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# PTSD/S, Stress, and Burnout in CISOs: The Impact of Strain and Resilience in Cybersecurity

AFFILIATIONS



### 01. Introduction

This research aimed to identify potential risks for stress and associated disorders within the position of Chief Information Security Officers (CISOs). Through a review of literature on stress in high-risk organization employees, certain job factors for CISOs (such as critical incidents, acute/chronic stress interactions, and alienation) were similar to those identified as being associated with post-traumatic stress symptoms, acute stress disorder, burnout syndrome, and allostatic load in other high stress professions.

### 02. Purpose

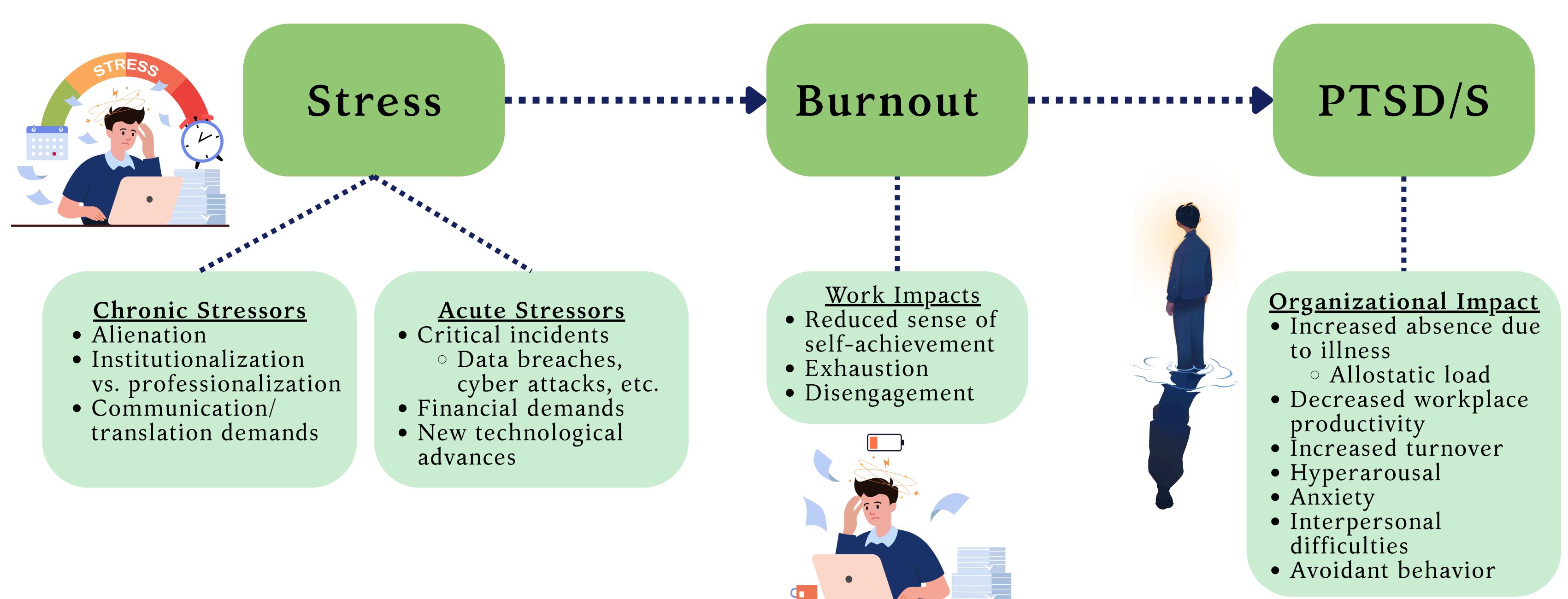
PTSD/S, stress, and burnout can create negative health and occupational outcomes for workers. This includes an increase in clustered health issues known as allostatic load (Guidi et. al., 2020) and a reduced efficacy in the workplace due to factors such as difficulties in interpersonal functioning (Svetlitzky et. al., 2020), absenteeism, or task avoidance. This poster aims to analyze the specific occupational risks associated with CISOs, alongside providing basic recommendations for human resource departments on resilience and stress reduction.

### 03. Methods

The role of CISOs was analyzed through the lens of PTSD/S prevalence and stress/resilience factors in similarly high-stress occupations that had larger amounts of published research. This was compared with studies about the role of CISOs within an organization and the issues that they may face within that role. This is not a conclusive literature review, but rather a summary of relevant literature aiming to provide actionable suggestions for those in the targeted positions (HR, higher management, and information security).

## 04. Key Findings

Wear-and-tear model of PTSD/S: A flowchart depicting how acute and chronic stressors can build into burnout syndrome or PTSD/S over time, and how this will impact the organization and individual.



### 05. Recommendations

### Items for development:

- Cultural mindsets that treat security as a priority for every employee.
- Social support systems with employees trained in recognition of stress and associated disorder symptomology in themselves and others; 'Peer support teams.'
- Strategic action plans for the inevitability of different critical incidents.
- Resilience and regulation skill development courses; can be borrowed from fields with similar social and risk profiles.
- Personnel positions with employees trained in critical incident stress management.
- Psychotherapy and PTSD/S informed therapy recommendations for employees.
- Well defined communicative pathways and role definitions for CISOs to mitigate the impact of alienation and role conflict.

# 06. Definitions

Allostatic Load: a negative physiological state resulting when the cumulative effects of life and environmental stress exceed individual resilience.

**Burnout**: a psychological syndrome that places you at a higher risk of developing PTSD/S; a result of occupational stress characterized by exhaustion, separation from person and place, and a reduced sense of achievement.

Critical Incidents: operational tasks or stressful event(s) that elicit strong emotional responses; may influence an individual's ability to function in the workplace.

High-Risk (High-Reliability) Organizations (HROs): occupations or businesses where an employee faces exposure to extreme stress, pressure, or workload, such that it is detrimental to their mental and physical health.

Post-Traumatic Stress Disorder/Symptoms (PTSD/S): a collection of abnormal stress reactions that can develop due to exposure to a traumatic event, or through 'wear-and-tear' exposure to multiple critical incidents over time.

Resilience: the psychosocial strengths and processes that assist an individual in recovering from adverse events.

