

Systems of thinking, systems of work

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**You do not rise to the level
of your goals. You fall to the
level of your systems.**

(Clear, 2018)

In his bestselling book *Atomic Habits*, author and entrepreneur James Clear (2018) observed that systems are the vehicles that take us to our goals. Systems can range from the familiar pragmatic systematic approaches seen in safety management, to abstract legal, cultural, and social systems that influence and shape our everyday work.

The shared aspects and interdependence of many systems means that in managing the risks associated with mental health, for example, we must first acknowledge that mental wellness is a complex, multi-dimensional output/goal of these system interactions. What, therefore, are some of the system elements that we can monitor, manage, and influence, to reach our destination – the aspirational goal of mental wellbeing for all?

Respondents in the annual Deloitte Global Millennial and Gen Z Survey (Deloitte, 2021) noted that businesses had improved their focus on mental health despite the impact the COVID-19 pandemic has had since early 2020. However, 40% of those surveyed felt they had not been supported during the pandemic, and that the absence of a strategic or systematic approach to mental wellbeing was evident in the ‘scatter gun’ approach adopted by their employers in promoting mental health. These perceptions are reflected in the statistics from the UK where nearly half of all working days lost annually to non-fatal workplace injuries/illnesses are due to work-related stress, anxiety and depression (HSE, 2021), a sobering statistic given this data was collected pre-COVID.

So, can we measure psychosocial risk factors within a business and ensure our systems of work are effective in addressing them?

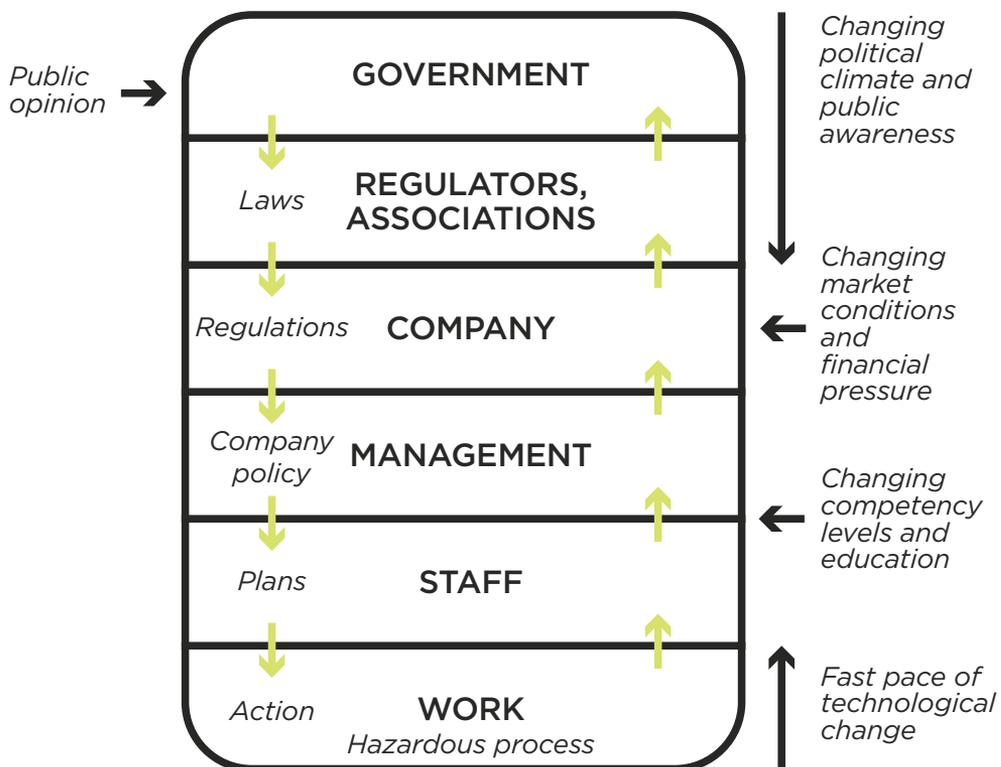
This chapter looks at where our efforts should be targeted to assess and measure workplace mental health and wellbeing, suggesting that any effort to improve worker mental health should consider that businesses are part of a broader socio-technical system in which different agencies and entities play a role and need to be considered when assessing risk. It will also outline the most common psychosocial risk factors in workplaces and some of the pitfalls in measuring these. Finally, I will also give a few of my thoughts and feelings around the subject along the way.

Assessing mental wellbeing risk in the workplace?

Socio-technical systems pertain to theory regarding the social aspects of people, society, and the technical aspects of organisational structure and processes. Rasmussen (1997) highlights this approach in his paper on a socio-technical system and highlights the disconnect between those doing the work and those in government and regulatory bodies. It is important to appreciate Rasmussen conducted his work almost 25 years ago, in Europe and in a health and safety context. However, the simplicity of the model (Figure 1) suggests that it can equally be applied to the assessment and management of risks around mental health at work in Aotearoa New Zealand.

Figure 1

Rasmussen's (1997) Hierarchical Model of Socio-technical Systems



Rasmussen (1997) argues that competitive markets tend to focus the attention of decision-makers upon short-term financial and survival factors, rather than long-term factors concerning welfare, safety, and environmental impact. Initiatives will focus on short-term goals at the lower levels of this framework (staff and work) rather than above the company level. Rasmussen (1997) states that due to advancements in technology the pace of change is much faster than the pace of management structures accommodations, and it is an even longer lag in adjustments in legislation and regulation. Currently, New Zealand's Health & Safety at Work legislation is only six years old but is this fit for purpose to assist in managing and tackling workplace psychosocial risks?

The hierarchical framework by Rasmussen (1997) suggests that for safe and efficient performance, the decisions and actions made at higher governmental, regulatory, and managerial levels of the system should propagate down and be reflected in the decisions and actions occurring at the lower levels (Figure 1). If change is to be sustained at a certain level, information needs to transfer up the hierarchy to inform the decisions at the higher levels. In many businesses, the controls that are required to manage psychological risks do not travel up the system because the structure is more of an hour-glass shape with all company, management and staff reporting into one person which can create a 'pinch point' . Another reason could be that there is a lot of 'noise' (distractions) between the levels meaning that little change is happening, and the wellbeing focus can be lost while appearing to circle between management, staff, and work.

This is supported in a study by Bentley et al. (2021), which adds to the growing body of work supporting the need to consider meso-level influences which includes distal social (e.g., legal, political and cultural factors) as well as organisational influence on the psychosocial environment and individual health outcomes. This is to complement the dominant focus on micro-level approaches, often at the individual level (Dollard et al., 2017), such as resilience, training and resources.

To be well is to move fluidly between a calm and safe environment to an adverse, risky and exciting environment and back. (Aiko Betha, 2021)

The study by Bentley et al. (2021) is not telling us anything new as previously the International Labour Organization (ILO, 1986) defined psychosocial factors as the interactions between drivers such as job content, work organisation, management, and other environmental and organisation conditions on the one hand, and people's characteristics and needs on the other. In New Zealand we are required to eliminate risk or minimise these factors so far as reasonably practicable (Health and Safety at Work Act, 2015).

Anecdotal evidence suggests that when managing workplace hazards, we tend to be drawn more towards physical risks and less towards psychosocial risks. Machine guarding for example, can be diagnosed as being either present or not, the assessment of such eliciting a clear path of action to resolve any unacceptable risk. The complexity of mental wellbeing is by its very nature, difficult to assess and thus prescribe appropriate responses without consideration of the many aspects that shape mental health. It's not surprising therefore that our assessment of and responses to mental health are, (a) heavily reductionist and simplified given our current view of psychosocial risks, and (b) focused on the individual rather than the system within which they operate. That is, we generally address these issues at the lower levels of Rasmussen's framework (Rasmussen, 1997).

This perspective is clear to see in recent research from Australia which found that policies and practices associated with psychosocial risks are often limited to a narrow focus on explicit behaviours of bullying, harassment, aggression, and violence (Robertson et al., 2021) demonstrating that psychosocial risk management is heavily focused on the explicit behaviours of workers – the bottom of the socio-technical system. Factors such as workload, support, and job control were found to be rarely considered in organisational efforts to improve mental health, unlike consideration in the management of physical risks. The research strongly suggests that mental health is still perceived as a dispositional problem, a problem with the individual, a damning conclusion that demonstrates our concept of psychosocial harm has matured very little since the ILO's definition some 35 years ago, which also emphasised the organisational and system influences upon mental wellbeing in the workplace.

It could be argued that we have missed the mark when it comes to understanding psychosocial risk factors in the workplace, not just in Aotearoa New Zealand, but as Robertson et al. (2021) shows, in other jurisdictions too. If the goal of the health and safety profession is to ensure people leave work at the end of the day in at least the same condition as when they arrived (if not better!), then the profession MUST bring their skillset to the prevention of psychological injuries through risk management.

Instinctively we know this to be a largely accurate reflection of the status quo, much of our current efforts toward improving wellbeing is targeted at workers with less focus upon our systems of work. In addition, much more effort is placed on reactive measures, in response to a harmful event, than in preventing mental distress. A way to view at this is in a bow tie format where much of our effort is focused on the post-event consequences in the reactive space such as mental health first aiders or using EAP for counselling. Whereas there should be a focus on the other side of the bow tie to focus on preventing the harm in the first instance through better work design and work environment/culture among many influencing factors. This requires a shift in focus from the individual to a suitable position in the socio-technical system where we can maximise our influence over environmental conditions and move from the predominantly reactive approach to one which is proactive and preventative. To clarify, it is not that reactive approaches are not important, but they need to complement those on the proactive side as we consider all the tools available to us to manage the risks.

When a flower doesn't bloom you fix the environment in which it grows, not the flower. (Alexander Den Heijer, 2018)

This approach to focusing away from the individual and on the proactive side of the bow tie is supported by international standards and guidance. These guidance documents provide insights into the type of system elements we could be monitoring, managing, and influencing.

What are these aspects of mental wellbeing that we can monitor, manage and influence?

The *National Standard of Canada for Psychological Health and Safety in the Workplace* (2013) was launched as the first of its kind to help guide organisations towards mentally healthy work. The standard identifies 13 workplace factors that can affect workers' psychological health and safety. The standard acknowledges that these factors are organisational/systemic in nature and therefore, at least theoretically, within the influence of the workplace. The 13 factors are:

1. Organisational Culture
2. Psychological and Social support
3. Clear Leadership and Expectations
4. Civility and Respect
5. Growth and Development
6. Psychological Demands
7. Recognition and Reward
8. Engagement
9. Workload Management
10. Balance
11. Psychological Protection
12. Protection of Physical Safety
13. Involvement and Influence

More recently these factors have been incorporated into *ISO45003:2021 Occupational health and safety management – Psychological health and safety at work – Guidelines for managing psychosocial risks* (ISO, 2021) which provides practical guidance on managing psychological health in the workplace. ISO45003 is written to help organisations using an occupational health and safety management system based on *ISO45001:2018 Occupational Health and Safety Management Systems Standard*. Table 1 gives the ISO45003 identified risks in three categories and within the Guidelines there are examples of what could be improved to manage that risk. Note that ISO45003 also provides examples and elaborates more around each of the risk factors.

Table 1
ISO45003 – Psychosocial Hazards

HOW WORK IS ORGANISED	SOCIAL FACTORS AT WORK	WORK ENVIRONMENT, EQUIPMENT AND HAZARDOUS TASKS
<ul style="list-style-type: none"> • Roles and Expectation • Job control or Autonomy • Job demands • Organisational Change Management • Remote or Isolated Work • Workload and Work Pace • Working Hours and Schedule • Job Security and Precarious Work 	<ul style="list-style-type: none"> • Interpersonal Relationships • Leadership • Organisational/ Workgroup Culture • Recognition and Reward • Career Development • Support • Supervision • Civility and Respect • Work/Life Balance • Violence at Work • Bullying and Harassment 	<ul style="list-style-type: none"> • Environment • Equipment • Hazardous Tasks

Not all risk factors in the guidance documents above will be applicable to every business size, type and work activities but they provide a great starting point for a broader consideration of psychosocial risk rather than putting a single line in a risk register denoting ‘psychosocial hazards’. They also confirm the earlier observation that mental wellbeing is multi-dimensional, that we cannot focus on one element alone, but need to look at their interdependence, their relationship with other system components. Whilst some elements may already be monitored, managed, and influenced, there remains much to learn about the more abstract elements proposed by these standards, e.g., civility and respect: how do you measure that? Maybe we should not be surprised to discover that there is already a developing research literature in this area, along with some reasonably reliable assessment tools (Clarke, Sattler, & Barbosa-Leiker, 2018). However, there is still much work to be done in this space, but what is painfully obvious is that current approaches to managing physical hazards are insufficient to manage the complexity of mental wellbeing.

How can we measure/assess mental wellbeing in the workplace?

...what we measure shapes what we collectively strive to pursue — and what we pursue determines what we measure (Stiglitz et al., 2009)

Organisations need to have processes in place to monitor and measure a wide range of internal functions, such as financial resource allocation and performance, distribution efficiency, production and outputs. This will include monitoring those socio-technical systems that could impact the organisation. Mental health and wellbeing amongst workers should be no different. There is not a simple (or even difficult) formula for measuring workers' mental health and wellbeing, rather it is important for each organisation to learn how to confidently reflect on its own unique way of doing things and pull out the measurements which are applicable to the business and its workers. As Stiglitz (2009) implies, measurement is not abstract or disconnected from the business and its processes, and those selecting the metrics (owners, managers and workers) need to consider what is important to measure and how this will impact on the workers and the business.

There are a variety of methods businesses currently use to gather data from the variety of sources. According to Saunders (2015) 'method' is the technique and procedures used to obtain and analyse research data, including for example questionnaires, observation, interviews, and statistical and non-statistical techniques. Table 2 shows some methods, benefits, limitations, and examples to consider.

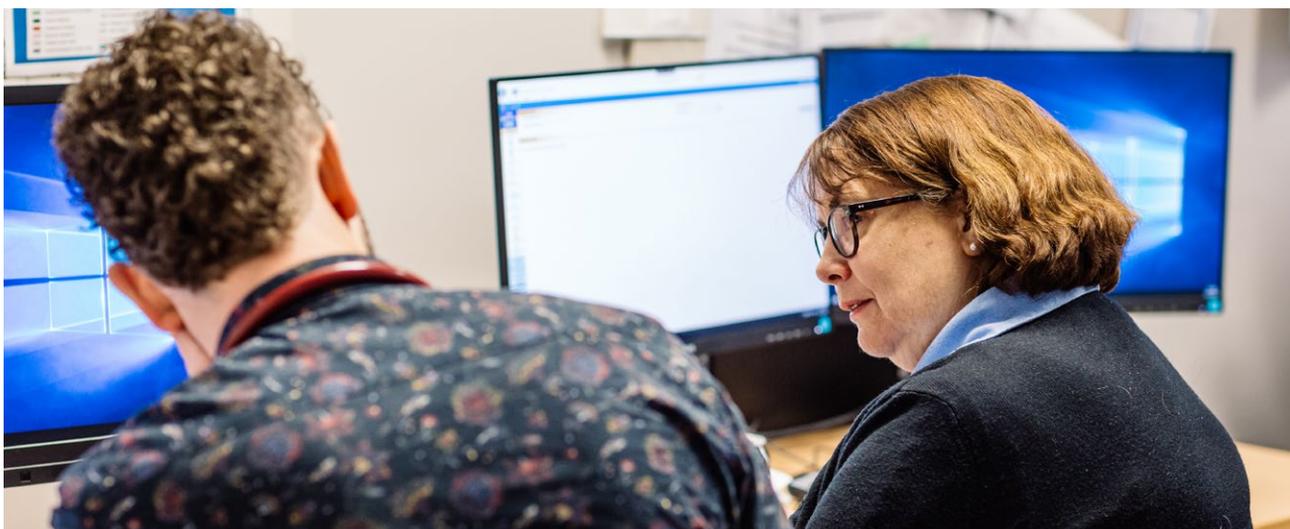


Table 2

Examples of methods to gather data with their benefits and limitations

TYPE OF METHODS	BENEFITS
Interviews	Development of relationship; selection of suitable candidate; can collect sufficient information; time saving; increasing knowledge
Focus groups	Interaction and deepness; intelligibility; non-verbal aspect; time saving; variety points of view
Surveys/questionnaires	Can cover a large sample and can get the quantitative numbers and qualitative comments
Case studies	It is possible to collect detailed information and can be great for learning and relating to workplace examples
Ethnography	Get more realistic picture of work in real life and real time with great insight of behaviours, attitudes, and motivations; extended observations giving more insight whereas focus groups you get limited time

LIMITATIONS	EXAMPLES
Record problems; lack of attention; time consuming. For non-structured interviews can be hard to record	During regular catch-ups with employees (not necessarily structured); Exit interviews
Possible group biases; can be hard to measure	Health and safety reps/committees or have a mental health committee. Learning teams. Units in the organisation; Single parents, emerging professionals
Might not get into the intricacies of a complex concept such as wellbeing. Results can differ depending on how the survey is constructed and how you frame the survey questions (Tiller et al, 2020). Can be impacted by outside factors (e.g. remuneration, time of the year, workloads). Can be labour intensive	Psychosocial safety climate – PSC-12 (Hall et al, 2010); The World Health Organization – Five Well-Being Index (WHO-5); Work Productivity and Activity Impairment Questionnaire: General Health V2.0
Can be quite complex. May depend on the data that is available as to what can be interpreted making analysis difficult	Looking at near misses, incidents, EAP reports as well as using real world examples from outside the workplace e.g. news articles
Complex. Limited by the perception of the individual undertaking the study with attribution bias. It may be wise to notify the employees you will be doing this study, but they may change their behaviours now they are alerted to what you are doing. Will be time intensive. Requires particular skill sets (not for everyone)	Observing work processes and work as a whole, which will include team dynamics and influences on work

How are we approaching measuring within my own business? Where I work, we have been measuring our people's wellbeing through quarterly surveys for some time now, which has allowed us to benchmark. Anecdotally, the conversation has changed over time through initiatives that started with HR and H&S and have now been taken on by our workers who continue to drive them in a self-sustaining way via a mental health committee. Through surveys and peer support networks we can see that some of our workforce have high workload as well as stress and anxiety within their roles, which comes from this workload and is having an impact outside of work. Because of this data/analysis of the workload and stress, our company carefully considers the additional capacity of our employees and business when we bid for new contracts. When providing supports to our people in a more holistic wellbeing sense such as wellbeing apps, mole mapping, webinars, etc. We also consider how these are applied to employees' home life to lower the barriers to accessing services as well as upskilling mental health literacy of our communities.

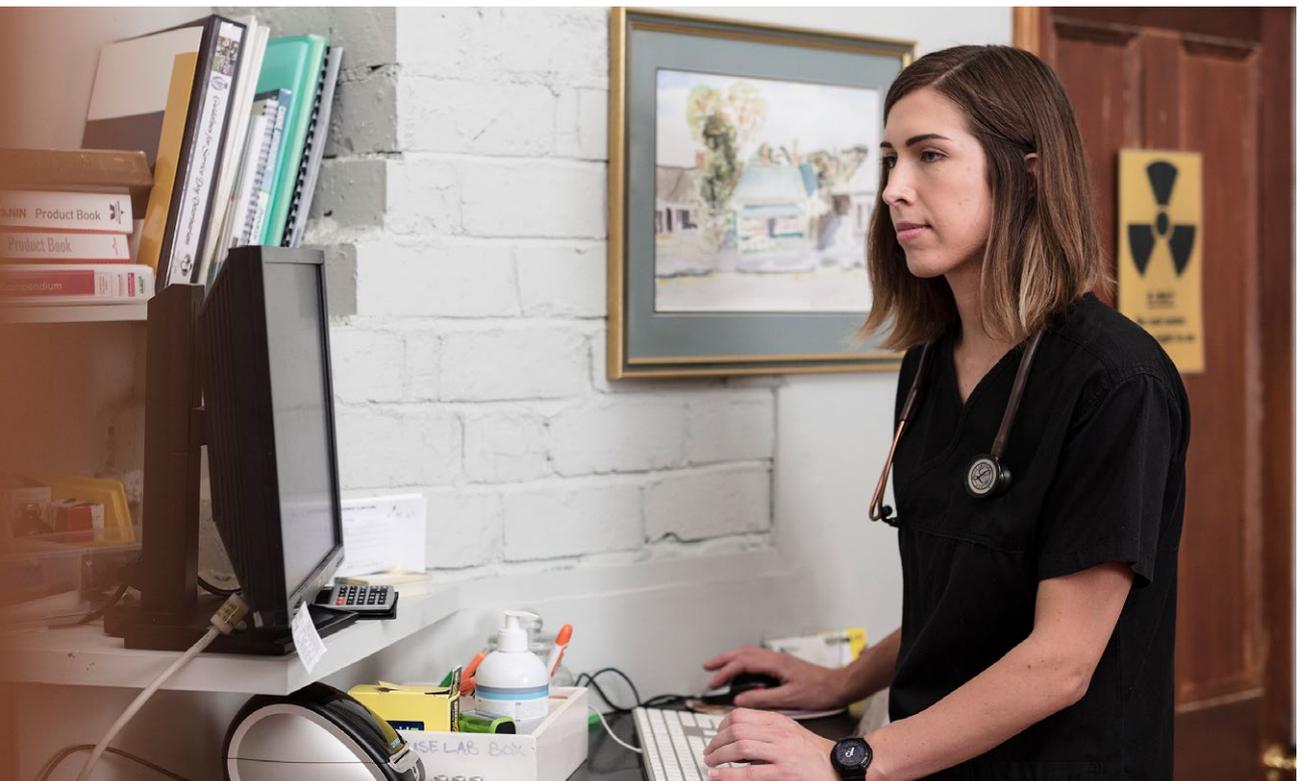
Going forward

As the quote at the start of this chapter suggested, it is systems that will drive the change around psychosocial risk. If these systems are broken at the top, middle or bottom, we will keep on failing in our mahi to keep workers safe and healthy and support them to thrive, however hard we try. Rasmussen (1997) highlighted that we work in complicated dynamic systems, and businesses need to work together with governments, regulators and educational systems to change things around mental health on a broader scale and not just within their own businesses. Also, we need to shift the focus from the individual and tackle the risks associated with mental health in the workplace in Aotearoa New Zealand. When we are measuring and monitoring using the variety of methods and methodologies above, we need to ensure we consider these external forces that could be impacting our workers' mental health and wellbeing.

Organisations seem to be starting to understand the need for investment in their employees' mental health with a study by Deloitte (2020) showing that a \$1 investment will return anywhere from \$3 to \$12, a rate of return which is piquing interest in organisations. Over the next 5-10 years, this conversation will only get louder as COVID-19 has shone a light on this area and appears to be here to stay for a while. Also, our workforce will change as we get more Gen Z and Millennials who are more open to talking about their mental health (American Psychological Association, 2018) than previous generations. It will be a risk this next generation will want to address in their workplaces, as they hold businesses to account.

When I look back at where we have come from five years ago in my own workplace and as a Health and Safety professional, I believe we have matured with our approach to mental health and wellbeing as we can now have the conversation in the workplace. However, there are businesses that do not know where to start and are searching for the 'right' answer. As I hope you would have seen from reading this chapter, there is no perfect answer to measuring mental health in the workplace and I do not know any business that is close to the 'right' answer. It is variable and dependent on each business, with their own work culture, and organisational structure as well as the socio-technical system each organisation sits within. Great organisations are those that are constantly reviewing and challenging themselves and using a variety of methodologies and measurements. Businesses should be adapting and evolving their approach with any risk within the business, and right now this is what we should be aiming for by measuring psychosocial risk and the impact it is having on our people's wellbeing.

Context is also important and there are not the established and accepted good practices that can parallel those associated with physical hazards. We are too focused on reactive responding rather than proactively addressing the known causes of mental health problems in the workplace. The ISO45003 and the NSW Code of Practice for Psychosocial Hazards at Work (SafeWork NSW, 2021) will help us move toward this proactive space. It gives me hope that businesses and health and safety professionals will use these frameworks to question and challenge themselves, their thinking and where they are at. I also hope we will be more inclined to take a multidisciplinary approach to tackle the risks around mental health in the workplace by partnering with professions such as Organisational Psychologists and our Human Resources team to look at it from many different perspectives. As mental health and wellbeing is a multidimensional concept, so too is the approach we should take to monitor, measure, and manage this risk in the workplace.



References

- American Psychological Association (2018). *Stress in America: Generation Z. Stress in America™ Survey*. <https://www.apa.org/news/press/releases/stress/2018/stress-gen-z.pdf>
- Bentley, T. A., Teo, S. T. T., Nguyen, D. T. N., Blackwood, K., Catley, B., Gardner, D., Forsyth, D., Bone, K., Tappin, D., D'Souza, N., & Port, Z. (2021). Psychosocial influences on psychological distress and turnover intentions in the workplace. *Safety Science*, 137, 105200. <https://doi.org/10.1016/j.ssci.2021.105200>
- Canadian Standards Association, & Bureau de normalisation du Québec (CSA Group/BNQ) (2013). *Psychological health and safety in the workplace – Prevention, promotion, and guidance to staged implementation* (CSA Publication No. CAN/CSAZ1003-13/BNQ9700-803/2013). Retrieved from http://www.csagroup.org/documents/codes-and-standards/publications/CAN_CSA-Z1003-13_BNQ_9700-803_2013_EN.pdf
- Clark, C. M., Sattler, V. P., & Barbosa-Leiker, C. (2018). Development and psychometric testing of the Workplace Civility Index: A reliable tool for measuring civility in the workplace. *The Journal of Continuing Education in Nursing*, 49(9), 400–406.
- Clear, J. (2018). *Atomic habits: An easy & proven way to build good habits & break bad ones*. Avery, an imprint of Penguin Random House.
- Deloitte (2020). *Mental health and employers – Refreshing the case for investment*. <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/consultancy/deloitte-uk-mental-health-and-employers.pdf>
- Deloitte (2021). *A call for accountability and action – The Deloitte Global 2021 Millennial and Gen Z Survey*. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2021-deloitte-global-millennial-survey-report.pdf>
- Dollard, M. F., Dormann, C., Tuckey, M. R., & Escartín, J. (2017). Psychosocial safety climate (PSC) and enacted PSC for workplace bullying and psychological health problem reduction. *European Journal of Work and Organizational Psychology*, 26(6), 844–857. <https://doi.org/10.1080/1359432X.2017.1380626>
- Gournelos, T., Hammonds, J.R., & Wilson, M.A. (2019). *Doing Academic Research: A Practical Guide to Research Methods and Analysis* (1st ed.). Routledge. <https://doi-org.helicon.vuw.ac.nz/10.4324/9780429263552>
- Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial Safety Climate: Development of the PSC-12. *International Journal of Stress Management*, 17(4), 353–383. <https://doi.org/10.1037/a0021320>

Health and Safety Executive (2021). *Working days lost in Great Britain*.
<https://www.hse.gov.uk/statistics/dayslost.htm>

Heijer, A.D. (2018). *Nothing you don't already know: Remarkable reminders about meaning, purpose, and self-realization*. CreateSpace Independent Publishing Platform; 1st edition (May 17, 2018)

International Organization for Standardization (ISO) (2021). *ISO45003:2021 Occupational health and safety management – Psychological Health and Safety at Work – Guidelines for Managing Psychological Risks*. International Organization for Standardization.

Moen, R. (2009). *Foundation and history of the PDSA cycle*. Retrieved from https://deming.org/wp-content/uploads/2020/06/PDSA_History_Ron_Moen.pdf

International Labour Organization (1986). *Psychosocial factors at work: Recognitions and Control*. Occupational Safety and Health Series (no. 56). International Labour Office.

Rasmussen, J. (1997). Risk management in a dynamic society: A modelling problem. *Safety Science*, 27(2-3), 183-213.
[https://doi.org/10.1016/S0925-7535\(97\)00052-0](https://doi.org/10.1016/S0925-7535(97)00052-0)

Robertson, J., Jayne, C., & Oakman, J. (2021). Work-related musculoskeletal and mental health disorders: Are workplace policies and practices based on contemporary evidence? *Safety Science*, 138, 105098.
<https://doi.org/10.1016/j.ssci.2020.105098>

Safe Work Australia (2018). *Review of the model Work Health and Safety laws – Final Report* https://www.safeworkaustralia.gov.au/system/files/documents/1902/review_of_the_model_whs_laws_final_report_0.pdf p. 12

SafeWork NSW (2021). *Code of Practice: Managing psychological hazards at work*. https://www.safework.nsw.gov.au/_data/assets/pdf_file/0004/983353/Code-of-Practice_Managing-psychosocial-hazards.pdf

Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research Methods for Business Students* (EBook). Pearson Education Limited.

Stiglitz, J. E., Sen, A. and Fitoussi J-P. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Paris.
https://www.economie.gouv.fr/files/finances/presse/dossiers_de_presse/090914mesure_perf_eco_progres_social/synthese_ang.pdf

Tiller, E., Fildes, J., Hall, S., Hicking, V., Greenland, N., Liyanarachchi, D., and Di Nicola, K. (2020). *Youth Survey Report 2020*. Mission Australia