

Mental health in mining: The link between psychological stress and safety



As a country, South Africa struggles with its collective mental health.

According to the Annual Mental State of the World Report from Sapien Labs, published in 2022, SA ranks as one of the worst countries when it comes to mental health, scoring the lowest average score on the mental health wellbeing scale. Put in the starkest terms: more than a quarter (25.7%) of South Africans are depressed while every year the country loses up to 14,000 people to suicide.

Zoom in on the mining sector, and you will see South Africa's mental health 'pandemic' play out in real time.

High-intensity, long-shift work in challenging conditions - especially underground operations - demands constant alertness. Many workers are also migrants who are separated from their families, contributing to loneliness, stress and depression. South African mining communities are often racked by violence, which further harms workers' state of mind. Compounding this is the fact that mining organisations are notoriously hierarchal with an aggressive leadership style defined by yelling, with workforces that are predominantly male. In a patriarchal society such as ours, men are often discouraged from expressing vulnerability because it appears "weak", leading to a bottleneck of emotions that presents as severe psychological stress.

This dangerous context has far-reaching effects, posing a risk to the lives of others. Psychological stress can lead to disengagement, presenteeism, alcohol and substance abuse and burnout. In one report, depression was revealed to interfere with a person's ability to complete physical tasks at work around

20% of the time while reducing cognitive performance 35% of the time.

In turn, a fall-down in one's mental condition impacts their safety mindset, leading to an increase in injuries or even fatalities. Data shows that up to 80% of injuries and fatalities in mines are due to an inadequate safety mindset among the workforce, and are therefore avoidable. Combine severe psychological stress and a poor safety mindset with a work environment that is high-risk in nature, and you have a volatile cocktail for disaster.

For this reason, entrenching a safety mindset within the mining workforce is paramount, and will circumvent many of the physical safety risks presented by mental illness or psychological stress, and which are compounded by the high-risk nature of the work environment. These mental health conditions still need to be dealt with, but through learning and coaching, we can at least mitigate many of the physical risks they present.

What is a safety mindset? We see this as a mentality focused on protecting oneself and others, managing risks, and promoting shared safety values. It's built on core assumptions, beliefs, and attitudes that balance care with control in approaching safety. This mindset shapes our choices, actions, and responses to challenges, changes, and compliance with rules and regulations.

To this end, one of the first things we do when we enter a mine is conduct a safety assessment. By assessing individual risk patterns, we're able to understand the workforce's general risk-taking tendency, which we categorise according to a Risk Propensity Matrix with four main risk profiles: Consistent Risk Adverse (cautious and predictable); Consistent Risk Taking (predictable in taking risks); Erratic Risk Adverse (cautious and unpredictable); and Erratic Risk Taking (takes risks but is unpredictable) - with Consistent Risk Adverse being the least concerning from a safety perspective, and Erratic Risk Taking being the most concerning. *Why?* Because the latter takes risks - but you cannot anticipate when or why they take them.

Once we understand the organisation's overall risk propensity, we teach them to apply situational awareness in their daily work by helping them identify potential risks, understand these risks, and consider appropriate responses. Together, we create action plans to address specific behaviours, which are reinforced through ongoing, on-the-floor coaching.

We view the supervisor as the safety leader of the team. In the mines we enter, the worst recorded competency is always planning and organising. We know that planned work is, however, safe work. And so, we prevent knee-jerk reactions that can lead to injury through a series of tools and processes that bring structure and order to the shift, creating routine and consistency.

Through tools such as the daily meeting - and by showing people how to engage with each other respectfully - we also focus on psychological safety, which contributes to physical safety. When people feel safe and empowered to speak up when they see something is wrong, we can avoid a whole host of risky behaviours.

Tackling the issue of poor mental health in mines requires action, collaboration and commitment from multiple stakeholders. While many initiatives are underway to address this, it is not a problem that will be solved overnight.

However, what we can do *right now* is remove the likelihood of the physical risks that these conditions can contribute to, through targeted, effective intervention.