



## Introduction

Working in disaster environments represents a major professional challenge. This particularly applies to executive personal engaged in directing disaster operations, i.e. crisis managers. The present study aimed to investigate self-reported stress and psychophysiological responses to emotional and cognitive stressors in crisis managers.

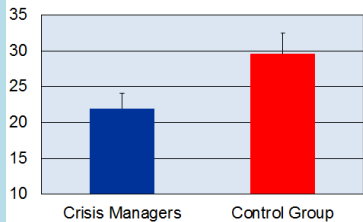
## Methods

- ❖ Comparison crisis managers vs. managers from other fields
- ❖ Self-report measures: Perceived Stress Questionnaire (PSQ), Questionnaire for Recuperation and Strain (EBF-24), von Zerssen Symptom Checklist (BL-R), basic health behaviors (physical activity, alcohol consumption)
- ❖ Psychophysiological parameters: heart rate (ECG), electrodermal activity (EDA)
- ❖ Stress induction: visual/acoustic crisis-related and non-specific stressors, cognitive load (mental arithmetics)

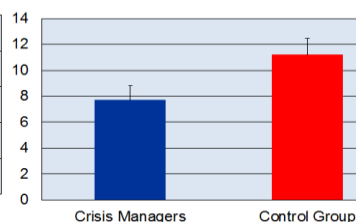
## Main Results

Crisis managers reported: lower subjective stress (PSQ,  $p < .05$ ), lower social strain (EBF,  $p < .05$ ), lower physical problems (BL-R), higher social recreation (EBF), less alcohol consumption and more physical activity (all  $p < .05$ ).

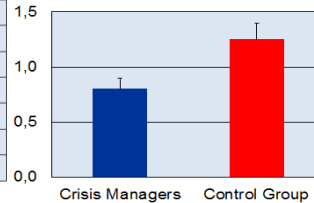
Perceived Stress Questionnaire



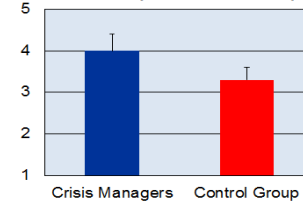
Symptom Checklist



Social Strain (Questionnaire for Recuperation and Strain)

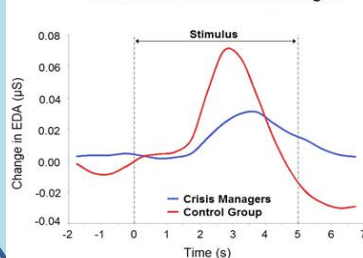


Social Recreation (Questionnaire for Recuperation and Strain)

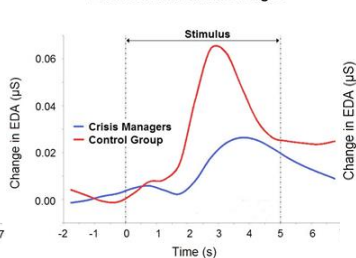


Crisis managers exhibited diminished EDA and heart rate responses to crisis related and non-specific stress images, crisis related and non-specific acoustic stressors as well as to cognitive stress (all  $p < .05$ ).

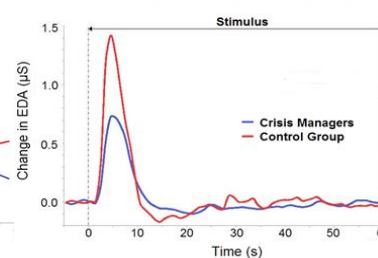
EDA: Crisis-related Stress Images



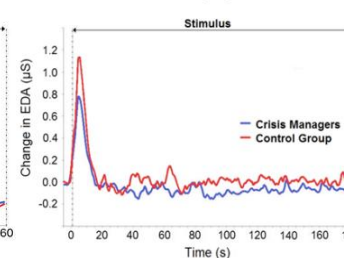
EDA: General Stress Images



EDA: Crisis-related Acoustic Stress



EDA: Montreal Imaging Stress Test



## Discussion

Crisis managers reported lower subjective stress burden, improved subjective health and showed smaller psychophysiological responses to crisis-related and non-specific stressors as well as to cognitive load.

Possible reasons of increased stress tolerance:

- ❖ Higher levels of social support
- ❖ More healthy life-style
- ❖ Professional stress management training
- ❖ Selection according to stress management skills