



The Music Therapy of the Rockies program was developed from observing brain images of PTSD and music on the brain and the perfusion (bloodflow) to affected areas. In October 2020, a veteran obtained a brain imaging and cognitive assessment prior to the retreat, following the retreat, and then a five-month follow-up.

Veteran is a 62-year-old right-handed female with major depressive disorder, PTSD. The patient is a discharged Air Force veteran. She enlisted in January of 1980 and was medically discharged after eight months of active duty. She was sexually assaulted in May of 1980.

The veteran is returning for a follow up scan after her first two scans in October of 2020 (pre/post music therapy). The patient states she has noticed a relief of some depression symptoms in the past few months since her prior scan. She reported having a "better outlook on life" even though this year has been challenging. The patient has continued to see her psychiatrist. The patient did not report any new health changes.

The significant finding is there has been marked interval improvement in cerebral perfusion (bloodflow) in comparison to the prior Brain scan in October 2020, including numerous areas of normalized cerebral perfusion on the current scan that were previously abnormally decreased in perfusion.

October 2020 Cognitive Assessment Pre and 5 Month Post Retreat

Patient Profile	Percentile Range				> 74	25 - 74	9 - 24	2 - 8	< 2
	Standard Score Range				> 109	90 - 109	80 - 89	70 - 79	< 70
Domain Scores	Patient Score	Standard Score	Percentile	Valid Score**	Above	Average	Low Average	Low	Very Low
Neurocognitive Index (NCI)	NA	93	32	No		X			
Composite Memory	92	95	37	Yes		X			
Verbal Memory	55	115	84	Yes	X				
Visual Memory	37	78	7	Yes				X	
Psychomotor Speed	119	79	8	Yes				X	
Reaction Time*	784	91	27	No		X			
Complex Attention*	8	105	63	No		X			
Cognitive Flexibility	30	94	34	No		X			
Processing Speed	40	95	37	Yes		X			
Executive Function	30	93	32	Yes		X			
Simple Attention	40	108	70	Yes		X			
Motor Speed	79	74	4	Yes				X	

February 2021

Patient Profile	Percentile Range				> 74	25 - 74	9 - 24	2 - 8	< 2
	Standard Score Range				> 109	90 - 109	80 - 89	70 - 79	< 70
Domain Scores	Patient Score	Standard Score	Percentile	VI**	Above	Average	Low Average	Low	Very Low
Neurocognition Index (NCI)	NA	105	63	Yes		X			
Composite Memory	104	116	86	Yes	X				
Verbal Memory	59	127	96	Yes	X				
Visual Memory	45	101	53	Yes		X			
Psychomotor Speed	136	89	23	Yes			X		
Reaction Time*	682	102	55	Yes		X			
Complex Attention*	4	113	81	Yes	X				
Cognitive Flexibility	42	105	63	Yes		X			
Processing Speed	43	99	47	Yes		X			
Executive Function	42	103	58	Yes		X			
Simple Attention	40	108	70	Yes		X			
Motor Speed	93	87	19	Yes			X		