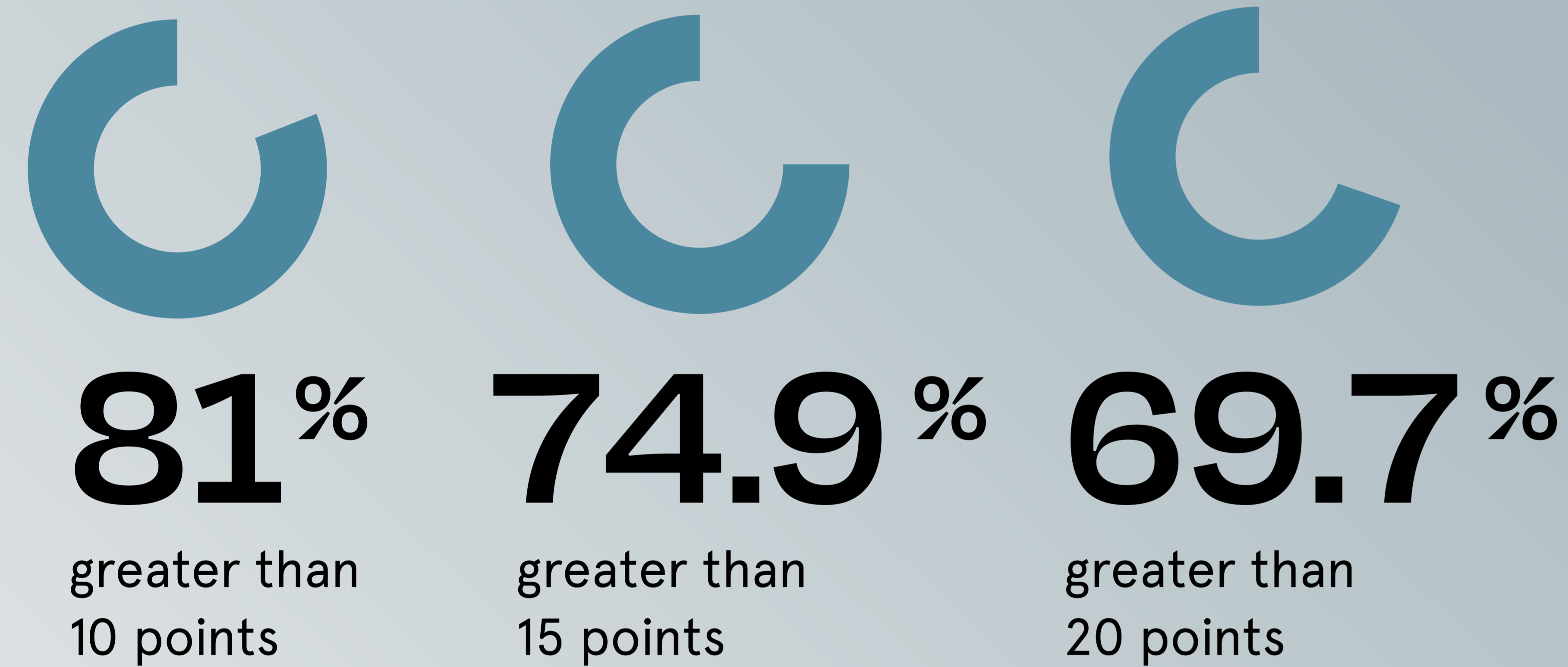


A Retrospective Study

Utility of Cervical Sympathetic Block in Treating Post-Traumatic Stress Disorder in Multiple Cohorts

PCL scores dropped on average:



The Result

Stellate Ganglion Block is an effective treatment for PTSD symptoms no matter their gender, trauma type, PTSD-related drug use, history of suicide attempts, or age.

Trauma Type	n	M _{change}	SD _{Mchange}	SE _{Mchange}	Min	Max	95% CI		M _{change} = 0
							LCL	UCL	P
Divorce/Family Stress	4	-45.75	8.54	4.27	-51.00	-33.00	-59.34	-32.16	0.001
Parental Issues Stress	2	-43.00	18.38	13.00	-56.00	-30.00	-208.18	122.18	0.187
Combat Warfare	75	-32.27	17.81	2.06	-68.00	4.0	-36.36	-28.17	<0.0005
Domestic Violence	3	-31.00	12.77	7.37	-42.00	-17.00	-62.72	0.72	0.052
Other Trauma	27	-29.52	18.89	3.64	-58.00	0.00	-36.99	-22.05	<0.0005
Physical Violence/Threat	9	-28.67	15.41	5.14	-43.00	0.00	-40.51	-16.82	0.001
Childhood Physical Abuse	16	-28.06	19.59	4.90	-60.00	-2.00	-38.50	-17.62	<0.0005
Sexual Assault Abuse	7	-26.71	20.37	7.70	-43.00	6.00	-45.55	-7.88	0.013
Head Injury	6	-26.58	10.72	4.37	-44.00	-14.00	-37.83	-15.34	0.002
Car or Other Accident	4	-25.50	15.84	7.92	-35.00	-2.00	-50.71	-0.29	0.044
Witness Death/Traumatic Event	8	-24.75	10.14	3.58	-44.00	-10.00	-33.23	-16.27	<0.0005
Childhood Emotional Abuse	13	-24.12	21.60	5.99	-60.00	0.00	-37.17	-11.06	0.002
At least 1 Childhood Trauma	26	-24.02	19.77	3.88	-60.00	2.00	-32.00	-16.03	<0.0005
Injury/Death of a Loved One	13	-22.31	16.77	4.65	-56.00	1.00	-32.44	12.17	<0.0005
Work Stress Fear	6	-21.83	14.73	6.01	-40.00	0.00	-37.29	-6.38	0.015
Health Issues	7	-21.43	10.85	4.10	-35.00	-8.00	-31.46	-11.40	0.002
Don't Know	11	-21.18	18.35	5.53	-58.00	7.00	-33.51	-8.85	0.003
Childhood Sexual Abuse	9	-17.00	17.41	5.80	-41.00	2.00	-30.38	-3.62	0.019
Bullying/Hazing	5	-13.85	35.04	15.67	-56.00	29.75	-57.36	29.66	0.427

Table 3. Measures of central tendency and variability of PCL score from pre- to post-interventions according to trauma type, ranked from largest to smallest change, for the subgroup of men (n=182).

Trauma Type	n	M _{change}	SD _{Mchange}	SE _{Mchange}	Min	Max	95% CI		M _{change} = 0
							LCL	UCL	P
Physical Violence/Threat	13	-33.91	13.31	3.69	-53.00	-12.00	-41.95	-25.87	<0.0005
Childhood Physical Abuse	23	-33.64	16.13	3.36	-55.00	0.00	-40.62	-26.66	<0.0005
Don't Know	3	-32.67	7.51	4.33	-40.00	25.00	-51.31	-14.02	0.017
Sexual Assault Abuse	40	-30.96	16.25	2.57	-60.00	0.00	-36.15	-25.76	<0.0005
Childhood Sexual Abuse	23	-30.80	15.94	3.32	-55.00	0.00	-37.70	-23.91	<0.0005
Health Issues	12	-30.17	14.16	4.09	-58.00	-10.00	-39.16	-21.17	<0.0005
At Least 1 Childhood Trauma	49	-29.79	14.77	2.11	-55.00	0.00	-34.03	-25.55	0.022
Divorce/Family Stress	5	-29.20	17.85	7.98	-46.00	0.00	-51.37	-7.03	0.008
Car or Other Accident	7	-28.43	19.05	7.20	-52.00	-8.00	-46.05	-10.81	<0.0005
Domestic Violence	27	-28.36	15.53	2.98	-57.00	-4.00	-34.51	-22.22	<0.0005
Childhood Emotional Abuse	27	-26.66	15.24	2.93	-55.00	0.00	-32.68	-20.63	<0.0005
Injury/Death of Loved One	19	-26.26	19.03	4.37	-62.00	1.00	-35.44	-17.09	0.063
Work Stress Fear	2	-25.50	3.54	2.50	-28.00	-23.00	-57.27	6.27	0.138
Combat Warfare	3	-25.33	18.23	10.53	-45.00	-9.00	-70.62	19.95	0.008
Parental Issues Stress	6	-25.33	14.43	5.89	-49.00	-7.00	-40.48	-10.19	0.127
Head Injurt	4	-23.50	22.400	11.20	-57.00	-10.00	-59.14	12.14	<0.0005
Other Trauma	17	-23.48	15.97	3.87	-52.00	0.00	-31.69	-15.27	<0.0005
Witness Death/Traumatic Event	8	-22.80	20.12	6.36	-53.00	0.00	-37.19	-8.41	0.009
Bullying/Hazing	2	3.00	19.80	14.00	-11.00	17.00	-174.89	180.89	0.866

Table 4. Measures of central tendency and variability of PCL score from pre- to post-interventions according to trauma type, ranked from largest to smallest change, for the subgroup of women (n=145).

Why studies like this matter:

Such findings suggest that the current model for treating psychological trauma may benefit from a paradigm shift by considering that psychological trauma may produce biological changes to the central nervous system, such as over-activation of the amygdala.



Average decrease in PCL score was between **28.59 - 29.2 points.**



Women had a slightly **greater mean change** in PCL score.



Results like these suggest that **physiological changes may be reversible** following SGB and help resolve PTSD-related symptoms, currently recognized as psychological.

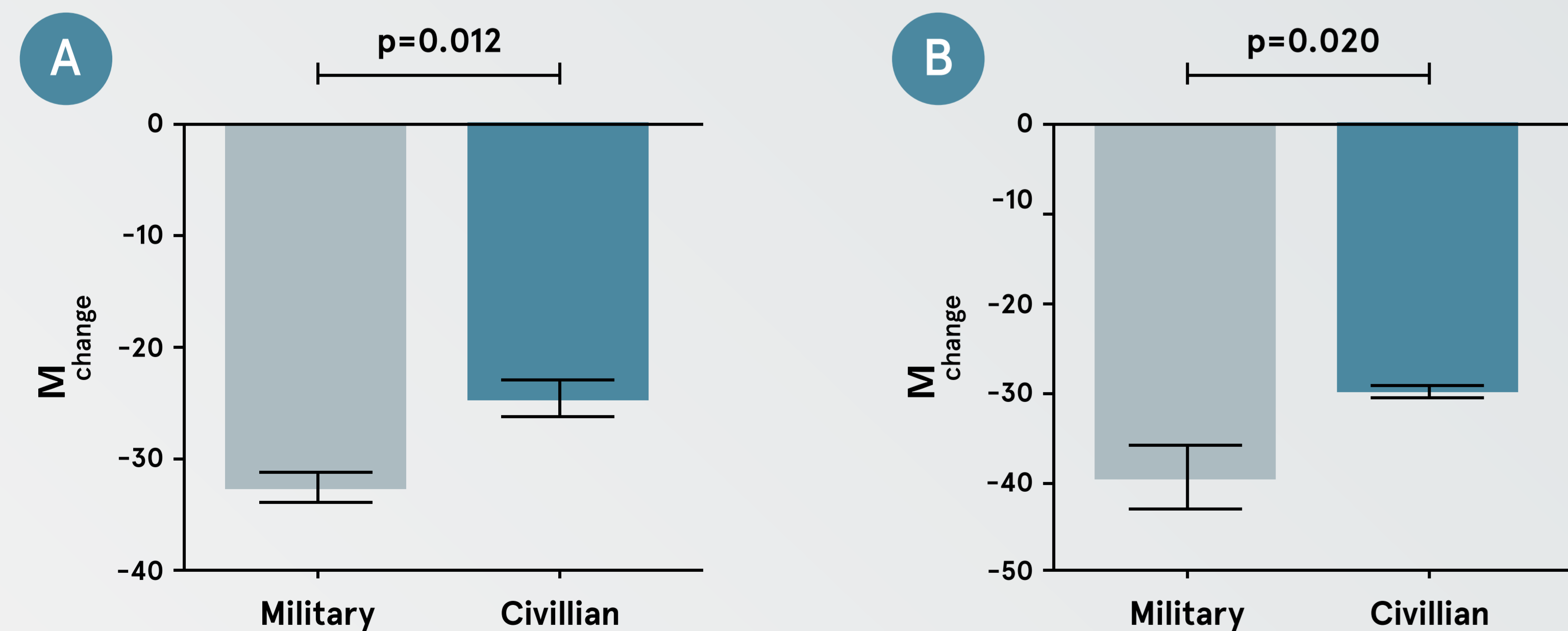


Fig. 1. Mean change in PCL score from pre- to post- intervention (Mchange) in (A) men and (B) women, based on military or civilian background



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[Hyperlink to Study](#)