Supplementary Tables and Figures

Supplementary Table 1: Individual participant trauma details for both sham and cervical non-invasive vagal nerve stimulation (nVNS) groups. Number of distinct traumatic experiences are also presented. It was possible for a trauma to be present in multiple traumatic scripts or a script to contain multiple traumatic experiences.

Participant	Sham or nVNS	Trauma Classification (s)	Number of Distinct
1	nVNS	Death of parent; Loss of job; unfaithful spouse; failed relationship; emotional neglect (n = 3); molested; work-related stress	9
2	nVNS	Seeing ghosts; Observed death of others; Work-related stress	3
3	nVNS	Death of parent; Molested	2
4	nVNS	Observed death of workplace customer	1
5	nVNS	Observed serious injury to others (n = 2)	2
6	nVNS	House Fire; Near Car Accident	2
7	nVNS	Attempted suicide and emotional abuse related to serious illness of parent	1
8	nVNS	Physical Assault, Car Accident	2
9	nVNS	Robbery, Attempted abduction of family member	2
10	nVNS	Car Accident, Threatened by strangers	4
11	nVNS	Death of family member	2
1	Sham	Observed seriously injury to others; Molested	2
2	Sham	Personal Injury, Near Car Accident	2
3[a]	Sham		
4	Sham	Robbery, Victim of Assault	2
5	Sham	Sexual Abuse	1
6	Sham	Embarrassed by Peer	1
7	Sham	Molested; Relationship Failed	2
8	Sham	Sexual Abuse	2

[a] content of script lost due to technical error

Supplementary Table 2: Brain areas with significantly (p < 0.0025) greater activity during the first (TSB1), second (TSB2), and third (TSB3) applications of sham stimulation during trauma as measured with positron emission tomography. Significant clusters are presented by size (number of voxels) and location (Brodmann area, cluster peak Talairach coordinates). Sub-cluster peaks are also identified. ND = no difference.

| Voxel Number | Brain Region | Brodmann Area | Talairach | | | Z Score |
			X	Y	Z	
Activation						
TSB2 > TSB1: ND						
TSB3 > TSB2						
39	R Parietal Lobe, Postcentral Gyrus	1	65	-21	38	5.29
	R Parietal Lobe, Inferior Lobule	40	67	-29	33	3.39
16	R Caudate		14	20	9	5.16
18	L Frontal Lobe, Precentral Gyrus	44	-57	6	11	4.05
16	L Posterior Cingulate	31	-6	-29	45	3.73
26	R Claustrum		26	21	2	3.65
25	L Frontal Lobe, Middle Gyrus	46	-46	51	8	3.49
	L Frontal Lobe, Inferior Gyrus	46	-48	43	11	3.36
16	R Temporal Lobe, Superior Gyrus	22	57	4	0	3.42
17	L Claustrum		-34	-13	11	3.28
Deactivation						
TSB2 > TSB1:	ND					
TSB3 > TSB2						
27	L Occipital Lobe, Precuneus	31	0	-65	20	3.88
16	R Cerebellum		32	-30	-24	3.84
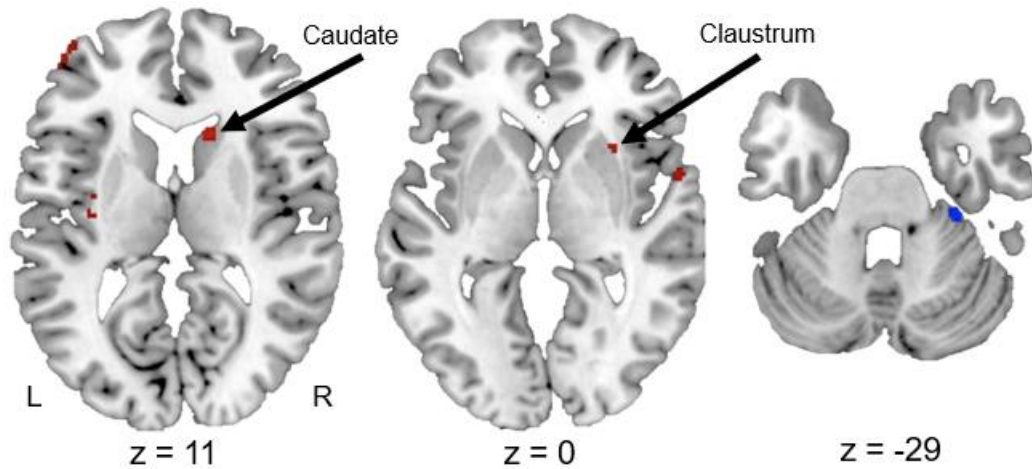
Supplementary Figure 1: Axial slices of significant (p < 0.0025) areas with greater activation and deactivation during the third (TSB3) compared to second (TSB2) period of exposure to individualized trauma scripts with sham non-invasive vagal nerve stimulation. Talairach x coordinates are presented to indicate slice location.