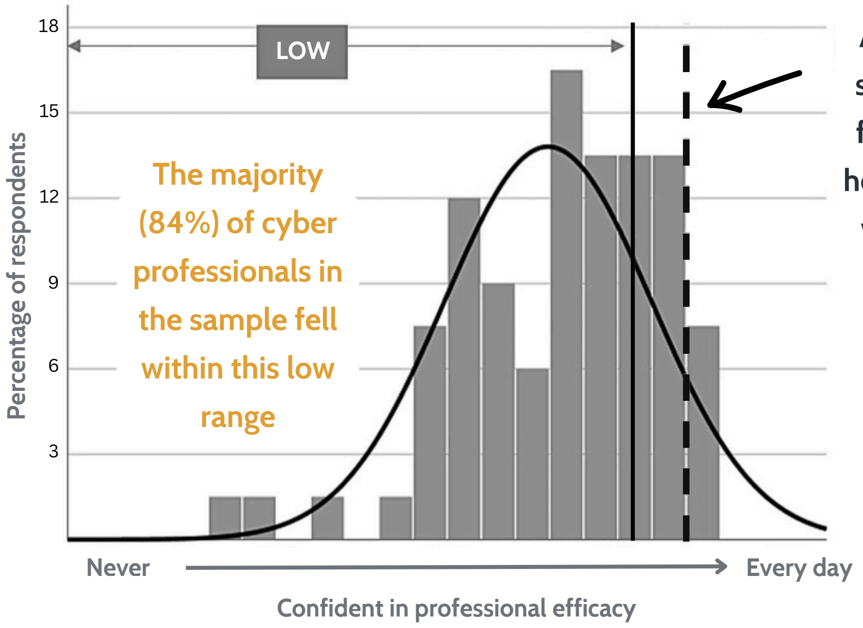
Cyber Defenders are burning out faster than Frontline Healthcare Workers

FINDINGS FROM CYBERMINDZ' ORGANISATIONAL PSYCHOLOGY RESEARCH

The cybersecurity workforce is now indispensable to the resilience of organisations and national infrastructure. Yet, the professionals entrusted with this mission are themselves under unsustainable strain. Two recent research studies conducted by Cybermindz' organisational psychology team demonstrate that burnout in the cyber sector has reached critical levels, with average scores meeting or exceeding those recorded among frontline healthcare workers during the height of the COVID-19 pandemic. For a workforce already stretched by skills shortages, this constitutes a systemic risk that cannot be ignored.

Burnout is a well-established occupational health construct, defined not as mere fatigue but as a multidimensional syndrome comprising emotional exhaustion, depersonalisation and reduced professional efficacy. When high job demands–constant vigilance, heavy workload, and the "always-on" threat environment–are not balanced with adequate resources, the result is exhaustion, cynicism and reduced capacity. In cybersecurity, these conditions are intrinsic to the work itself, meaning that interventions must be deliberate and industry-specific.

Across two ongoing studies, now incorporating data from 294 cybersecurity professionals across multiple organisations, several concerning patterns have become clear. The first and most striking was the sheer prevalence of burnout. Regardless of role or gender, scores were consistently elevated compared to the general population, placing the profession at a level of strain comparable to healthcare workers who endured the extraordinary demands of the pandemic. Burnout in cyber, in other words, is not an isolated phenomenon confined to a few overworked analysts–it is pervasive, extending from entry-level roles through to CISOs and senior managers.



The majority (84%) of cyber professionals in the sample fell within this low range

Average score for frontline healthcare workers

The research also revealed important demographic and role-based nuances. Female security consultants reported significantly higher levels of emotional exhaustion than their male colleagues, a trend likely compounded by cultural barriers in a male-dominated industry. While sample sizes of women in certain roles were limited, the signal is clear: lack of cultural fit, exposure to bias, and fewer flexible work options continue to exact a measurable toll.

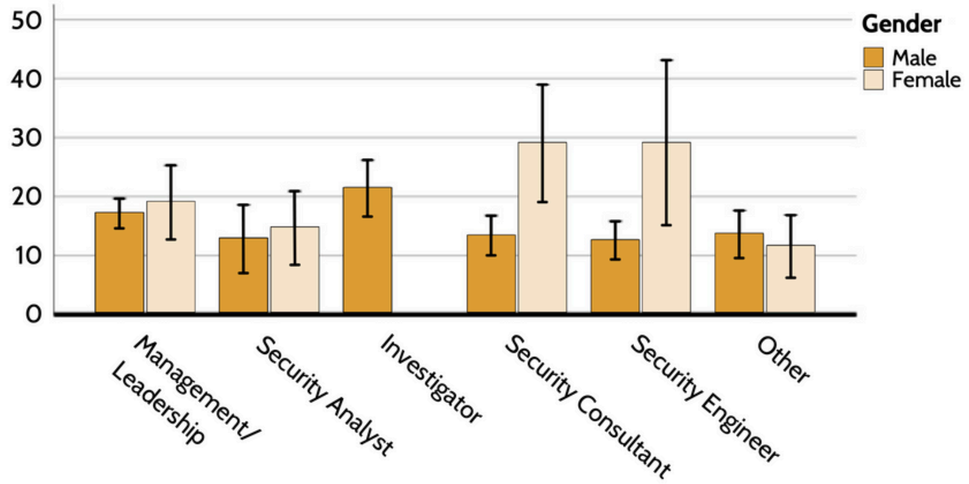
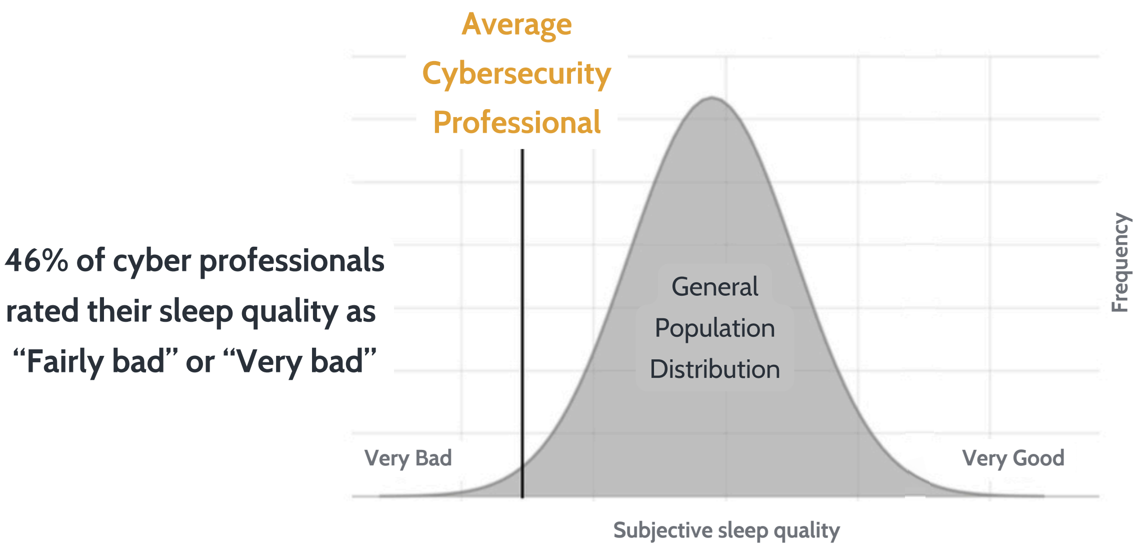


Figure 1. Average Emotional Exhaustion scores across job role and gender

Beyond gender, the findings showed that different cyber roles exhibit different burnout profiles, underscoring that resilience strategies cannot be generic. What protects a SOC analyst from exhaustion may not be sufficient for a consultant, engineer, or executive.

A further dimension investigated was sleep quality, a variable often neglected in workforce research but of critical importance to cognitive performance and stress recovery. Senior managers in particular reported poorer quality sleep, and statistical analyses confirmed that poor sleep was strongly associated with higher levels of emotional exhaustion. This relationship is not linear but cyclical: exhaustion degrades sleep, and poor sleep exacerbates exhaustion. For those in leadership positions, where decisions under pressure carry significant consequences, this finding should be regarded as a red flag.



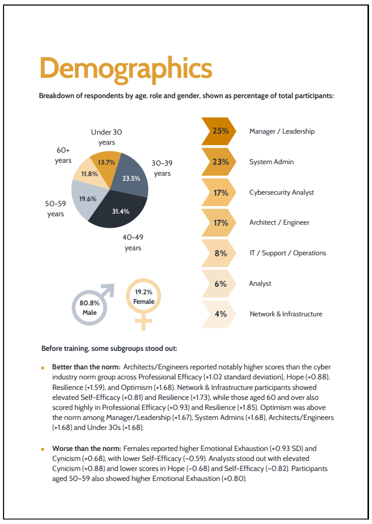
46% of cyber professionals rated their sleep quality as “Fairly bad” or “Very bad”

The implications are profound. At an individual level, prolonged burnout erodes wellbeing and increases the likelihood of resignation. At an organisational level, it degrades performance, slows incident response, and increases the risk of human error in high-stakes environments. At a sectoral level, it deepens the skills shortage and undermines diversity, as women continue to bear a disproportionate share of the burden. Left unchecked, burnout becomes not just a workforce issue but a cybersecurity risk in its own right.

What these studies demonstrate, however, is that burnout is measurable. Using the Cybermindz Resilience Index™, organisations can quantify the resilience of their teams just as they would assess the vulnerabilities of their networks. This transforms resilience from an abstract aspiration into a controllable dimension of organisational security. Leaders who take the step of measuring workforce wellbeing gain the ability to benchmark against industry norms, monitor trends over time, and design targeted interventions that address the unique stressors of different roles and demographics.

Cybermindz' research establishes an evidence base that makes the challenge visible and actionable. The message is clear: resilience is not motivational rhetoric but a capability, and like any capability, it must be assessed, tracked, and improved. If cybersecurity leaders wish to retain their talent, sustain performance, and close the gaps that attackers are all too ready to exploit, they must treat the wellbeing of their teams as a core element of defence strategy.

Cybermindz' Resilience Pulse Survey provides a research-validated, lightweight means of benchmarking the resilience of cyber teams. It offers leaders actionable insights into where their workforce stands today and how to strengthen it for tomorrow, while the Cybermindz Resilience Index™ delivers the full suite of psychometrics for deeper analysis and long-term resilience planning.



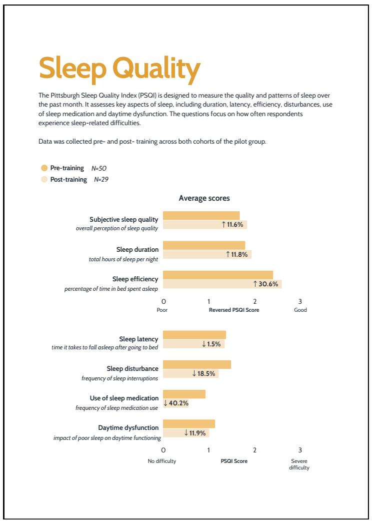
Demographics

Breakdown of respondents by age, role and gender, shown as percentage of total participants:

25%	Manager / Leadership
23%	System Admin
17%	Cybersecurity Analyst
17%	Architect / Engineer
8%	IT / Support / Operations
6%	Analyst
4%	Network & Infrastructure

Before training, some subgroups stood out:

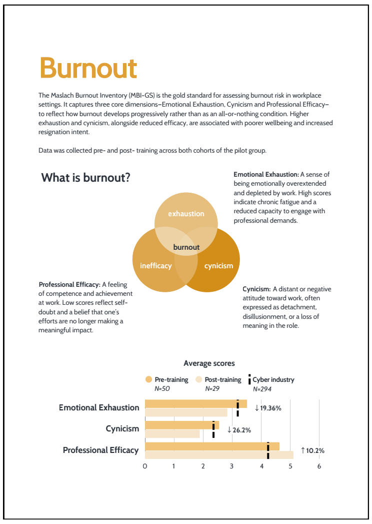
- **Better than the norm:** Architects/Engineers reported notably higher scores than the cyber industry norm group across Professional Efficacy (+1.02 standard deviation), Hope (+0.88), Resilience (+1.59), and Optimism (+1.68). Network & Infrastructure participants showed elevated Self-Efficacy (+0.81) and Resilience (+1.73), while those aged 60 and over also scored highly in Professional Efficacy (+0.93) and Resilience (+1.85). Optimism was above the norm among Manager/Leadership (+1.67), System Admins (+1.68), Architects/Engineers (+1.68) and Under 30s (+1.68).
- **Worse than the norm:** Females reported higher Emotional Exhaustion (+0.93 SD) and Cynicism (+0.68), with lower Self-Efficacy (–0.59). Analysts stood out with elevated Cynicism (+0.88) and lower scores in Hope (–0.68) and Self-Efficacy (–0.82). Participants aged 50–59 also showed higher Emotional Exhaustion (+0.80).



Sleep Quality

The Pittsburgh Sleep Quality Index (PSQI) is designed to measure the quality and patterns of sleep over the past month. It assesses key aspects of sleep, including duration, latency, efficiency, disturbances, use of sleep medication and daytime dysfunction. The questions focus on how often respondents experience sleep-related difficulties.

Data was collected pre- and post- training across both cohorts of the pilot group.



Burnout

The Maslach Burnout Inventory (MBI-GS) is the gold standard for assessing burnout risk in workplace settings. It captures three core dimensions–Emotional Exhaustion, Cynicism and Professional Efficacy–to reflect how burnout develops progressively rather than as an all-or-nothing condition. Higher exhaustion and cynicism, alongside reduced efficacy, are associated with poorer wellbeing and increased resignation intent.

Data was collected pre- and post- training across both cohorts of the pilot group.

What is burnout?

Emotional Exhaustion: A sense of being emotionally overextended and depleted by work. High scores indicate chronic fatigue and a reduced capacity to engage with professional demands.

Professional Efficacy: A feeling of competence and achievement at work. Low scores reflect self-doubt and a belief that one's efforts are no longer making a meaningful impact.

Cynicism: A distant or negative attitude toward work, often expressed as detachment, disillusionment, or a loss of meaning in the role.

Burnout at the level of frontline healthcare workers should not be regarded as the new normal for cyber. It is a clear signal for leaders to measure resilience and take deliberate action to protect their teams. Resilience is now as critical to defend as any firewall–because without it, every system is vulnerable.