Psychology of Safety
From Risk Perception to Safe Behaviours
State of mind and risk perception
Influencers and modifiers

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Declaration

- I am an employee of Qatar Airways
- I have no potential conflicts of interest to report
- Opinions expressed are my own and do not directly represent the opinion of the organization
Objectives

- Examine factors that shape perception and tolerance of risk
- Understand the internal factors that impact safe behaviour
- Discuss practical applications and possible solutions
Spot the hazard
Psychology of Safety
Risk Management - Shaping our Perception

- Research related to OHS has focused on the management of worker safety with little concern for the subjective interpretation of safety risks and effects (Morrow & Crum, 1998)

- Safety interventions need to consider risk perception and reduce the level of risk people are willing to tolerate in order to be successful.
- Improvements in OHS cannot be achieved through training, engineering or enforcement
- The extent of risk taking ultimately depends on the values that prevail, not the safety technology available.
Perception of risk

Not constant. Varies with individual and context

Ref: Deloitte, Enterprise Risk Services
Impact of mood on safety behavior

MOOD AND RISK IN SAFTEY-CRITICAL WORKERS

Direct and indirect effects of mood on risk decision making in safety-critical workers

Abstract

The study aimed to examine the direct influence of specific moods (fatigue, anxiety, happiness) on risk in safety-critical decision making. It further aimed to explore indirect effects, specifically, the potential mediating effects of information processing assessed using a goodness-of-simulation task. Trait fatigue and anxiety were associated with an increase in risk taking on the Safety-Critical Personal Risk Inventory (S-CPRI), however the effect of fatigue was partialled out by anxiety. Trait happiness, in contrast was related to less risky decision making. Findings concerning the ability to simulate suggest that better simulators made less risky decisions. Anxious workers were generally less able to simulate. It is suggested that in this safety-critical environment happiness had a direct effect on risk decision making while the effect of trait anxiety was mediated by goodness-of-simulation.
Memory trials and research has demonstrated that:
- Big picture vs. details
- Suggestion and prompting
- Forget unpleasant events
- Perception of an event impacts memory
- Interruptions whilst learning or retrieving information can lead to errors in mental processing
- Perception of risk is also influenced by prior experience
Human performance and accidents

Human performance approach to accident causation

Error traps -
- Time pressure
- Mental pressure
- Fatigue
- New to the task
- Distractions
- Overconfidence

Ref: US Dept. of Energy, 2009
**Stress impact on safety behaviour**

A collective challenge

**Physical**  **Psychological**  **Behavioural**

**Warning Signs:**

- Difficulty concentrating
- Lack of motivation
- Emotional exhaustion
- Feeling guilty

Ref: ILO, 2016
Making a decision to be safe

Link between risk perception and behaviour

- Risk perception is a critical antecedent to at-risk behaviour
- Direct pressure, high stress, persuasive leaders, cohesiveness, shared stereotypes can encourage groupthink and can lead to a failure to examine risks, poor information gathering, bias in information processing and perception.
Practical applications

Initiatives & applications
- risk perception workshops
- experimental programs
- Behavioural analysis
- risk communication
- personal risk tools

We need to shift our focus and address risk perceptions issues

“incorporate the human element into risk management and actively address employee risk perception to achieve a step change in safety”

Internal factors
- experience
- memory
- stress
- mood

External factors
- environment
- exposure
- groups
- signs

perception

decisions

Safe or at risk behaviours

Safety programs often focus on decisions & behaviours
Are we in the right state of mind?

Does it matter if you’re tired at work?

Tiredness can have a severe impact on all areas of your life, and a profound impact on your productivity at work. This sleep study by Hull International Business School highlights just how detrimental lack of sleep can be.

SAFETY STARTS

- addiction
- anxiety
- adhd
- depression
- peer pressure

I sure hope that cop doesn’t catch me thinking!

WITH THE MIND

- mood disorder
- bipolar
- family problems
- financial problems
Impact of organizational factors

Can they be protective factors?
Conclusion

Incorporate the human element into risk management

Address the psychological hazards
- Need to focus on the human aspect and individual differences
- Consider the internal and external factors that influence safe behaviours
- Improve workplace morale and motivation
- Early access to mental health support services
- Focus on employee engagement and wellbeing
Questions?

It's OK to talk

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