

Exploring the factor structure of a battery of neuropsychological assessments among the CENC cohort

Purpose

To identify potentially useful relationships between neuropsychological assessments collected on Chronic Effects of Neurotrauma Consortium (CENC) participants using a factor model

Participants

Participants consisted of 492 post-911 combat Veterans and Service Members from four VA study sites.

How was the study conducted?

Participants completed assessments: concussion history, neurocognitive functioning, and self-report questionnaires. Exploratory factor analyses (EFA) using four different methods with varimax and promax rotations were used to analyze the cognitive variables. Final model selection was based on factor loadings towards simple structure.

Findings

There is reasonable evidence to suggest that data collected from the CENC neuropsychological battery can be reduced to five clinically useful factors: list learning, working memory/executive skills, cognitive control, fluency, and memory.

Military Impact

The five clinically useful factors will make further study of the impact of concussion on neurodegeneration among Veterans and Service Members more specified and useful.

Exploring the Factor Structure of a Battery of Neuropsychological Assessments among the CENC Cohort Hirsch, Shawn; Belanger, Heather; Levin, Harvey; Eggleston, Barry; Wilde, Elisabeth; McDonald, Scott; Brearly, Timothy; Tate, David