



# Quantitative Psychosocial Risk Assessment

A Brief History and Next Generation Requirements





### Quantitative Psychosocial Risk Assessment: A Brief History and Next Generation Requirements

This paper reflects on the **evolution** of quantitative psychosocial risk assessment, highlighting how far we've come, and where we need to go next.

Ultimately, it calls for an **updated**, **nuanced approach** that reflects the **distinct characteristics** of psychosocial risk, including the capacity to cause both psychological **harm and benefit**, along with its interrelated, cumulative, dynamic, and variable nature.

### **Contents**

03

### The Evolution of Psychosocial Risk Assessment

Summarises the journey from early Hazard ID surveys to more recent, risk-focused approaches.

05

# Next Generation Requirements for Psychosocial Risk Assessment

Outlines the limitations of current models and presents key requirements for a more effective, nuanced approach.

09

# Moving Forward: Improving Assessment and Promoting Transdisciplinary Teams

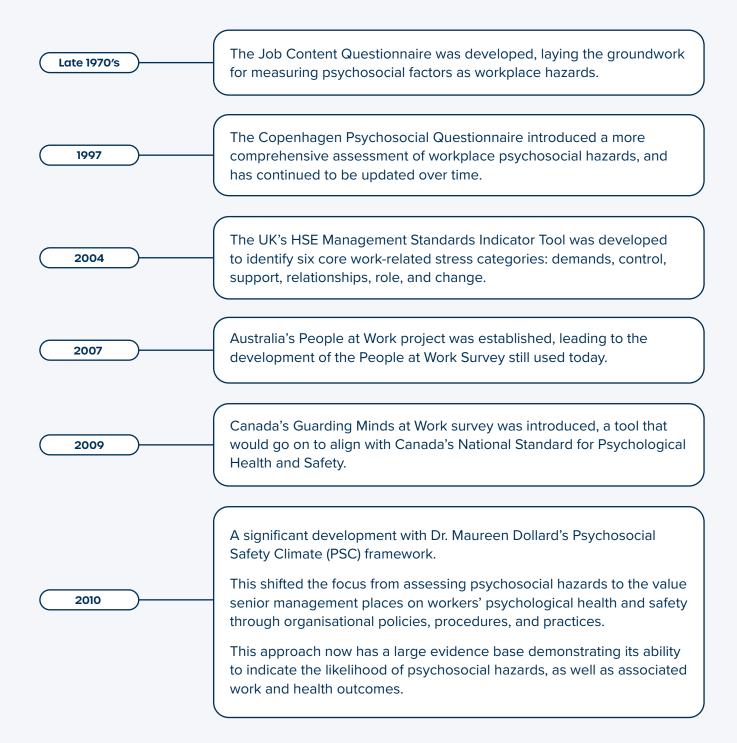
Advocates for an integrated approach that supports cross-functional collaboration and accurate, actionable insights.



### The Evolution of Psychosocial Risk Assessment

### **1st Generation Tools**

The journey began with Hazard Identification (Hazard ID) surveys, which played a foundational role in the shift toward the inclusion of quantitative approaches in psychosocial risk management. These early tools categorised and measured work-related psychological hazards.





### **1st Generation Tools**

While 1st generation tools (outside of PSC) identify psychosocial hazards, they **do not directly assess risk.** 

Accordingly, 2nd generation tools have emerged over the last decade with the goal of suitably assessing psychosocial risk.

### **2nd Generation Tools**

Current regulatory requirements and several popular 2nd generation psychosocial risk assessment tools are rooted in the Occupational Hygiene Model, originally designed to protect worker physical health by controlling workplace hazards that can cause harm.

This approach recognises that while Hazard ID surveys can indicate whether work factors are hazards; they do not assess the risk of harm to workers. And while risk assessment is not a legislative requirement, it is necessary to help prioritise and plan risk controls accordingly. Therefore, psychosocial risk assessment tools aim to examine participants' actual experience of work factor harm. This method has since played a vital role in increasing awareness and adoption of psychosocial risk management.

But while drawing from this model for psychosocial risk assessment offers advantages over Hazard ID alone, a core assumption – that physical and psychosocial risks can be assessed in the same way – has long been questioned.

As early as 2000, Rick and Briner challenged the application of traditional physical risk assessment models to psychosocial risk, suggesting such frameworks are conceptually and practically inadequate to assess the complexity of psychosocial contexts.

Additionally, 2nd generation tools are usually preferable to Health and Safety professionals who are familiar with risk assessment approaches.

However, Human Resources teams are typically comfortable with culture or engagement surveys, which more closely resemble Hazard ID surveys that tend to explore both negative and positive work aspects. This can lead to misalignment among key internal stakeholders and barriers to building the collaborative, cross-functional teams needed to manage psychosocial risks effectively.

### Physical Risk v.s Psychosocial Risk





### Next Generation Requirements for Psychosocial Risk Assessment

While effective in managing physical risks, Occupational Hygiene Model related approaches require **substantial revision** to suit **inherently complex** and **variable psychosocial environments** – and to promote broader, more effective adoption.

### **Harm AND Benefit**

Unlike physical risks which only cause harm, many psychosocial factors, such as how work is designed, how workers are managed, and governance systems, can both harm and benefit mental health and well-being.

That's why it's not enough to only look for harm. Also, the absence of harm **does not** necessarily mean a factor is protective.

Therefore, we also need to assess how much psychosocial benefit is being experienced – because it is psychosocial benefits that help mitigate potential harm from hazards, and actively support positive mental health outcomes.

This is particularly important where exposure to psychosocial hazards is inherent in a role. In these cases, targeting the most appropriate protective factors becomes a critical risk management strategy.

Psychosocial Harm Examples	Psychosocial Benefit Examples
Poor Role Clarity	Good Role Clarity
Poor Manager Support	Good Manager Support
Workplace Disrespect	Workplace Respect
A lack of fairness	Fairness
Poor Reward and Recognition	Good Reward and Recognition



### Interrelated and Cumulative

Physical risks are typically analysed individually, with the highest-rated risk prioritised for intervention. This approach does not consider the interrelated nature of psychosocial factors or the cumulative effect that multiple hazards may have.

For example, consider the influence poor organisational fairness and high productivity hindrances might have on increasing workplace incivility downstream. Or consider the cumulative impact of several minor hazards may have when combined.



This means we need to assess which factors have the biggest influence on the entire psychosocial system, analyse the balance of total harm burden vs protective benefits, and develop controls prioritising system-wide influence. By doing so, we increase the chance effective control measures will result in improvements across multiple factors and deliver the greatest return of investment.

### **Present vs. Future Harm**

In the occupational hygiene model, potential future harm is evaluated by assessing the risk (likelihood and consequence) of hazards causing harm (e.g., falling into an uncovered hole). In contrast, most psychosocial factors shape all workers' immediate, daily lived experiences, providing direct awareness of psychological harm or benefit. For example, a reasonable workload, meaningful work, or a supportive direct leader contributing recognisable benefit. Or workplace unfairness and incivility contributing recognisable harm.

Therefore, traditional risk assessment based on likelihood × consequence is largely unnecessary for psychosocial risks. Instead, the psychosocial environment allows risk assessment of psychological injury or illness based on workers' actual reports of current felt harm and benefit, measured as prevalence × impact (harm severity or benefit significance).

**Likelihood x Consequence** 

V.S

Prevalence x Impact

**2nd Generation** 

**Next Generation** 



### Frequency and Duration Assessment

The occupational hygiene model and model codes of practice require that organisations have regard for the duration, frequency, and severity of hazard exposure. Assessing frequency and duration is suitable for some factors (e.g., job demands, harmful behaviours). However, psychosocial resource factors (e.g., role clarity, job control, manager/co-worker relationships) tend to affect workers continuously once established. For example, if someone is unclear about their responsibilities, has little choice in how they complete work, or feels unsupported by their manager or co-workers... As a result, measuring hazard exposure or harm frequency for such factors (e.g., asking, "How often are you exposed to this factor?" or "How often does this factor affect you?") is unnecessary.

Further, hazard exposure (or harm) duration from social factors like incivility or manager and co-worker support changes with each interaction. For example, depending on their nature, a five-minute co-worker interaction might have an impact for days, while a longer exchange may be quickly forgotten, making it difficult, and often confusing, to quantify harm exposure duration in a traditional manner. This means assessing hazard exposure or harm duration for these factors (e.g., asking 'how long does exposure to this factor last' or 'how long does the effect last for') is also impractical. It is instead more appropriate to assess these fluctuating social factors based on how workers naturally process them – as a general summation of harm severity or benefit significance.

Instead of frequency and duration, resource-related factors are best assessed using a degree of agreement scale. This reflects their typically continuous, but fluctuating nature once established.

### **Role Clarity**

# 2nd Generation How often are you exposed to this factor? How often does this factor affect you? How long does exposure to this factor last? How long does the effect last for?





### **Variable Nature**

While the experience of physical hazards tends to be more stable, the psychosocial environment is highly variable, both between and within organisational groups. This is because many psychosocial factors are dependent on social interactions, and how they are experienced is influenced by our individual personalities, circumstances, and histories. This often leads to significant variation between teams within the same department, driven by factors like team dynamics or the capabilities of individual leaders.

And also differences among individuals within the same team, for example:

- Some team members finding the emotional demands of a role energising, while others experience them as stressful.
- A direct leader's management being experienced as beneficial for some, but harmful by others.



Traditional risk assessment approaches are not fit to assess these complexities. Instead, psychosocial risk assessment requires:

- i. the recognition that some psychosocial factors are neither only harmful or protective, but both, depending on the individual differences of each group member, and
- ii. the capacity to then measure these differences.

# 5 Critical Differences Between Physical and Psychosocial Risk Assessment

#	Difference	Key Insight
1	Harm and Benefit	Most psychosocial factors can cause benefits, not just harm, so both possibilities must be measured where relevant.
2	Interrelated and Cumulative	Psychosocial factors tend to interact and are cumulative in impact, so require a whole-system approach.
3	Present vs. Future Harm	Psychosocial risk is better assessed via current felt harm and benefit rather than future likelihood and consequence.
4	Limits of Frequency and Duration	Psychosocial resource factors are experienced continously but fluctuate, so exposure/harm frequency and duration aren't the best way to assess them.
5	Highly Variable	Experiences differ widely between and within teams, so assessments must capture individual variation.



# Moving Forward: Improving Assessment and Promoting Transdisciplinary Teams

### **1st Generation**



## Hazard ID only

Identifies psychosocial hazards without assessing risk.

### **2nd Generation**



### Risk Assessment

Focuses on psychological harm only (harm lens).

### **Next Generation**



Integrated Hazard ID and Risk Assessment

Assesses both harm AND benefit from psychosocial factors.

Hazard ID surveys were instrumental in shifting the field toward the inclusion of quantitative approaches to psychosocial risk management. And while 2nd generation risk assessment tools were an important step forward, they aren't suitably equipped for the complexities of the psychosocial environment.

To advance the field it is critical to recognise these limitations to more accurately assess the impact of psychosocial factors on work and health outcomes, and also support the design of effective controls.

Further, to help overcome the barriers of siloed approaches to psychosocial risk management, the industry needs quantitative tools that bridge the gap between HR, WHS, and other relevant departments...Tools that suitably account for both harm and benefit, the interrelated and cumulative nature of psychosocial factors, and the continuous, variable, and immediate daily lived experience of the psychosocial environment.



**Dr. Anthony Ross** 

Founder,

Chief of Psychosocial Safety at Mibo



### **Introducing Mibo**

Mibo is a **next-generation** Psychosocial Risk Management technology platform helping organisations embrace a rigorous approach to creating supportive psychosocial work environments.

Our solution combines the Psychosocial Risk Management Assessment (PRMA), industry-leading analysis and reporting, an advanced Control Measure Module system, and the leveraging of emerging technologies to enhance capability, efficiency, and precision in managing psychosocial risks.

Discover more about Mibo's innovative approach to Psychosocial Risk Management <u>here</u>.





### References

Cousins, R., Mackay, C. J., Clarke, S. D., Kelly, C., Kelly, P. J., & McCaig, R. H. (2004). 'Management Standards' and work-related stress in the UK: Practical development. Work & Stress, 18(2), 113–136.

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. Journal of Occupational and Organizational Psychology, 83(3), 579–599.

Jimmieson, N. L., Bordia, P., & Hobman, E. V. (2010). The People at Work Project: Development and validation of a psychosocial risk assessment tool. Final Report to Partner Organisations.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. Administrative Science Quarterly, 24(2), 285–308.

Kristensen, T. S., Hannerz, H., Høgh, A., & Borg, V. (2005). The Copenhagen Psychosocial Questionnaire—a tool for the assessment and improvement of the psychosocial work environment. Scandinavian Journal of Work, Environment & Health, 31(6), 438–449.

Samra, J., Gilbert, M., Shain, M., & Bilsker, D. (2009). Guarding Minds at Work: A Workplace Guide to Psychological Safety and Health. Centre for Applied Research in Mental Health & Addiction (CARMHA), Simon Fraser University.

Rick, J., & Briner, R. B. (2000). Psychosocial risk assessment: problems and prospects. Occupational Medicine, 50(5), 310–314.