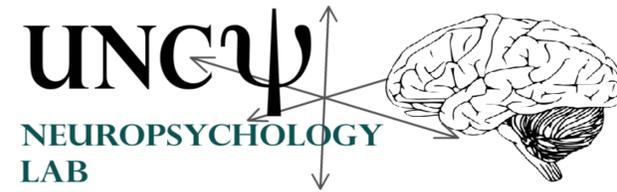




Post-Traumatic Stress Disorder in a Large Veteran Sample: Results of the Traumatic Symptoms Inventory

Antonio E. Puente, Alan Steed, John Capps, Michael Francis, Keenan Withers, Aaron Dedmon, Angie Sekely, Marlee Cadwell and Jacob Wisnoski.

University of North Carolina Wilmington



INTRODUCTION

With substantial medical advances over the years, survival rates in war have risen which has increased the number of soldiers returning home from wars in the Middle East and Southwest Asia with easily overlooked emotional scarring from the trauma experienced in combat. This has led to many cases of Posttraumatic Stress Disorder (PTSD) needed to be diagnosed and treated. To help clinicians detect PTSD, the Trauma Symptom Inventory (TSI) has been developed and has become an important tool in properly diagnosing and treating these invisible wounds.

OBJECTIVE

Research regarding the TSI and its association with PTSD has been conducted, but with minimal sample sizes of around fifty subjects. This current study utilizes a large sample of 664 males veterans between the ages of eighteen and fifty-four to analyze the different elevated scales on the TSI amongst this population.

METHOD

A total 1,266 subjects were evaluated in the complete dataset. However, only 664 were included in the present study due to completion of the TSI-II. The evaluation procedure consisted of a modified neuropsychological “Blast” battery which includes 3 hours of clinical interview and 7 hours of neuropsychological tests administered over two separate testing sessions.

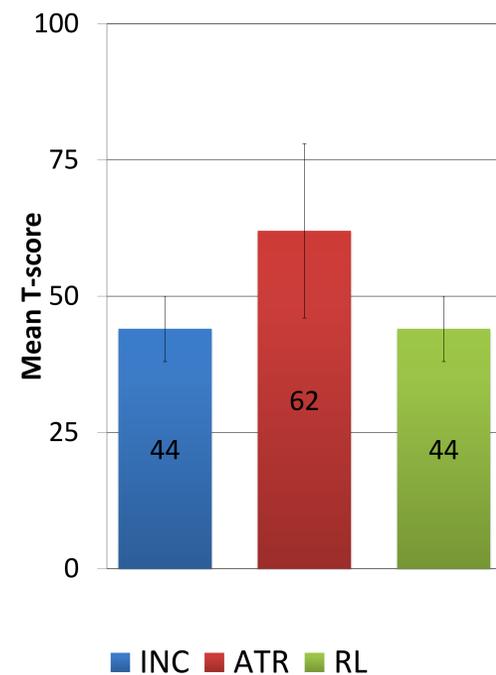
- CVLT-II
- COWAT
- Groove Pegboard
- Grip strength
- Trails Making
- Hayling and Brixton
- MMPI
- Stroop
- TOMM
- TSI
- WAIS-III/WAIS-IV
- MWS-III/MWS-IV
- WRAT-IV

Data was compiled via a private practice associated with Camp Lejeune, North Carolina. All individuals participated through the Tricare health care program and were referred by various military neurologists or other medical officers. The UNCW Office of Research reviewed and provided IRB approval.

Validity Scales

(Measure how much an individual is in denial of symptoms, whether or not the individual is exaggerating his or her symptoms, and whether or not an individual is genuinely responding to questions)

Mean TSI-II Validity Scale T-Scores



INC	Inconsistent Response
ATR	Atypical Response*
RL	Response Level

*indicates an elevated score with one or more standard deviations above the mean.

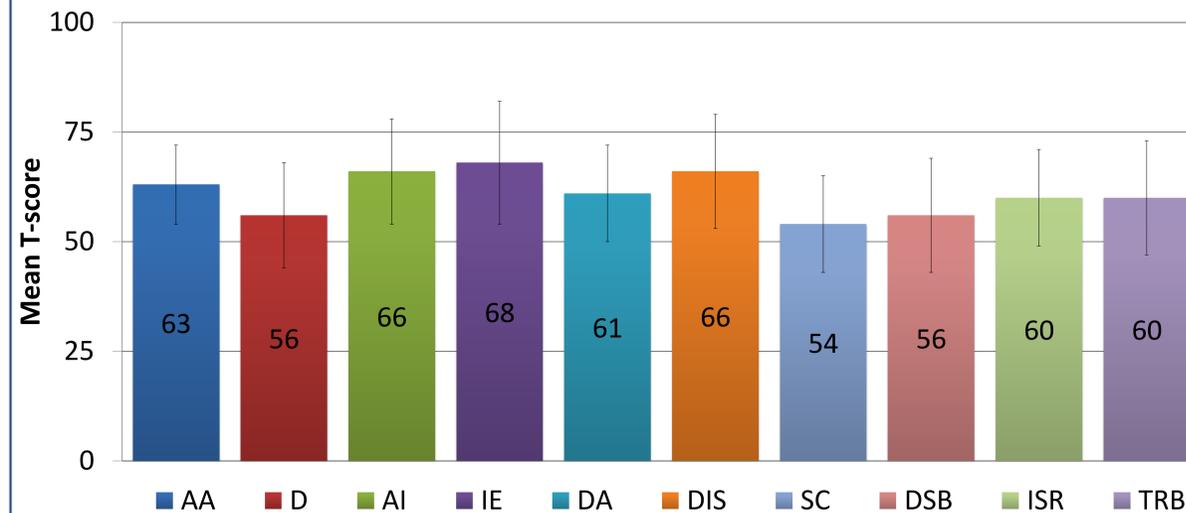
Findings of Validity Scales

- The Atypical Response scale evaluates how much an individual claims to experience events that are atypical within the standard population. Elevation of this could potentially indicate that the individual is attempting to exaggerate his/her symptoms or could indicate the existence of psychosis. Individuals with an elevated score should be further interviewed in order to properly interpret.

Clinical Scales

Clinical Scales (Assesses how much an individual experiences ten various symptoms associated with trauma)

Mean TSI-II Clinical Scale T-scores



AA	Anxious Arousal*	IE	Intrusive Experiences*	SC	Sexual Concerns
D	Depression	DA	Defensive Avoidance*	DSB	Dysfunctional Sexual Behavior
AI	Anger/Irritability*	DIS	Dissociation*	ISR	Impaired Self-Reference*
				TRB	Tension Reduction Behavior*

*indicates an elevated score with one or more standard deviations above the mean.

Findings of Clinical Scales

- The Anxious Arousal scale measures amount of anxiety and autonomic hyperarousal symptoms and an elevated score is potentially sufficient for a DSM-IV diagnosis of PTSD or other conditions related to anxiety.
- The Anger/Irritability scale assesses the level of anger and irritability within an individual including violent thoughts. A high score could represent the existence of these feelings and thoughts, which are often present in cases of PTSD.
- The Intrusive Experiences scale addresses the existence of posttraumatic reactions and symptoms an individual experiences internally (ie. Nightmares, flashbacks, persistent thoughts related to trauma). A high score could satisfy the DSM-IV diagnostic criteria for the “B” group of symptoms.
- The Defensive Avoidance scale measures extent to which an individual makes an intentional effort to deter and fend off unwanted internal experiences and physical environments that could trigger a memory. An elevated score might indicate the fulfillment of the group “C” PTSD symptoms.
- The Dissociation scale measures how much an individual deals with symptoms of dissociation (ie. Cognitive disengagement, depersonalization, emotional numbing, fugue states) and an elevated score could reflect the existence of a dissociative disorder.
- An elevated Impaired Self-Reference scale indicates lack of self-confidence and a poor sense of knowledge about himself/herself.
- A high amount of Tension Reduction Behavior is reflected in an elevated score and might be expressed through suicidal tendencies, abnormal sexual activity, self-injurious behaviors, and intentionally avoiding situations that could evoke feelings of loneliness.

SUMMARY

Considering the amount of traumatic experiences that occur in combat, these elevated scores are not unusual. The existence of an elevated ATR score could mean that some individuals are experiencing some sort of psychosis as a result of trauma while others could be trying to exaggerate their symptoms for sympathy reasons. Increased levels of AA, AI, IE, and DA support the high prevalence of PTSD amongst this population considering how they are associated with the PTSD criteria of the DSM-IV. Elevated DIS and ISR scores are indicative of personality hindrances, which are often symptoms of a traumatic experience. Increased amounts of TRB represent an above average existence of behaviors that have visible outcomes.

FUTURE DIRECTIONS

Several concerns are being investigated including;

- Effects of loss of consciousness on PTSD
- Validity of the TSI in the military population.
- Utilization of elevated TSI scores in order to properly treat an individual’s emotional state.

References

Briere, J. (1995). *Trauma Symptom Inventory (TSI): Professional manual*. Psychological Assessment Resources: Lutz, FL.

A special thanks to Carolina Psychological Health Services and the veterans who participated in the study.