

Does Emotional Fatigue Impact Road Safety?

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Introduction

Most people know about physical and mental fatigue, but emotional fatigue is just as common and often overlooked. When drivers become emotionally drained by prolonged stress or demanding situations, their safety, engagement, and performance are more likely to suffer.

Drawing on recent research and interviews with multiple NRSPP partners, this article explores what emotional fatigue is, why it matters, and how organisations can spot it and protect their employees before serious crashes occur.

The Issue

Road safety is significantly impacted by numerous human factors, which now account for nearly two out of every three serious crashes. Human-factor related crashes are often the result of driver choices and behaviours. Among these factors, fatigue can play a critical role, impairing reaction time, influencing decision making; and overall alertness behind the wheel. As driver fatigue continues to be a key contributor to serious crashes, addressing it is essential in reducing road incidents.



What is fatique?

Fatigue is a state of exhaustion resulting from the depletion of energy reserves in the body, which interferes with your ability to function at your usual capacity. This may result from not getting enough sleep, poor sleep or being awake for long periods. This can make you feel tired or easily distracted. Fatigue can be thought of like a bank account: it most often occurs when you are constantly making withdrawals (through effort, stress or lack of sleep) without enough deposits (rest, recovery, replenishment).^{2,3}

Most people only attribute fatigue to drowsiness or tiredness caused by poor or inadequate sleep. However, fatigue is a multidimensional construct that can be divided into three major components: 2,4

- Physical fatigue is characterised by a sense of weariness or diminished energy in the body, often associated with tiredness, drowsiness, and muscle weakness.
- Cognitive fatigue is a feeling of mental exhaustion or decreased cognitive capacity, often leading to difficulty concentrating, slower thinking and reactions, and increased forgetfulness.
- **Emotional fatigue** is the state of depleted emotional resources caused by prolonged stress or emotional strain, leading to feeling drained, detached, or overwhelmed.

These components can interact together, or independently, to manifest a variety of symptoms, including:

- Poor decision-making and problem-solving ability 0
- o Slower reaction time
- Reduced concentration
- Increased irritability or frustration 0
- Lack of motivation 0
- Impaired cognition O
- Low energy O
- Difficulty multitasking O
- Reduced empathy and compassion.

Emotional Fatique

Research has extensively examined the effects of physical and cognitive fatigue on driving performance, shaping policy guidelines that set minimum rest breaks and time between shifts.

However, emotional fatigue remains a relatively new area of study. Characteristics of emotional fatigue include decreased motivation, cognitive disengagement and exhaustion. This can impact a driver's ability to engage with their environment and decisionmaking, especially concerning adherence to safety regulations.⁴





Emotional Demands

Recent research highlights the impact of emotional demands on driving performance. These demands arise from work-related interactions that require persistent emotional effort.⁵

For example, many individuals in driving related professions, such as taxi drivers, rideshare operators, home-carers, emergency service drivers and bus drivers, often engage in 'surface acting' where they must project friendliness or calmness even when they are feeling stressed or fatigued. Bus drivers, for example, must maintain a friendly demeanour with passengers while suppressing frustration during difficult interactions or staying calm in stressful traffic situations. 5,6 Maintaining this composure can drain energy resources, reduce concentration on road safety behaviours—especially under high-pressure conditions—and lead to higher self-reported crash rates.⁵

Another emotional demand that impacts driving-related professions is 'emotion-rule dissonance', which occurs when an individual's personal beliefs do not align with their job/role requirements (see breakout box).



Utility workers dispatched to service locations may be required to disconnect power even when it conflicts with their personal values, such as when cutting electricity risks exposing elderly residents to dangerous heat. This moral strain, where workers feel compelled to act against their ethical judgment, can be emotionally and mentally exhausting, impairing their decision-making and overall cognitive performance.

"There are some [calls] that are more emotionally and mentally draining too, [especially] when our people have got to make moral decisions."

Other common workplace stressors that might have a cumulative effect on emotional fatigue in drivers across various industries include:

- Time constraints such as tight schedules and strict deadlines that are frequently impacted due to traffic congestion, road crashes, or roadworks.
- Personal issues particularly surrounding family, including extended time away from family or family conflict.
- Working hours especially inconvenient shifts like long hours, being on-call, night shifts or work that requires fly-in fly-out.
- Customer conflict that may involve aggressive, emotional or vulnerable clients.
- Multitasking which involves completing numerous tasks simultaneously, particularly while driving, that can use up cognitive reserve and create distractions.



Example of Personal Stressors Impacting Job Performance from a NRSPP Partner

A bus driver was caught talking on the phone while driving at 100 kmh. After unpacking the incident, it was revealed that he had just returned from an overseas trip where his mother was ill and had just undergone surgery. The call was from his brother, informing him that the surgery had been successful.

This situation highlights the importance of understanding the personal stressors affecting workers, as often there is no deliberate intent to break the rules; rather, in this case, the driver was emotionally preoccupied. Had he informed a supervisor about his circumstances before starting his shift, alternative arrangements—such as assigning him to non-driving duties—could have been made.

"We just didn't understand what that person was going through."







The delayed effect

Stressful events, particularly high-pressure shifts, can have a delayed impact due to the body's reliance on adrenaline. During crises, individuals can operate in a heightened state of alertness, where adrenaline sharpens focus and reaction times. However, once the crisis subsides and adrenaline begins to wear off, exhaustion starts to set in, leading to reduced attention, slower reflexes, and impaired decision-making. ^{7,8}

"Adrenaline [used up] because you're there to make a difference, but the downside to adrenaline is it comes and goes real quickly too."

Many NRSPP partners have noted that workers returning from high-stakes situations often experience minor crashes in subsequent shifts and expressed their concern about the safety of that worker during this time. This suggests that while these individuals may function optimally under stress, the sudden depletion of adrenaline can result in dangerous lapses, leaving individuals vulnerable to errors and crashes.

"They're running on adrenaline and almost desensitised to what they're doing, but then the moment they come in the office, tripping over a step...that shift scares me more than the night one."

Additionally, NRSPP partners have noticed that being frequently exposed to this type of environment can create a sense of dependency on adrenaline and workers become accustomed to crisis-driven engagement. Once the urgency fades, they may begin to feel unsettled or disengaged until a new emergency appears.

"We've been through quite a lot as far as disasters, fires, and floods, and what we see every time is the safety stats are exceptional. No near misses, no injuries, nothing. It's amazing to see people raise that level of awareness. But again, you see on the other side of that, when things come back to base that it's nearly like people are waiting...nearly manifesting something to happen."

Despite this widespread acknowledgment across industries and strong foundational evidence on adrenaline's effects, a significant gap remains in research on how its depletion impacts worker performance in subsequent shifts and the development of effective mitigation strategies.

However, until research can provide specific guidelines and policies to directly target the delayed effects of adrenaline depletion, simple strategies—such as debriefing—can still be effectively implemented to ensure safer transitions between high-intensity tasks and routine responsibilities.

Time of Year

Towards the end of the year, many companies experience a high level of workload. According to Energy Queensland, a NRSPP partner, this surge in activity can lead to a rise in "dumb" incidents—minor errors in routine tasks—around November and December. For drivers, factors such as end-of-year fatigue, stress, home-life distractions, and multitasking at work accumulate, making this period especially high risk. This trend raises concerns for employers about whether workers' mental, physical, and emotional capacities have been depleted after a long, intense workload period, with many simply pushing through to the holidays in hopes of resetting.



"Our dumb incidents were going up...nothing life-threatening, but just silly fender benders and hits with stationary objects...A lot of these mundane almost tasks that people would do every single day were just starting to fail us. And that was about November/December. And we were having the chat to sort of go, 'well have we used them up?' You know, have we used our capacity up, our people?"

The Role of Telematics in Early Prevention of Emotional Fatigue

Telematics can monitor a driver's behaviour by gathering realtime data on driving patterns, including sudden braking, lane deviations, or inconsistent speed, which may indicate fatigue.⁹

However, using telematics systems to monitor emotional exhaustion in employees is still in its early stages. These tools could help overcome the challenge of expressing emotions and reporting wellbeing concerns, particularly in male-dominated industries with older generations.

Case Study with Origin

In an interview with the IVMS Compliance & Road Safety Advisor at Origin, he expresses his concerns for older male drivers regarding their reluctance to discuss mental health and emotions, as well as their restricted awareness of the biological implications it can have on their health.

He explains that supervisors receive training on mental health to help them recognise signs of poor wellbeing in their staff, adding that he applies a similar approach using in-vehicle monitoring data, where he may recommend that a manager check in with a driver and "see what's happening in their headspace. Their driving record is usually five stars but they've had a couple of harsh braking or minor incidents, which were probably lowering their driver performance."

Not only does this open up conversations between drivers and their managers by providing drivers with a safe environment to discuss their wellbeing, it also emphasises the value of telematics in detecting early warning signs and preventing major incidents linked to emotional fatigue.

Challenges with Emotional Fatigue

Emotional fatigue still comes with barriers that prevent individuals from reaching out before an incident occurs. Some of the biggest barriers are being able to recognise when you are affected by emotional fatigue, not knowing how to recover adequately before getting behind the wheel, and being prepared to speak up. Emotional exhaustion is exceptionally difficult to measure accurately as unlike physical fatigue, it can only be detected through subjective reports, making it hard to identify or address concerns unless individuals speak up—an insight highlighted in an interview with Vero, a NRSPP partner.

Stigma further complicates this issue, particularly in maledominated industries like utilities, where acknowledging mental health or emotions may be perceived as a weakness. In contrast, healthcare work settings—with a higher proportion of women—have been more successful in implementing risk mitigation strategies that include addressing emotional fatigue, as it can also be perceived as a strength.

"Just acknowledging it doesn't mean you're incapable, even if you just have one bad day. It doesn't mean you can't come to work and do a job. All it means is let us help you out, mate."

What can be done?

To better manage emotional fatigue and reduce stigma, workplaces can adopt several strategies:

- Adjust terminology and use terms like "appearance" or "mood" instead of "mental health" to make discussions feel less intimidating and encourage open communication.
- Implement self-assessment tools like I'M SAFE (Injury, Medication, Stress, Alcohol, Fatigue, Emotion) to allow employees to evaluate their wellbeing daily and prompt conversations about potential concerns.
- Train supervisors on mental health so they can recognise early signs of emotional fatigue and provide support when needed.
- Conduct fatigue assessments that require drivers to complete fatigue checks before and during shifts to allow supervisors to intervene if safety risks arise.
- Drive a cultural shift by encouraging open dialogue about fatigue and normalising discussions in the workplace, which can help reduce stigma and improve overall wellbeing.
- Debrief after stressful or triggering events to allow workers to process their experiences and receive support.

By implementing these measures, organisations can create a safer and more supportive environment, helping workers manage emotional fatigue without fear of judgement, and increasing work driving and community road safety.



Resources

Are You Roadworthy? - https://www.nrspp.org.au/are-youroadworthy-road-safety-campaign/

H.E.A.D.S.P.A.C.E. - https://www.nrspp.org.au/resources/ recognising-poor-h-e-a-d-s-p-a-c-e-perspectives-from-bothoneself-and-managers/

Emotional Exhaustion - https://www.nrspp.org.au/resources/ nrspp-quick-fact-emotional-exhaustion/

Support Services

Healthy Heads Trucks and Sheds - https://www.healthyheads. org.au/

Amber Community (road incident support) - https:// ambercommunity.org.au/

Mental Health First Aid - https://www.mhfa.com.au/

Lifeline - https://www.lifeline.org.au/

Black Dog Institute - https://www.blackdoginstitute.org.au/

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