# Efficacy of Cranial Electrotherapy Stimulation for Anxiety, PTSD, Insomnia and Depression: US Military Service Members and Veterans Self Reports

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# **Objective**

The purpose of this study was to examine Alpha-Stim and Veterans' perceptions of the effectiveness and safety of CES treatment.

#### **Design**

Service Members and Veterans (N=1,514) were invited to participate in the web based survey via email. One hundred fifty-two participants returned questionnaires. Data were analyzed using descriptive statistics.

### **Primary Effectiveness Endpoints**

Participants reported clinical improvement of ( $\geq$ 25%) from using Alpha-Stim CES for anxiety (66.7%), PTSD (62.5%), insomnia (65.3%) and depression (53.9%). The majority of these participants reported  $\geq$  50% clinical improvement. Almost all (99.0%) respondents perceived CES to be safe.

#### **Key Inclusion Criteria**

Service Members and Veterans who obtained an Alpha-Stim CES device through the US Department of Defense or US Veterans Affairs Medical Centers from 2006-2011.

## **Protocol Summery**

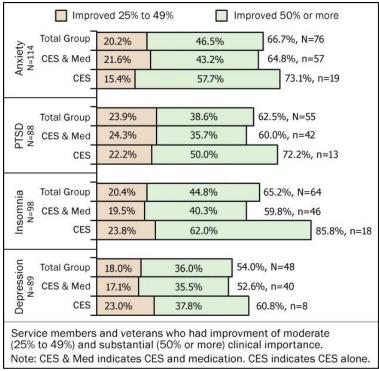
Participants either voluntarily chose to respond or not to respond to the questionnaire. One hundred fifty-two (N=152) responses to the questionnaire were received, yielding a response rate of 10%. The questionnaire contained 27 questions that covered the following areas: demographic information, prescription medication use, current exercise activity, and questions asking respondents to rate the effectiveness of Alpha-Stim CES technology for treating anxiety, PTSD, insomnia and depression.

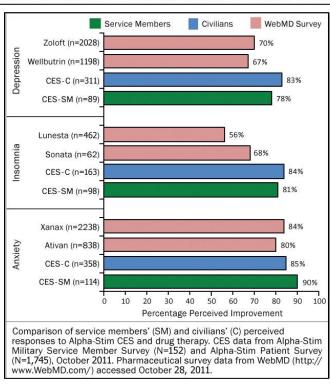
#### **Outcome Measures**

Data were analyzed using descriptive statistics. In addition to analysis of improvement related questions on anxiety, PTSD, insomnia and depression, questions were also interpreted in light of respondents taking or not taking prescription medication while using CES.

# **Conclusion**

Respondents perceived Alpha-Stim CES as an effective and safe treatment for anxiety, PTSD, insomnia and depression. These findings are consistent with the findings of previous research studies on Alpha-Stim CES. In this study, it appears that medication may be a confounding variable that influences the effectiveness of CES. The need to control for medications (type and dose) in future CES studies is a valuable outcome of this study. CES can be used to provide patients with a safe, non-invasive, non-pharmacologic treatment for anxiety, PTSD, insomnia and depression that can be used in the clinic or self-directed at home.





#### **Author Affiliations**

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