0.01 (0.01)
Childhood Sexual Abuse	0.37 (0.33)	0.01 (0.08)	<0.01 (0.01)
Peritraumatic Helplessness	3.69 (3.67)	-0.73 (0.92)	0.07 (0.06)
Peritraumatic Horror	6.42 (3.27)*	-0.53 (0.81)	0.03 (0.05)
Peritraumatic Numbing	5.40 (3.50)	-0.24 (0.84)	<0.01 (0.05)
Model 3: Trimmed Model			
Age at Index Trauma	-0.22 (0.15)	0.01 (0.04)	<0.01 (<0.01)
Hispanic Ethnicity	-11.47 (4.55)*	2.61 (1.12)*	-0.11 (0.07)
Post-Deployment Social Support	-0.92 (0.13)*	0.03 (0.03)	<0.01 (<0.01)
Peritraumatic Horror	9.74 (3.18)*	-0.83 (0.77)	0.05 (0.05)

Note. All analyses adjusted for age at time of index trauma; * = $p < .05$.

Supplemental Table 7.

Unstandardized Parameter Estimates (and Standard Errors) of Covariate Models among the Deployment Subsample.

Model/Covariate	PTSD T1	PTSD T2	PTSD T3	PTSD T4
Model 1 – Depression	-	-	-	-
Depression T1	2.13 (0.05)*	0.43 (0.07)*	-	-
Depression T2	-	1.65 (0.07)*	0.43 (0.07)	-
Depression T3	-	-	1.65 (0.07)*	0.54 (0.08)*
Depression T4	-	-	-	1.42 (0.08)*
Model 2 – Suicidal Ideation				
Suicidal Ideation T1	8.07 (0.55)*	2.86 (0.53)*	-	-
Suicidal Ideation T2	-	5.10 (0.55)*	1.88 (0.52)*	-
Suicidal Ideation T3	-	-	6.68 (0.50)*	2.14 (0.68)*
Suicidal Ideation T4	-	-	-	5.61 (0.62)*
Model 3 – Alcohol Abuse				
Alcohol Abuse T1	0.75 (0.08)*	0.19 (0.08)*	-	-
Alcohol Abuse T2	-	0.46 (0.09)*	0.08 (0.10)	-
Alcohol Abuse T3	-	-	0.63 (0.10)*	0.11 (0.12)
Alcohol Abuse T4	-	-	-	0.49 (0.11)*
Model 4 – Psychological Treatment				
Treatment T1	9.10 (0.84)*	-	-	-
Treatment T2	-	5.84 (0.70)*	-	-
Treatment T3	-	-	6.32 (0.67)*	-
Treatment T4	-	-	-	3.41 (0.80)*
Model 5 – VA SC PTSD Disability (y/n)	10.63 (1.10)*	8.80 (1.10)*	8.48 (1.13)*	5.54 (1.20)*

Note. PTSD = posttraumatic stress disorder; SC = service-connected disability; VA = Department of Veterans Affairs; * = $p < .05$.